ENVIRONMENTAL PROTECTION AGENCY

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BUDGET SUMMARY

The President's request for the Environmental Protection Agency's 1985 budget totals $4,249,254,000 supported by 12,297.8 total workyears, including $1,209,254,000 and 10,940.7 total workyears for the Agency's operating programs, and $640,000,000 and 1,357.1 total workyears for the Superfund program. New budget authority in the amount of $2,400,000,000 is requested for the municipal waste treatment facilities construction program. These resources constitute an increase of $295,154,000 and 750.0 total workyears for the Agency as a whole in 1985.

Major emphasis continues on the Superfund and Hazardous Waste programs. Funding for the Superfund program increases by $230,000,000, to $640,000,000 supported by 1,357.1 total workyears in 1985. EPA will continue it's efforts to increase the role of States in managing response actions and in working with other Federal agencies in the implementation of Superfund. A major portion of this funding will be used to support a threefold increase in the number of sites where remedial construction will begin. Other Superfund program increases will support expanded enforcement efforts, particularly in the area of cost recoveries, and for research and development projects in support of Superfund activities. In addition to the increase from the 1984 appropriated amount, we are also requesting a supplemental in 1984 of $50,000,000 to support increased site investigations, designs and constructions. The request for the Hazardous Waste program, continues our efforts to develop and implement cost-effective regulations. An additional $7,300,000 will be used to expand and strengthen the existing Hazardous Waste program.

EPA will continue to improve its enforcement efforts with a major increase of sixty percent in the Superfund program. This expanded resource base will enable the Agency to ensure an adequate enforcement presence given the increasing numbers of sites identified and included on the National Priorty List. There is also a significant increase for toxic substances enforcement to support additional inspections and case development for the PCB and asbestos-in-schools rules. In addition, enforcement increases will continue our efforts to fully eliminate the backlog of major water permits by the end of 1985. This will assure that industrial and municipal dischargers have permits in sufficient time to comply with statutory requirements.

The 1985 research and development program places emphasis on four major areas: acid rain; understanding the risks posed by hazardous and toxic chemicals; enhancing our research to control pollutants; and improving the scientific bases for estimating the human health consequences of environmental pollutants. Our request for research activities includes $278,048,700 supported by 1,851.0 total workyears, an increase of $33,324,900. In addition, we are requesting a 1984 supplemental of $5,500,000 for acid rain research to support the National Lakes Survey in order to give us an accurate and uniform measure of acified lakes.

Grants to State and local governments are at a level of $237,688,300, and the Construction Grants program maintains the authorized level of $2,400,000,000. The 1985 budget request also includes a $10,000,000 program for the Chesapeake Bay, which is designed to support Bay States through cost-sharing grants and continue EPA's role in monitoring and modeling. This major initiative is support by an increase of $5,800,000 over the 1984 level.

A summary of budget authority for EPA's six appropriation accounts is as follows:

EPA's Request by Appropriation Account

	1984 Current Estimate	1984 Supplemental	1985 Budget Authority
Salaries & Expenses.....	$578,400,000	...	$639,275,000
Abatement, Control & Compliance..	393,900,000	...	396,042,000
Research & Development.....	139,200,000	$5,500,000	163,437,000
Buildings & Facilities.....	2,600,000	..	10,500,000
Operating Programs Subtotal..	$1,114,100,000	$5,500,000	$1,209,254,000
Construction Grants.....	$2,430,000,000	...	$2,400,000,000
Hazardous Substance Response Trust Fund.....	410,000,000	$50,000,000	640,000,000
Total.....	$3,954,100,000	$55,500,000	$4,249,254,000

The following briefly describes the content of each appropriation and the changes requested within each from the Agency's current 1984 estimates.

SALARIES AND EXPENSES

EPA requests an increase of $64,375,000 for its Salaries and Expenses appropriation which finances salaries and related costs associated with administering the programs within the Environmental Protection Agency. It incorporates all costs exclusive of grant programs and program-specific contractual agreements. The increase reflects the additional workyears in 1985 and increased support for hazardous waste regulations development, acid rain research, toxic substances inspections and case development, and elimination of major water permits backlogs by the end of 1985.

ABATEMENT, CONTROL AND COMPLIANCE

The Abatement, Control and Compliance appropriation finances contracts, grants, and cooperative agreements for pollution abatement, control and compliance activities. EPA requests an increase of $2,142,000 in 1985 for this appropriation which continues these activities at essentially the 1984 level.

RESEARCH AND DEVELOPMENT

The 1985 budget increases the Research and Development appropriation by $20,737,000 to $163,437,000. Program increases are primarily for acid rain research and and toxics health effects. In addition, we have requested a 1984 supplemental of $5,500,000 for acid rain research.

BUILDINGS AND FACILITIES

EPA requests $10,500,000, an increase of $7,900,000 for the Building and Facilities appropriation which finances the construction, repair, improvement, extension, alteration, and purchase of fixed equipment of facilities owned, as well as existing facilities occupied by the Environmental Protection Agency. The funds in 1985 will ensure healthy and safe conditions in EPA laboratories, prevent deterioration of our owned and leased facilities, and begin construction of a new radiation laboratory in Montgomery, Alabama to replace the outmoded facility.

CONSTRUCTION GRANTS

The Construction Grants appropriation is for grants to local public agencies for construction of municipal wastewater treatment facilities to assist States and localities in attaining water quality standards.

In 1981 Congress enacted significant reforms proposed by the Administration. These reforms provide for a more cost-effective program and reduce the long-term requirements for Federal assistance. Under the reforms, Congress provided a four year authorization at $2,400,000,000 with an additional amount of $200,000,000, beginning in 1983 for combined sewer overflow. The 1984 appropriation provided $2,430,000,000, which included $30,000,000 for combined sewer overflow. In 1985, the Agency is requesting $2,400,000,000 to obligate funds to award a total of 650 grants resulting in 4,710 active projects. In addition, approximately 1,060 projects are expected to have construction completed during 1985.

HAZARDOUS SUBSTANCE RESPONSE TRUST FUND

The 1985 budget requests $640,000,000, supported by 1,357.1 total workyears, an increase of $230,000, and 350.0 total workyears to support the Hazardous Substance Response Trust Fund. In 1985 these funds will be dedicated to responding to hazardous waste sites and spills; expanding the number of sites where remedial construction will begin, encouraging States to assume a larger role in managing response actions; adapting existing research and development data and technology to support field response activities; expanding our enforcement activity; and, supporting on going activities of other Federal agencies.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Budget Authority,
Obligations, Outlays and Workyears
By Appropriation
(dollars in thousands)

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Research and Development						
Budget Authority	$121,000.0	$111,669.0	$142,700.0	$139,200.0	$5,500.0	$163,437.0
Obligations	128,613.0	112,434.0	140,192.1	140,692.1	5,500.0	164,492.0
Outlays	182,690.0	140,764.0	133,012.7	132,312.7	1,100.0	148,941.9*
Abatement, Control and Compliance						
Budget Authority	369,075.0	293,933.0	393,900.0	393,900.0		396,042.0
Obligations	377,272.1	294,871.0	390,456.8	390,456.8		395,709.0
Outlays	455,020.0	363,359.0	416,984.0	416,984.0		415,290.0
Salaries and Expenses						
Budget Authority	555,613.2	540,389.0	574,900.0	578,400.0		639,275.0
Obligations	545,195.8	540,389.0	574,900.0	578,400.0		639,275.0
Outlays	540,947.0	518,533.0	563,767.0	566,777.0		627,611.0
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3		9,426.1
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7		10,878.7
Buildings and Facilities						
Budget Authority	3,000.0	2,600.0	2,600.0	2,600.0		10,500.0
Obligations	4,116.1	2,965.0	4,042.0	4,042.0		9,315.0
Outlays	3,266.0	4,689.0	4,233.0	4,233.0		4,148.0
Operations, Research and Facilities						
Obligations	475.3	...	150.0	150.0		150.0
Outlays	-525.0	1,439.0	1,250.0	1,250.0		601.0
SUBTOTAL, OPERATING PROGRAMS						
Budget Authority	1,048,688.2	948,591.0	1,114,100.0	1,114,100.0	5,500.0	1,209,254.0
Obligations	1,055,672.3	950,659.0	1,113,740.9	1,113,740.9	5,500.0	1,209,231.0
Outlays	1,181,666.0	1,031,784.0	1,119,478.7	1,119,479.7	1,100.0	1,196,707.9
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3	...	9,426.1
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7	...	10,878.7

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Hazardous Substance Response Trust Fund						
Budget Authority	210,000.0	310,000.0	410,000.0	410,000.0	50,000.0	640,000.0
Obligations	227,822.4	319,870.0	431,652.0	431,652.0	50,000.0	642,406.0
Outlays	147,803.0	269,000.0	325,000.0	325,000.0	15,000.0	535,000.0**
Permanent Workyears	635.7	619.3	892.0	890.9	50.0	1,249.0
Total Workyears	724.8	707.1	1,007.1	1,007.1	50.0	1,357.1
Payment to Hazardous Substance Response Trust Fund						
Budget Authority	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)
Obligations	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)
Outlays	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)
Construction Grants						
Budget Authority	2,430,000.0	2,400,000.0	2,430,000.0	2,430,000.0		2,400,000.0
Obligations	3,737,469.5	2,400,000.0	2,600,000.0	2,600,000.0		2,400,000.0
Outlays	2,982,669.0	2,800,000.0	2,500,000.0	2,500,000.0		2,500,000.0
Scientific Activities Overseas						
Obligations	11.0	950.0	315.0	315.0		200.0
Outlays	232.0	600.0	183.0	183.0		175.0
Revolving Fund						
Obligations	768.0	$800.0	588.0	588.0		588.0
Outlays	13.0	100.0	15.0	15.0		15.0
Enforcement						
Outlays	268.0	...	232.0	232.0		116.0
U.S. Regulatory Council						
Outlays	28.0	...	2.0	2.0		...
Misc. Contributed Funds						
Obligations	21.7	20.0	30.0	30.0		21.0
Outlays	24.0	20.0	25.0	25.0		25.0

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Reimbursements - Salaries and Expenses						
Obligations	15,270.6	20,000.0	20,000.0	20,000.0		20,000.0
Permanent Workyears	57.1	53.0	53.0	53.0		53.0
Total Workyears	65.5	62.0	62.0	62.0		62.0
Reimbursements - Superfund						
Obligations	2,570.3	...	4,164.0	4,164.0		9,621.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY						
Budget Authority	$3,688,688.2	$3,658,591.0	$3,954,100.0	$3,954,100.0	$55,500.0	$4,249,254.0
Obligations	5,039,605.8	3,692,299.0	4,170,489.9	4,170,489.9	55,500.0	4,282,067.0
Outlays	4,312,435.0	4,101,504.0	3,944,703.7	3,947,013.7	16,100.0	4,231,922.9
Permanent Workyears	9,154.2	8,669.1	9,669.1	9,675.2	50.0	10,728.1
Total Workyears	10,843.7	10,447.8	11,547.8	11,547.8	50.0	12,297.8

* Includes outlays for Energy supplemental of $2,365.0.
** Includes outlays for Superfund supplemental of $20,000.0.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Budget Authority,
Obligations, Outlays and Workyears
By Media
(dollars in thousands)

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Air						
Budget Authority	$214,533.7	$190,991.6	$225,385.5	$224,768.8		$228,768.2
Obligations	215,980.0	191,337.6	222,997.0	222,440.0		227,996.9
Outlays	221,455.0	199,621.0	211,774.0	212,035.6		225,993.4
Permanent Workyears	1,405.7	1,350.3	1,462.7	1,464.0		1,591.9
Total Workyears	1,630.7	1,577.1	1,694.7	1,696.1		1,758.0
Water Quality						
Budget Authority	206,048.0	151,369.3	217,829.5	216,156.9		217,710.8
Obligations	210,188.2	151,818.3	215,582.5	216,004.5		218,805.9
Outlays	282,029.0	205,682.0	234,912.7	235,483.7		239,873.9
Permanent Workyears	1,867.4	1,662.9	1,790.1	1,792.1		1,902.5
Total Workyears	2,230.9	2,065.5	2,205.2	2,207.2		2,259.4
Drinking Water						
Budget Authority	75,540.9	66,355.9	79,370.3	78,713.6		79,274.5
Obligations	75,511.6	66,467.9	78,313.5	78,069.5		79,248.8
Outlays	85,040.0	73,568.0	79,935.9	80,012.1		81,028.2
Permanent Workyears	446.6	465.1	472.9	472.9		508.0
Total Workyears	522.8	560.8	568.5	568.5		591.5
Hazardous Waste						
Budget Authority	120,148.3	110,112.7	130,417.0	128,657.0		143,267.9
Obligations	118,584.9	110,194.7	129,362.5	129,051.5		144,054.1
Outlays	127,165.0	114,192.0	126,750.7	126,912.7		137,748.6
Permanent Workyears	627.7	625.8	794.4	799.6		887.3
Total Workyears	790.7	830.0	1,015.1	1,015.1		1,090.2
Pesticides						
Budget Authority	53,693.8	52,742.6	57,690.8	57,296.8		63,258.2
Obligations	53,497.9	52,750.6	56,997.6	57,209.6		63,022.4
Outlays	57,888.0	53,430.0	56,018.4	56,233.4		60,680.8
Permanent Workyears	665.1	652.7	694.5	694.5		727.5
Total Workyears	726.4	736.9	783.7	783.7		808.7

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Radiation						
Budget Authority	10,278.8	10,854.8	12,410.7	12,320.4		12,090.6
Obligations	11,680.4	10,872.8	12,248.2	12,272.2		12,044.2
Outlays	14,363.0	11,419.0	12,331.2	12,372.0		13,211.5
Permanent Workyears	139.0	126.9	142.2	142.2		153.8
Total Workyears	161.6	146.4	164.6	164.6		164.6
Noise						
Budget Authority	...	...	...	...		...
Obligations	40.0	...	...	...		...
Outlays	1,540.0	663.0	744.0	744.0		485.8
Interdisciplinary						
Budget Authority	34,710.0	41,335.6	45,887.8	46,069.1		48,952.8
Obligations	38,026.6	41,595.6	45,851.9	45,481.9		48,911.7
Outlays	24,798.0	29,098.0	32,046.7	32,077.1		43,009.2
Permanent Workyears	444.7	353.4	422.2	425.4		486.1
Total Workyears	509.4	396.5	469.1	472.7		514.3
Toxic Substances						
Budget Authority	68,403.8	66,675.7	69,117.8	68,8[illegible].5		79,642.1
Obligations	69,979.1	66,891.7	68,913.3	68,782.3		79,641.1
Outlays	79,797.0	71,368.9	67,349.6	67,481.6		74,896.6
Permanent Workyears	618.8	606.2	634.6	632.6		740.0
Total Workyears	712.1	683.2	717.0	716.0		799.5
Energy						
Budget Authority	25,209.9	23,530.1	30,489.7	30,449.8	$5,500.0	48,503.5
Obligations	26,716.9	23,742.1	31,064.3	31,086.3	5,500.0	48,755.5
Outlays	64,779.0	42,153.0	35,718.5	35,737.5	1,100.0	40,283.2*
Permanent Workyears	57.8	36.8	44.1	44.1		52.0
Total Workyears	82.9	54.9	65.9	65.9		72.6
Management and Support						
Budget Authority	237,121.0	232,022.7	242,900.9	248,218.1		277,285.4
Obligations	231,350.6	232,022.7	248,368.1	249,301.1		277,435.4
Outlays	219,546.0	225,901.0	257,664.0	258,466.0		275,348.7
Permanent Workyears	2,188.6	2,116.7	2,266.4	2,263.9		2,377.0
Total Workyears	2,685.9	2,627.4	2,794.9	2,788.9		2,819.9

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
Buildings and Facilities						
Budget Authority	3,000.0	2,600.0	2,600.0	2,600.0		10,500.0
Obligations	4,116.1	2,965.0	4,042.0	4,042.0		9,315.0
Outlays	3,266.0	4,689.0	4,233.0	4,233.0		4,148.0
SUBTOTAL, OPERATING PROGRAMS						
Budget Authority	1,048,688.2	948,591.0	1,114,100.0	1,114,100.0	$5,500.0	1,209,254.0
Obligations	1,055,672.3	950,659.0	1,113,740.9	1,113,740.9	5,500.0	1,209,231.0
Outlays	1,181,666.0	1,031,784.0	1,119,478.7	1,119,479.7	1,100.0	1,196,707.9
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3	...	9,426.1
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7	...	10,878.7
Hazardous Substance Response Trust Fund						
Budget Authority	210,000.0	310,000.0	410,000.0	410,000.0	50,000.0	640,000.0
Obligations	227,822.4	319,870.0	431,652.0	431,652.0	50,000.0	642,406.0
Outlays	147,803.0	269,000.0	325,000.0	325,000.0	15,000.0	535,000.0
Permanent Workyears	635.7	619.3	892.0	890.9	50.0	1,249.0
Total Workyears	724.8	707.1	1,007.1	1,007.1	50.0	1,357.1
Payment to Hazardous Substance Response Trust Fund						
Budget Authority	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0
Obligations	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0
Outlays	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0
Construction Grants						
Budget Authority	2,430,000.0	2,400,000.0	2,430,000.0	2,430,000.0		2,400,000.0
Obligations	3,737,469.5	2,400,000.0	2,600,000.0	2,600,000.0		2,400,000.0
Outlays	2,982,669.3	2,800,000.0	2,500,000.0	2,500,000.0		2,500,000.0
Scientific Activities Overseas						
Obligations	11.0	950.0	315.0	315.0		200.0
Outlays	232.0	600.0	183.0	183.0		175.0
Revolving Fund						
Obligations	768.0	800.0	588.0	588.0		588.0
Outlays	13.0	100.0	15.0	15.0		15.0

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985
U.S. Contributed Funds						
Obligations	21.7	20.0	30.0	30.0		21.0
Outlays	24.0	20.0	25.0	25.0		25.0
Reimbursements - Salaries and Expenses						
Obligations	15,270.6	20,000.0	20,000.0	20,000.0		20,000.0
Permanent Workyears	57.1	53.0	53.0	53.0		53.0
Total Workyears	65.5	62.0	62.0	62.0		62.0
Reimbursements - Superfund						
Obligations	2,570.3	...	4,164.0	4,164.0		9,621.0
U.S. Regulatory Council						
Outlays	28.0	...	2.0	2.0		...
TOTAL ENVIRONMENTAL PROTECTION AGENCY						
Budget Authority	$3,688,688.2	$3,658,591.0	$3,954,100.0	$3,954,100.0	$55,500.0	$4,249,254.0
Obligations	5,039,605.8	3,692,299.0	4,170,489.9	4,170,489.9	55,500.0	4,282,057.0
Outlays	4,312,435.3	4,101,504.0	3,944,703.7	3,947,013.7	16,100.0	4,231,922.9
Permanent Workyears	9,154.2	8,669.1	9,669.1	9,675.2	50.0	10,728.1
Total Workyears	10,843.7	10,447.8	11,547.8	11,547.8	50.0	12,297.8

NOTE: The transfer of $3,500.0 thousand for pay raise costs, in 1984 Budget Authority, from the Research and Development appropriation to the Salaries and Expenses appropriation, is not reflected in the above figures.

* Includes outlays for Energy supplemental of $2,365.0.
** Includes outlays for Superfund supplemental of $20,000.0.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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AIR

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$71,314.0	$71,028.1	$75,137.2	$74,825.9		$81,204.9	$6,379.0
Abatement Control and Compliance	$108,103.6	$92,815.4	$112,680.2	$112,692.8		$108,902.4	-$3,790.4
Research & Development	$36,362.4	$27,148.1	$37,568.1	$37,250.1		$38,660.9	$1,410.8
Operations Research and Facilities	$200.0						
TOTAL, Air	$215,980.0	$190,991.6	$225,385.5	$224,768.8		$228,768.2	$3,999.4
PERMANENT WORKYEARS	1,405.7	1,350.3	1,462.7	1,464.0		1,591.9	127.9
TOTAL WORKYEARS	1,630.7	1,577.1	1,694.7	1,696.1		1,758.0	61.9
OUTLAYS	$221,455.0	$199,621.0	$211,774.0	$212,035.6		$225,993.4	$13,957.8
AUTHORIZATION LEVELS	Authorization for the Clean Air Act expired September 30, 1981. Reauthorization pending.						

OVERVIEW AND STRATEGY

The Clean Air Act authorizes a nationwide program of air quality planning, regulation, enforcement, and research for control of air pollution. EPA's strategy to meet the requirements of the Act in the 1980's focuses on six major objectives:

ACHIEVE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQSs) NATIONWIDE

Attainment of the primary NAAQSs nationwide is among EPA's highest public health related priorities. EPA's strategy for attaining the NAAQSs includes working with States to complete and enforce the State Implementation Plans (SIPs) required by the Act. The lead responsibility for completing, implementing, and enforcing SIPs rests with States, with support from EPA. Much of the EPA support will be provided through EPA Regional Offices.

Since 1970, SIPs have been the chief regulatory means to reach the healthful levels of air quality set by the NAAQSs. The primary focus of the SIPs has been the application of reasonably available control technology (RACT) to existing sources of pollution to achieve needed emission reductions. Application of RACT will continue to be the foundation of the SIP program in the 1980's.

Although air quality has generally improved as a result of the measures in SIPs, EPA and the States will have to remedy SIPs which have proven inadequate to meet NAAQSs by statutory deadlines. In some instances, measures in SIPs have not been implemented or enforced. The Clean Air Act requires that primary NAAQSs for total suspended particulates, sulfur dioxide, ozone, carbon monoxide, and nitrogen dioxide be met by December 1982. Some States were granted extensions of this deadline, through December 1987, to meet NAAQSs for ozone and carbon monoxide. Deadlines for attaining the NAAQSs for lead vary, depending on the date of State plan approval by EPA. In 1985 EPA will complete the review of most of the remaining State lead plans that have not been approved.

In addition to remedying SIPs still inadequate to meet NAAQSs, the States and EPA will carry out a comprehensive enforcement program aimed at achieving continuous compliance by stationary and mobile sources. The stationary source enforcement program will continue to emphasize compliance by "significant violators," particularly those major sources in or affecting areas not meeting health-related air standards. The program will allow States more flexibility in scheduling inspections and require sources to increase the use of continuous emissions monitoring. Additional elements of an effective continuous compliance program will be identified in 1984, as part of the development of a continuous compliance strategy, and will be implemented beginning in 1985. In the enforcement of SIPs, sources of volatile organic compounds will receive increased attention in 1985. Emissions from these sources are of concern both because they contribute to unhealthful ozone levels and because their components may be toxic in nature.

As a result of industry efforts in controlling emissions and the effectiveness of State, local, and Federal control programs, approximately 90 percent of the more than 18,000 major stationary sources have achieved compliance with all applicable emission limitations. An additional 2.4 percent are meeting acceptable compliance schedules. Although the current rate of compliance represents a significant achievement, efforts must continue to ensure that remaining sources come into compliance with present standards, or any new or revised standards, and that compliance, once achieved, is maintained.

Ensuring compliance by Federal facilities will be a priority activity for EPA in 1985. The current rate of compliance by Federal facilities with SIP emission limits is generally very good. Efforts will focus on keeping facilities meeting limits in compliance and on addressing the relatively few facilities that remain out of compliance.

A continued reduction in emissions from in-use motor vehicles will be a major factor in meeting NAAQSs, particularly the standards for ozone, carbon monoxide, and nitrogen dioxide. To help ensure that vehicles meet emission standards throughout their useful life, EPA will maintain a comprehensive Federal compliance program and will work with States to establish anti-tampering and fuel switching programs.

The primary objective of the Federal compliance program for motor vehicles is to ensure that manufacturers design and produce vehicles that are capable of meeting emission standards throughout their useful life. The program includes preproduction certifications of emission control systems, Selective Enforcement Audits (SEAs) of manufacturers' facilities, and recalls of insufficiently controlled vehicles. Recall investigations of vehicles with high mileage are especially important in ensuring that emission standards continue to be met.

EPA will support the establishment of anti-tampering and fuel switching programs in all areas where health standards have not been achieved, or have been only marginally achieved, for ozone, carbon monoxide, or nitrogen dioxide. Tampering with vehicle emission control systems and switching to leaded fuels greatly increase the levels of these three pollutants. In addition to supporting the establishment of new anti-tampering and fuel switching programs, EPA will also be tracking the progress of existing programs to ensure that projected emission reductions are achieved.

To assure the adequacy of SIPs and the effectiveness of compliance programs in meeting NAAQSs, the States and EPA will continue a comprehensive program for the collection and analysis of ambient air quality and emissions data. The credibility of the data will be maintained through effective quality assurance procedures.

MAINTAIN STRONG STATE AND LOCAL PROGRAMS

State and local governments have developed air pollution control programs of increasing scope and effectiveness. EPA will continue to support these programs by providing direct program assistance and training and by facilitating information exchange. The mechanisms for information exchange include operation of clearinghouses for determining appropriate levels of control technology and publication of additional Control Techniques Guidelines and Control Technology Documents.

The abatement and control and enforcement programs will continue to reflect full partnership with the States in air pollution control. States have been assisted in assuming their responsibility under the Act by EPA's provision of financial support. State grant assistance will be continued to provide for regulatory reform and allow broader State discretion on regulatory programs. This assistance will emphasize improving State capabilities with a corresponding reduction of detailed Federal overview.

A National Air Audit System (NAAS) was initiated in 1984 to identify obstacles to control agency effectiveness and to help EPA define more efficient and meaningful national programs. The NAAS, developed jointly by representatives from State and local governments and EPA, covers four program areas: air quality planning, new source review, compliance assurance, and air monitoring. A fifth program area, vehicle inspection and maintenance, will be added in 1985. The entire NAAS will be continued in 1985 and a national summary report prepared. The report will be used by EPA to help identify the program assistance needs of State and local agencies.

REVIEW NATIONAL AMBIENT AIR QUALITY STANDARDS

The establishment of NAAQSs at levels that protect public health and prevent other adverse effects has been the keystone of the national air quality program. The need to revise NAAQSs is determined based on regular assessment of the most accurate and up-to-date scientific data available on the health and other effects of the various pollutants. These effects are summarized in criteria documents prepared by EPA's research program. In addition to preparing criteria documents, the research program develops reliable monitoring methods, cost-effective control technologies, and air quality simulation models that help States and the regulated community comply with the NAAQSs.

During 1985, EPA will promulgate revised NAAQSs for particulate matter and sulfur dioxide. Also during 1985, EPA will complete the review of the NAAQSs for ozone and lead and develop the support documentation for deciding any needed revisions to the standards.

During 1984, EPA will assess the current process for reviewing and revising NAAQSs. The assessment will cover the scope of the criteria and regulatory support documents and the associated resource requirements. The assessment may result in modifications to the NAAQSs review process and to the analyses supporting NAAQSs revisions in 1985 and later years.

ESTABLISH TECHNOLOGY-BASED STANDARDS

Substantial progress has been made in establishing national technology-based standards for new major stationary sources and motor vehicles. Promulgation of New Source Performance Standards (NSPSs) for all categories of major stationary sources was not, however, completed by the 1982 deadline in the Clean Air Act. A revised schedule has been developed by EPA that will accelerate NSPS development and provide for coverage of all major source categories by the end of 1986. In 1985, 20 additional NSPSs will be promulgated by EPA. An additional 23 standards will be proposed or under development. Many of the standards promulgated or under development will limit emissions of particulates, volatile organic compounds, and nitrogen oxides.

Many major classes of new motor vehicles are now covered by Federal emission standards. Future standard setting will focus primarily on heavy-duty vehicles. In 1985, final standards will be promulgated for particulates from heavy-duty vehicles and nitrogen oxides from heavy-duty engines and light-duty trucks.

Comprehensive compliance activities, described earlier, will remain major components of the Federal motor vehicle air pollution control program. The Federal motor vehicle testing program will include: 300 tests for preproduction certificates; 700 tests for fuel economy labeling and compliance; and 2,500 tests of in-use vehicles for support of the Federal recall program and State compliance programs. The results of the in-use vehicle testing are also used to provide States with information needed to develop control strategies. The recall initiative begun in 1984 will be expanded with further testing and investigation of both moderate mileage and high mileage vehicles. Developmental work will begin on new recall programs covering heavy-duty engines and light-duty vehicle evaporative emissions.

DEVELOP AND IMPLEMENT NEW PROGRAMS

In 1984 EPA will better define the nature and magnitude of the air toxics problem and reassess the regulatory options for dealing with the problem. The results of this analysis, scheduled for completion in late 1984, will provide the basis for a more comprehensive strategy for controlling air toxics. While the strategy is being completed, EPA will continue to screen chemicals to determine which ones may pose a significant risk to public health at ambient levels. Detailed assessments will be prepared of health effects, current emissions, public exposure, public risk, feasible emission reductions, and regulatory options. Decisions for Federal regulatory actions will be made for a number of chemicals in 1985.

Toxic air pollutants are now controlled both through State programs and through Federal emission limits. The Federal limits, which apply to both new and existing sources, are called National Emission Standards for Hazardous Air Pollutants (NESHAPs). State and local programs for controlling air toxics are generally less developed than the programs for controlling pollutants for which NAAQSs have been established. Some air toxics are controlled as a result of State plans to meet NAAQSs. These pollutants are emitted as particulates or volatile organic compounds. Similarly, some air toxics are controlled as the result of the application of NSPSs.

NESHAPs have been established for sources of four pollutants: asbestos, beryllium, mercury and vinyl chloride. Benzene and arsenic have been listed as hazardous air pollutants and emission control regulations have been proposed. NESHAPs for sources of benzene and arsenic are scheduled for promulgation during 1984; emission standards for additional arsenic sources are scheduled in 1985.

EPA will also monitor the composition of motor vehicle fuels and fuel additives as part of the Federal air toxics program and, if necessary, take regulatory action to protect public health. In addition, EPA will assist State and local governments in air toxics monitoring, emissions estimations, and control techniques.

Acid deposition is a growing issue of national and international concern. In order to assess the need for a full program of remedial action, further information is needed about major sources of acid rain precursors and the magnitude, extent, and severity of acid deposition effects. Possible measures for mitigating these effects need to be evaluated. EPA's research program, in cooperation with other Federal and State agencies, is developing the scientific and technical information required for dealing with the acid deposition problem. In 1984, EPA's research program will compile and analyze additional emissions, control technology, and monitoring information. Compilation of an improved data base will continue in 1985. A more detailed description of the program is included in the Energy section of the budget request.

CONTINUE RESEARCH TO SUPPORT REGULATORY PROGRAMS

In 1985, the EPA research and development program will continue to support the air quality regulatory program by providing other EPA offices, State and local governments, and the regulated community with information necessary to reduce ozone, gases, and particles; hazardous air pollutants; and mobile source emissions. The scientific assessment program will continue to update criteria documents on the health and other adverse effects of pollutants to support the review of NAAQSs. The health effects research program will continue to focus on assessing the contribution of oxidants and their precursors, as well as other gases and particles, to chronic conditions such as chronic obstructive lung disease and immune deficiency. Also, the health effects program will continue to develop methods to evaluate the genetic, developmental, neutrotoxic, mutagenic, and carcinogenic effects of potential hazardous air pollutants.

The environmental engineering and technology program will continue to evaluate and assess the performance, cost, and reliability of existing, new, and emerging air emission reduction technologies. The monitoring systems and quality assurance program will continue to develop air quality monitoring data and methods and to provide support for quality assurance. The environmental processes and effects program will continue to develop and refine air quality models and assess the adverse effects of pollution on materials and vegetation.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase(+) Decrease(-) 1985 vs. 1984
National Ambient Air Quality Standards					
Proposals	0	1	3	0	-3
Promulgations.....	1*	3	2	2	--
New Source Performance Standards					
Source categories covered.....	46**	67	55	68	+13
Proposals.....	11	12	15	7	- 8
Promulgations.....	12	18	12	20	+ 8
National Emission Standards for Hazardous Air Pollutants					
Number of pollutants covered.....	4	6	5	6	+1
Proposals.....	4	6	2	2	--
Promulgations.....	0	3	3	3	--
Light-duty vehicle engine families certified.....	302	250	300	300	--
Vehicle tests emission					
Certification.....	270	300	300	300	--
Fuel economy.....	630	700	700	700	--
Assembly line testing test orders.....	17	17	17	17	--
Combined fuels/vapor recovery inspections..	15,000	15,000	13,600	10,600	-3,000
Recall investigations..	45	44	60	60	--
Compliance monitoring inspections by EPA.....	1739	1694	2017	1685	-332

*Recision of hydrocarbon standard.

**Standards for 33 source categories were developed prior to the August 1979 priority listing. Promulgations were made for seven source categories from the priority list between August 1979 and September 30, 1982.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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AIR

Oxidants

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Scientific Assessment							
Salaries & Expenses	$366.2	$467.5	$467.5	$467.5		$473.2	$5.7
Research & Development	$440.9	$600.8	$600.8	$600.8		$600.8	
TOTAL	$807.1	$1,068.3	$1,068.3	$1,068.3		$1,074.0	$5.7
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$797.9	$752.7	$752.7	$750.7		$779.8	$29.1
Research & Development	$381.3	$290.0	$290.0	$246.5		$240.5	-$6.0
TOTAL	$1,179.2	$1,042.7	$1,042.7	$997.2		$1,020.3	$23.1
Health Effects							
Salaries & Expenses	$967.2	$1,177.1	$1,477.1	$1,463.0		$1,564.7	$101.7
Research & Development	$2,035.7	$1,910.9	$2,410.9	$2,410.9		$2,867.2	$456.3
TOTAL	$3,002.9	$3,088.0	$3,888.0	$3,873.9		$4,431.9	$558.0
Environmental Engineering & Technology							
Salaries & Expenses	$1,442.8	$1,138.9	$1,275.0	$1,257.5		$1,350.4	$92.9
Research & Development	$2,567.9	$1,511.0	$1,911.0	$1,911.0		$2,211.0	$300.0
TOTAL	$4,010.7	$2,649.9	$3,186.0	$3,168.5		$3,561.4	$392.9
Environmental Processes & Effects							
Salaries & Expenses	$1,420.5	$1,763.1	$1,928.5	$1,902.4		$1,978.7	$76.3
Research & Development	$2,947.0	$2,180.2	$3,680.2	$3,680.2		$3,456.7	-$223.5
TOTAL	$4,367.5	$3,943.3	$5,608.7	$5,582.6		$5,435.4	-$147.2

AIR

Oxidants

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$4,994.6	$5,299.3	$5,900.8	$5,841.1		$6,146.8	$305.7
Research & Development	$8,372.8	$6,492.9	$8,892.9	$8,849.4		$9,376.2	$526.8
Oxidants TOTAL	$13,367.4	$11,792.2	$14,793.7	$14,690.5		$15,523.0	$832.5
PERMANENT WORKYEARS							
Scientific Assessment	6.5	6.5	6.5	6.5		6.8	.3
Monitoring Systems & Quality Assurance	13.9	10.3	10.3	10.3		10.3	
Health Effects	17.9	16.6	22.9	22.9		23.3	.4
Environmental Engineering & Technology	23.0	11.5	15.5	15.5		18.5	3.0
Environmental Processes & Effects	25.2	19.3	24.3	24.3		24.3	
TOTAL PERMANENT WORKYEARS	86.5	64.2	79.5	79.5		83.2	3.7

AIR

Oxidants

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	8.6	9.0	9.0	9.0		9.0	
Monitoring Systems & Quality Assurance	17.8	14.8	14.8	14.8		14.8	
Health Effects	18.6	17.6	24.6	24.6		24.6	
Environmental Engineering & Technology	30.7	21.8	25.8	25.8		25.8	
Environmental Processes & Effects	27.0	34.4	32.9	32.9		32.9	
TOTAL WORKYEARS	102.7	97.6	107.1	107.1		107.1	

Oxidants

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Develop and Validate Air Quality Models			
- Report on improved chemical mechanisms for an urban scale ozone model (Env. Processes)	3/85	3/85	
- Report on validation of regional scale ozone model (Env. Processes)	3/86	3/86	3/86
Develop Health and Welfare Effects Information			
- Provide a national economic assessment of ozone impacts on major U.S. crops (Env. Processes)	8/84	8/84	
- Update the national crop loss assessment (Env. Processes)	9/86	9/86	9/86
- Journal article on immunological and biochemical response to O_3 (Health)	9/87	9/87	9/87
- Journal article on comparative dosimetry models for oxidants (Health)	9/87	9/87	9/87
- Journal article on the effects of O_3 and NO_2 on pulmonary host defenses in animals (Health)	2/87	2/87	2/87
- Publish the criteria document for ozone and other photochemical oxidants (Scientific Assessment)	1/85	1/85	1/85
Develop and Validate Measurement and Monitoring Methods			
- Provide QA support for the Oxidant program (Monitoring)	12/83	12/84	12/85
- Provide Final Report for National Atmospheric Pollutant Background Network (Monitoring)	6/84	6/84	
Research and Assess Emission Reduction Technologies			

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Report on design and construction of a flare testing facility (Env. Technology)	3/83		
- Report on the results of joint demonstration with a major truck manufacturing company to evaluate microprocessor control device for VOCs (Env. Technology)	6/83		
- Provide guidance on how to apply advanced heavy-oil, low NO_x burner to oil field steam generator (Env. Technology)	12/83		
- Report on the cost and efficiency of improved VOC reduction technologies (Env. Technology)	12/85	12/85	12/85
- Provide report on the pilot-scale tests of reburning techniques on stationary combustors (Env. Technology)	6/84	6/84	
- Provide report on technical requirements for pellet fuel for NO_x and SO_x control from stoker boilers (Env. Technology)	12/84	12/84	12/84
- Provide report on bench-scale tests of potential for NO_x reduction in industrial glass furnaces (Env. Technology)	6/84	6/84	

Oxidants

Budget Request

The Agency requests a total of $15,523,000 supported by 107.1 total workyears for 1985, an increase of $832,500 from 1984. Included in this total is $6,146,800 for Salaries and Expenses and $9,376,200 for Research and Development, with increases of $305,700 and $526,800, respectively. This increase results from an expanded effort on the health impacts of nitrogen dioxide (NO_2) and additional research on reduction technologies for volatile organic compounds.

Program Description

The Clean Air Act, as amended in 1977 (the Act), requires the Environmental Protection Agency (EPA) to periodically re-evaluate the adequacy of National Ambient Air Quality Standards (NAAQS) based upon the most scientifically credible data base available at the time of review. Research is also needed to help the regulatory decision-makers, the regulated community and the Regional, State and local officials, develop cost-effective control strategies and implementation procedures for the control of oxidants which include ozone, volatile organic compounds (VOC's), and nitrogen oxides (NO_x). The following objectives support these goals:

Objective 1. Develop and Validate Air Quality Models to Support Implementation, Maintenance and Enforcement of National Ambient Air Quality Standards (NAAQS). Research under this objective provides the air quality models, emissions data, monitoring tools, and technical strategies required by the Act.

Objective 2. Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. A criteria document for health and welfare effects provides the primary documentation of scientific data for use in the review of existing ambient air quality standards.

Objective 3. Develop and Validate Measurement and Monitoring Methods in Support of the Oxidants Program Requirements. New and improved air pollution methodologies and monitoring techniques are being developed and evaluated to determine air quality trends, compliance, and enforcement actions.

Objective 4. Research and Assess Emission Reduction Technologies to Support Permitting, New Source Performance Standards (NSPS), and Compliance Activities. In order to promulgate cost-effective NSPS and provide assistance to EPA Regions, State and local officials in their permitting, enforcement and compliance activities, research must be conducted to identify design criteria for developing more reliable and less costly NO_x and VOC emission reduction technologies.

Objective 5. Provide Quality Assurance Support for the Oxidants Program Requirements. This task specifies mandatory quality assurance for State and local air monitoring stations. All measurements must be traceable to National Bureau of Standards standard reference methods (SRMs) for the purpose of providing good procedures, wherever possible, thereby ensuring that Agency decisions are backed by technical data that are accurate and precise.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $1,074,000 supported by 9.0 total workyears for this program, of which $473,200 is for Salaries and Expenses and $600,800 is for Research and Development. This reflects an increase of $5,700 for Salaries and Expenses.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. The current Agency schedule for reviewing and updating the ozone NAAQS calls for final standard promulgation in September, 1986. Thus, revision of the ozone and other photochemical oxidants criteria document will be completed in January, 1985. In addition, literature retrieval and procurement actions will be initiated to begin the development of the criteria document for nitrogen oxides.

1984 Program

In 1984, the Agency is allocating a total of $1,068,300 and 9.0 total workyears to this program, of which $467,500 is for the Salaries and Expenses appropriation and $600,800 is for extramural purposes under the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. The first draft of the revised criteria document for ozone and other photochemical oxidants is being prepared for release to the public. In early 1984, a peer review workshop on health effects was conducted. In addition, technical support is being provided to assist OAQPS in developing a regulatory proposal, reviewing public comments, and promulgating a revised ozone standard.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $807,100 and 8.6 total workyears for this program, of which $366,200 was under the Salaries and Expenses appropriation and $440,900 was for extramural purposes under the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. The first internal review draft of the revised criteria document for ozone and other photochemical oxidants was prepared and a public peer review on welfare effects was conducted.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $1,020,300 supported by 14.8 total workyears for this program, of which $779,800 is for Salaries and Expenses and $240,500 is for Research and Development. This reflects an increase of $29,100 and a decrease of $6,000, respectively. This net increase will be utilized to increase the frequency of audits.

Develop and Validate Measurement and Monitoring Methods in Support of the Oxidants Program. The research program will focus on the development and evaluation of methods to measure ozone, nitrogen oxides (NO_x), and other oxidant precursors. Emphasis will be placed upon evaluating cryogenic techniques to enhance the detectability of low level VOC concentrations and upon evaluating existing, commercial VOC monitors. Manuals and guidelines will be prepared to provide guidance on which commercial instruments are most appropriate.

Provide Quality Assurance Support for the Oxidants Program. ORD will continue to maintain the repository of standard reference materials. Reference analyses, and gas samples traceable to NBS standards will be provided to the user community. The National Audit Program will be continued. Two additional standard ultraviolet spectrophotometers will be obtained from NBS and distributed for regional use.

1984 Program

In 1984, the Agency is allocating $997,200 and 14.8 total workyears for this program, of which $750,700 is for the Salaries and Expenses appropriation and $246,500 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Measurement and Monitoring Methods in Support of the Oxidants Program. EPA has proposed performance standards and guidelines to limit emissions of VOCs from organic process equipment. As a result, ORD is evaluating instruments in compliance with EPA methods. Simplified methods for the measurement of other oxidant precursors is continuing.

Provide Quality Assurance Support for the Oxidants Program. The National Standards Laboratory and the National Audit Program is continuing. The audit program assures that the data base used for regulatory decision making is accurate, precise and reliable. The National Atmospheric Background Network is being completed and a final report prepared.

1984 Explanation of Changes from the Amendment

The net decrease of -$45,500 results from the following actions:

-Reprogrammmings. (-$45,500) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$2,000 to the Salaries and Expenses appropriation and a net decrease of -$43,500 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,179,200 and 17.8 total workyears, of which $797,900 was under the Salaries and Expenses appropriation and $381,300 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Measurement and Monitoring Methods in Support of the Oxidants Program. Research on monitoring systems for the measurement of ozone, NO_x and other oxidant precursors was conducted. Research was initiated to evaluate existing, commercial VOC monitoring instruments and to prepare user manuals and guidelines on the use of these instruments.

Provide Quality Assurance Support for the Oxidants Program. The repository of standard reference materials was maintained. Reference analyses and gas samples traceable to NBS standards were provided to the user community. The National Audit Program was continued. In addition, the National Atmospheric Pollutant Background Network was continued with five stations operating in National Forests. This provided the data necessary to review SIPs and assess regional pollutant transport. Short term monitoring operations were conducted for OAQPS, the Regions and several State agencies.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $4,431,900 supported by 24.6 total workyears for this program, of which $1,564,700 is for Salaries and Expenses and $2,867,200 is for Research and Development. This reflects increases of $101,700 for Salaries and Expenses and $456,300 for Research and Development. This increase results from an enhanced research effort in NO_2 toxicology work. Also, in the extrapolation program, studies to determine the sensitivity of different animal species to oxidant pollutants will be conducted.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. EPA relies on animal test data in setting and revising standards for protecting human health under the Clean Air Act. These tests are especially useful for determining the long term health effects of chronic exposures and for studying the effects of pollutant inhalation in potentially sensitive subpopulations such as children. In 1985, the animal tests are designed to examine several biological endpoints, including pulmonary structure and function, ability to fight respiratory disease, and cardiovascular changes following exposure to oxidants. Also, increased emphasis will be placed on the study of biochemical and immunological effects and on expanding the data base for NO_2. The ozone uptake model, developed in 1983, will be validated experimentally.

In 1985, work with potentially sensitive populations, such as persons with chronic bronchitis, will increase. Clinical studies involve acute exposures only. To increase the value of clinical and animal studies from a regulatory standpoint, it is necessary to have reliable models for extrapolating animal data to humans. Mathematical models to predict the sensitivity of different animal species, including man, to the impact of ozone will be developed. Additional theoretical models for respiratory tract deposition of ozone and NO_2 will also be developed. In addition, increased epidemiology resources will enable EPA to collaborate with other Federal agencies in epidemiologic studies.

1984 Program

In 1984, the Agency is allocating a total of $3,873,900 and 24.6 total workyears to this program, of which $1,463,000 is for the Salaries and Expenses appropriation and $2,410,900 is for extramural purposes under the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. Following a workshop in 1983 which identified extrapolation research needs, EPA is enhancing its efforts to improve extrapolation techniques and applicability. Animal toxicology studies are providing data on functional, morphological, and biochemical changes following acute and chronic oxidant exposure. Also, clinical studies will be conducted to assess the response of humans to acute oxidant exposure.

1984 Explanation of Changes from the Amendment

The net decrease of -$14,100 results from the following action:

-Reprogramming. (-$14,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$14,100 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,002,900 and 18.6 total workyears for this program, of which $967,200 was under the Salaries and Expenses appropriation and $2,035,700 was for Research and Development.

Develop Health and Welfare Effects Information to Support the Review and Revision of NAAQS. A workshop was sponsored by the Agency to identify extrapolation research needs for EPA. Also, a mathematical model for ozone uptake was completed and reviewed at the workshop. Controlled human studies were performed which described changes in pulmonary structure and function, blood, and host defense mechanisms following chronic pollutant exposures.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $3,561,400 supported by 25.8 total workyears for this program, of which $1,350,400 is for Salaries and Expenses and $2,211,000 is for Research and Development. This reflects increases of $92,900 and $300,000, respectively. The increase represents additional research on VOC reduction technologies.

Research and Assess Emissions Reduction Technologies to Support Permitting, NSPS and Compliance Activities. Volatile organic compounds are a major cause of the ozone non-attainment problems in the country. Reliable data on demonstrated, cost-effective and energy-efficient emission reduction technologies for many medium and small sources of VOC's are lacking. Research to optimize VOC reduction technologies will be conducted to support the development of NSPS and the establishment of SIPs. Emission factors for industrial safety/relief systems will be developed. An analysis of generic technologies for VOC control will be conducted for key industrial sources. Research to determine the efficiency of catalytic oxidizers will be continued, and a series of field tests will be conducted to evaluate the accuracy of performance models for carbon adsorption and thermal incineration. Laboratory and field tests will be conducted to evaluate methods developed in 1984 for evaluating the efficiency of spray painting systems. The methods will be used to verify compliance with NSPS and SIP regulations for VOC emissions. The use of microprocessor technologies to enhance the cost of controlling VOC emissions will be evaluated for industrial processes. Research on road dust suppressants will continue.

Combustion modification methods for reducing NO_x emissions and improving the performance of industrial furnaces will be assessed. Prior research has proven that combustion modification methods can be effective for controlling NO_x as well as other emissions.

1984 Program

In 1984, the Agency is allocating a total of $3,168,500 and 25.8 total workyears to this program, of which $1,257,500 is for the Salaries and Expenses appropriation and $1,911,000 is for extramural purposes under the Research and Development appropriation.

Research and Assess Emissions Reduction Technologies to Support Permitting, NSPS and Compliance Activities. Pilot scale tests are being conducted for catalytic oxidizers and the results scaled up to full size units. Gases, representative of emissions from industrial safety/relief systems, will be combusted at a pilot scale flare facility to determine their destruction efficiencies. Research will be initiated to measure the effectiveness of a number of road dust suppressants over a two year period. In addition, combustion modification tests on a full-scale cement kiln are being completed and tests are being initiated on refinery process heaters.

1984 Explanation of Changes from the Amendment

The net decrease of -$17,500 results from the following action:

-Reprogramming. (-$17,500) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$17,500 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $4,010,700 and 30.7 total workyears for this program, of which $1,442,800 was under the Salaries and Expenses appropriation and $2,567,900 was for extramural purposes under the Research and Development appropriation.

Research and Assess Emissions Reduction Technologies to Support Permitting, NSPS and Compliance Activities. Field evaluations of industrial catalytic oxidizers were conducted at six sites representing eight incinerators. A number of field tests were completed on the effectiveness of dust suppression on paved and unpaved roads, and the effectiveness of a latex binder on a coal storage pile.

The use of microprocessor technologies to enhance and reduce the cost of controlling VOC emissions from metal coating ovens was completed. In addition, a study to define conceptual techniques to measure the capture efficiency of hooding systems was completed.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $5,435,400 supported by 32.9 total workyears for this program, of which $1,978,700 is for Salaries and Expenses and $3,456,700 is for Research and Development. This reflects an increase of $76,300 and a decrease of $223,500, respectively. This net decrease reflects the completion of the first phase of the regional scale modeling process and the completion of several studies in the air ecology program.

Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of NAAQS. Urban scale air quality models will continue to be developed, validated, and refined for dissemination to the user community. In order to address inadequacies in the urban models production, the program will focus on improving the chemical mechanisms that quantitatively describe ozone formation in ambient air.

An improved second generation regional scale air quality model for ozone will be developed. The deficiencies in various modular components of the regional model such as chemistry, meteorology, and emissions will be corrected and tested for accuracy against air quality data obtained from the Northeast Regional Oxidant Study.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. As part of the National Crop Loss Assessment Network (NCLAN), research will be conducted to quantify the economic impacts of ozone on the yield of major crop species.

Research to determine the extent and economic implications of the effects of ozone on forests will be initiated. To provide a preliminary indication of the extent and magnitude of the problem, research will initially focus on evaluating the relationship between the growth of forest species and estimates of ozone air quality. Studies are also planned, under conditions which will reflect a range of air quality situations and forest types, to establish cause and effect relationships.

In the biomonitoring program, the potential for using bees as indicators of air pollution trends will be evaluated.

1984 Program

In 1984, the Agency is allocating a total of $5,582,600 and 32.9 total workyears to this program, of which $1,902,400 is for the Salaries and Expenses appropriation and $3,680,200 is for the Research and Development appropriation.

Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of NAAQS. A number of urban scale air quality models for predicting ambient ozone are being developed and validated for use in the development and implementation of SIPs.

The first generation regional scale ozone model is being tested and evaluated against the available air quality data base. These tests will be used to identify any weaknesses and make improvements in the models predictive capability.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Research to address the impacts of ozone on major agronomic crops is being conducted under the NCLAN program. In 1984, dose/response functions are being integrated with air quality and economic data to provide a preliminary assessment of the economic impacts of ozone on major crops grown in the U.S. This assessment utilizes applied economic models to project data for farm level losses through the market place to the consumer level.

Also, a biomonitoring program using bees as bioindicators of air pollution trends is being conducted. Studies are being conducted in the Puget Sound area to verify initial observations with respect to arsenic and fluoride pollutants to determine if a more concentrated field sampling program is needed.

1984 Explanation of Change from the Amendment

The net decrease of -$26,100 results from the following action:

-Reprogramming. (-$26,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$26,100 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $4,367,500 and 27.0 total workyears for this program, of which $1,420,500 was under the Salaries and Expenses appropriation and $2,947,000 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Air Quality Models to Support the Implementation, Maintenance, and Enforcement of NAAQS. In the urban scale modeling program, the photoreactivity of percholorethylene to produce ozone was determined and found to be less important in contributing to ozone problems than previously thought. Also, an assessment of the strengths and weaknesses of the ozone mechanisms currently used in urban air quality models was provided. The first regional scale ozone model was formulated.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Under the NCLAN program, ozone dose/response experiments were conducted for winter wheat, soybean, and barley. An evaluation of economic and crop yield assessment techniques was completed to establish the best approach to be used in a preliminary national assessment of the impact of ozone. This evaluation was also used to identify research areas which would improve the accuracy of assessing the effects of ozone on agriculture.

AIR

Hazardous Air Pollutants

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Scientific Assessment							
Salaries & Expenses	$1,288.3	$1,481.1	$1,481.1	$1,521.1		$1,933.5	$412.4
Research & Development	$735.1	$1,775.0	$1,775.0	$1,770.5		$2,250.0	$479.5
TOTAL	$2,023.4	$3,256.1	$3,256.1	$3,291.6		$4,183.5	$891.9
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$1,772.5	$1,847.2	$1,979.5	$1,835.4		$2,043.5	$208.1
Research & Development	$1,526.6	$1,355.0	$3,205.0	$3,155.0		$3,085.0	-$70.0
TOTAL	$3,299.1	$3,202.2	$5,184.5	$4,990.4		$5,128.5	$138.1
Health Effects							
Salaries & Expenses	$1,214.7	$1,804.0	$1,954.0	$1,931.8		$2,028.8	$97.0
Research & Development	$865.8	$753.5	$753.5	$753.5		$1,470.0	$716.5
TOTAL	$2,080.5	$2,557.5	$2,707.5	$2,685.3		$3,498.8	$813.5
Environmental Engineering & Technology							
Salaries & Expenses			$167.9	$246.9		$451.3	$204.4
Research & Development			$650.0	$650.0		$600.0	-$50.0
TOTAL			$817.9	$896.9		$1,051.3	$154.4
Environmental Processes & Effects							
Salaries & Expenses	$302.6	$321.2	$321.2	$319.8		$338.2	$18.4
Research & Development	$676.6	$542.3	$542.3	$542.3		$636.9	$94.6
TOTAL	$979.2	$863.5	$863.5	$862.1		$975.1	$113.0

AIR

Hazardous Air Pollutants

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$4,578.1	$5,453.5	$5,903.7	$5,855.0		$6,795.3	$940.3
Research & Development	$3,804.1	$4,425.8	$6,925.8	$6,871.3		$8,041.9	$1,170.6
Hazardous Air Pollutants TOTAL	$8,382.2	$9,879.3	$12,829.5	$12,726.3		$14,837.2	$2,110.9
PERMANENT WORKYEARS							
Scientific Assessment	15.7	24.0	24.0	24.0		31.0	7.0
Monitoring Systems & Quality Assurance	30.4	29.6	32.6	31.3		31.7	.4
Health Effects	20.8	25.1	27.8	27.8		30.8	3.0
Environmental Engineering & Technology			5.0	5.0		8.0	3.0
Environmental Processes & Effects	5.7	3.9	3.9	3.9		3.9	
TOTAL PERMANENT WORKYEARS	72.6	82.6	93.3	92.0		105.4	13.4

AIR

Hazardous Air Pollutants

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	21.9	32.6	32.6	32.6		37.6	5.0
Monitoring Systems & Quality Assurance	34.5	33.5	37.5	35.8		35.8	
Health Effects	22.6	27.7	30.7	30.7		33.7	3.0
Environmental Engineering & Technology			5.0	5.0		8.0	3.0
Environmental Processes & Effects	5.7	3.9	3.9	3.9		3.9	
TOTAL WORKYEARS	84.7	97.7	109.7	108.0		119.0	11.0

Hazardous Air Pollutants

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Prepare Health and Risk Assessments			
- Complete 6 health assessments (Sci. Assess.)	9/83		
- Complete 11 health assessments for new (or review of existing) listing decisions (Sci. Assess.)	9/84	9/84	
- Complete 9 health assessments for new (or review of existing) listing decisions (Sci. Assess.)	9/85	9/85	9/85
- Complete 4 carcinogenicity assessments for new (or review of existing) listing decisions (Sci. Assess.)	9/84	9/84	
- Complete 1 carcinogenicity assessment for a new listing decision (Sci. Assess.)		4/85	4/85
Develop Information on Health, Emission Reduction Technologies, Monitoring and Transport and Fate			
- Report on intercomparison of methods at the Non-Criteria Monitoring Center (Monitoring)	9/83	9/84	9/85
- Report on Toxic Air Monitoring System (Monitoring)	9/84	9/85	9/86
- Report on organic compounds in indoor air (Monitoring)	9/84	9/85	
- Report on Integrated Cancer Project (Monitoring)			3/86
- Journal article on neurotoxicologic assessments (Health)	6/85	6/85	6/85
- Journal article on toxic effects of HAP's on lung, liver, and kidney (Health)	1/86	1/86	1/86
- Journal article on genotoxic dose-response studies of selected individual HAP's (Health)	10/87	10/87	10/87

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Journal article on models for extrapolation of neurotoxic risks to humans (Health)	10/88	10/88	10/88
- Journal article on data analysis methods for the comparative potency model for cancer risk (Health)	10/88	10/88	10/88
- Journal article on genotoxic risks from complex mixtures of HAP's (Health)	9/89	9/89	9/89
- Report characterizing hazardous emissions and evaluating mitigation technologies for selected industries (Env. Engineering)		1/85	9/86
- Publish report characterizing HAP emissions from residential combustion and controls for these sources (Env. Engineering)		9/85	
- Report on source characterization for the integrated air cancer project (Env. Engineering)			7/86
- Determine wet removal mechanisms for HAP's (Env. Processes)	4/84	4/84	
- Report on the identification, screening, and measurements of HAPs in ambient air (Env. Processes)	4/86	4/86	4/86
Provide Quality Assurance Support			
- Issue Research Materials for 2 HAP's per year from OAQPS priority list (Monitoring)	9/83	9/84	9/85

Hazardous Air Pollutants

Budget Request

The Agency requests a total of $14,837,200 supported by 119.0 total workyears for 1985, an increase of $2,110,900 and 11.0 total workyears from 1984. Included in this total is $6,795,300 for Salaries and Expenses and $8,041,900 for Research and Development, with increases of $940,300 and $1,170,600 respectively. The increases will be utilized to accelerate the completion of comprehensive health assessment documents for chemicals now on the Agency's priority list for regulatory consideration, and to fund a long-term cancer assessment program which is designed to assess the relationship of ambient air pollution and human cancer.

Program Description

The Hazardous Air Pollutants (HAP) Research program responds to the regulatory needs of the Clean Air Act under Sections 111(d) and 112. The program addresses several objectives:

Objective 1. Prepare Health and Risk Assessments to Support Regulation of Hazardous Air Pollutants. The Office of Research and Development (ORD) responds to the needs of the Office of Air Quality Planning and Standards (OAQPS) to conduct chemical-specific risk assessments. These assessments provide the health and environmental basis to determine if exposure to a pollutant can reasonably be expected to result in irreversible or incapacitating reversible illness. The assessments are then combined with OAQPS preliminary exposure analyses to provide quantitative estimates of the degree of population risk and disease incidence.

Objective 2. Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. Under this objective, ORD provides the scientific information to OAQPS on what contaminants are present in the air; their chemical concentration, transport, transformation, and persistence in the atmosphere; and the nature of their adverse health effects. This information provides the basis for decisions made during the preliminary exposure analysis as to whether risk assessments need to be conducted.

Objective 3. Provide Quality Assurance Support of Hazardous Air Pollutants Program Requirements. The Quality Assurance activity provides standard reference materials that permit decisions to be made with the confidence that the research results are not spurious and that chemical and physical determinations of pollutant fate, transport, and transformation are not in error.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $4,183,500 supported by 37.6 total workyears for this program, of which $1,933,500 is for Salaries and Expenses and $2,250,000 is for Research and Development. This reflects an increase of $412,400 and $479,500 respectively and an increase of 5.0 total workyears. The increases will be used to accelerate efforts to prepare comprehensive health assessments for use by OAQPS in hazardous air pollutant listing decisions.

Prepare Health and Risk Assessments to Support Regulation of Hazardous Pollutants. Nine comprehensive health assessment documents will be completed. Five additional documents will be initiated. By the end of 1985 assessment documents and/or assessment reviews for 32 chemicals will be completed. Four of the evaluations are for chemicals which are already regulated and for which a five year review of the basis for regulation is required. Twenty-one substances are from the OAQPS list of "37 suspected hazardous air pollutants," and seven substances result from other OAQPS regulatory priorities.

1984 Program

In 1984, the Agency is allocating a total of $3,291,600 and 32.6 total workyears to this program, of which $1,521,100 is for the Salaries and Expenses appropriation and $1,770,500 is for extramural purposes under the Research and Development appropriation.

Prepare Health and Risk Assessments to Support Regulation of Hazardous Air Pollutants. In support of the OAQPS program to evaluate candidate hazardous air pollutants, fifteen comprehensive health assessment documents and/or assessment reviews are being completed. In addition nine assessments will be started.

1984 Explanation of Changes from the Amendment

The net increase of +$35,500 results from the following actions:

-Reprogrammings. (+$35,500) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$40,000 to the Salaries and Expenses appropriation and a net decrease of -$4,500 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,023,400 and 21.9 total workyears for this program, of which $1,288,300 was under the Salaries and Expenses appropriation and $735,100 was for extramural purposes under the Research and Development appropriation.

Prepare Health and Risk Assessments to Support Regulation of Hazardous Air Pollutants. Comprehensive assessments for six chemicals were completed. These assessments will be printed and distributed by the middle of 1984. Assessments and/or assessment reviews for eight chemicals were initiated.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $5,128,500 supported by 35.8 total workyears for this program, of which $2,043,500 is for Salaries and Expenses and $3,085,000 is for Research and Development. This reflects an increase of $208,100 and a decrease of $70,000, respectively. The net increase reflects a multi-disciplinary initiative to determine the contribution of air pollution to human cancer.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. ORD will continue to maintain non-criteria monitoring stations to provide information useful in selecting chemicals for regulation and to investigate the effectiveness of existing control measures. In ambient air, the focus will be on developing and assessing sampling/concentration methods and developing advanced methods of analysis. New techniques will be evaluated and source monitoring methods will also be developed, evaluated and validated.

An integrated program to assess the contribution of air pollution to the risk of cancer in the United States will be initiated. This integrated cancer assessment program will involve several scientific disciplines within ORD (e.g., monitoring, health effects, engineering) and is designed to address a long-standing major scientific problem; the lack of information on the relationship between air pollution and cancer.

Provide Quality Assurance Support for HAP Program Requirements. The resposi-tory for reference samples will be expanded with Research Materials (RMs) from the National Bureau of Standards (NBS). Additions to the Quality Assurance Handbook will be developed, as will Technical Assistance Documents. These activities assist in ensuring that research results have the highest level of quality assurance.

1984 Program

In 1984, the Agency is allocating a total of $4,990,400 and 35.8 total work-years, of which $1,835,400 is for the Salaries and Expenses appropriation and $3,155,000 is under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. In response to the need for a more coordinated effort to monitor non-criteria contaminants at the regional, State, and local level, ORD is maintaining a non-criteria monitoring center in Philadelphia and is expanding the program to establish three other trend monitoring stations. The center functions as a focal point for the development and evaluation of field and laboratory methodologies to permit the characterization of urban and non-urban atmospheres.

In the area of indoor air pollution, studies are being undertaken in two major areas: methods development (testing smaller, quieter monitors for formalde-hyde particles and NO_2); and, monitoring (planning a large-scale multi-pollutant survey of residences).

Provide Quality Assurance Support for HAP Program Requirements. A repository for reference samples is being expanded and maintained. Quality assurance guide-lines are being developed detailing the procedures and explaining how to apply these procedures to laboratories. Audits of regional, State, and local government laboratories are being performed.

1984 Explanation of Changes from the Amendment

The net decrease of -$194,100 results from the following actions:

-Reprogrammings. (-$194,100) Several reprogrammings were made to this activi-ty which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$144,100 to the Salaries and Expenses appropriation and a net decrease of -$50,000 to the Research and Development appro-priation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,299,100 and 34.5 total work-years for this program, of which $1,772,500 was under the Salaries and Expenses appropriation and $1,526,600 was for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. As a cooperative effort, the first non-criteria monitoring station was established in Philadelphia. In 1983, ORD conducted a study to characterize the types and concentrations of indoor air pollution, especially on building materials in structures that the public has access to (e.g., office buildings, hospitals, schools). The results of this study will be compared to previous studies.

Provide Quality Assurance Support for HAP Program Requirements. Standard Reference Materials (SRM's) were validated and issued for formaldehyde, asbestos, and acrylonitrile. The sample repository was maintained and quality assurance performance audits were conducted for Regions and local governments as requested.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $3,498,800 supported by 33.7 total workyears for this program, of which $2,028,800 is for Salaries and Expenses and $1,470,000 is for Research and Development. This reflects increases of 3.0 workyears, $97,000 for Salaries and Expenses, and $716,500 for Research and Development. These resources will be used to conduct the health research component of an integrated program to address major scientific questions about the relationship between air pollution and human cancer.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. The health research component of the integrated cancer project will use mutagenicity bioassays to direct characterization of emissions once they have been detected and traced to a source. This approach has been successfully used to identify potential carcinogens in synthetic fuels, diesel emissions, and kerosene soot.

The remainder of the health research program has three goals: (1) to develop and validate methods to produce dose-response data on the toxic effects of HAP's; (2) to produce dose-response data on the toxic effects of HAPs; and (3) to develop models which improve our ability to use dose-response data in risk assessments.

In dose-response toxicological research, chemicals identified as HAP's will continue to be studied to determine their toxic effects upon genetic material, the nervous and reproductive systems, the lungs, the liver, and the kidneys. A focal point of these studies will be alterations in the lung's defenses against infection.

Research will also be continued to develop bioassays which are sufficiently sensitive and reliable to evaluate the neurotoxic potential of HAP's and to develop improved data analysis techniques for use in establishing a cancer risk assessment method based on comparative mutagenic potency of chemicals.

1984 Program

In 1984, the Agency is allocating a total of $2,685,300 and 30.7 total workyears to this program, of which $1,931,800 is for the Salaries and Expenses appropriation, and $753,500 is for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. Toxicologic studies of HAPs have been broadened to include additional health endpoints. Bioassay techniques are also being developed which will provide dose-response data more rapidly, reliably, and inexpensively. The genetic, respiratory, reproductive, and neurologic toxicity of chemicals selected by OAQPS are being studied. Biological models are being developed which will provide better methods for extrapolating data on neurologic toxicology from animal tests to predict human effects and methods for extrapolating from observed effects at high doses to those at low doses.

1984 Explanation of Changes from the Amendment

The net decrease of -$22,200 results from the following action:

-Reprogramming. (-$22,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$22,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,080,500 and 22.6 total workyears to this program, of which $1,214,700 was under the Salaries and Expenses appropriation and $865,800 was for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. Emphasis was placed on development of bioassays for the identification and screening of HAPs, primarily with carcinogenesis and mutagenesis as endpoints. Studies were performed to obtain genetic, neurologic, and pulmonary dose-response data on HAP's to support regulation development and review. Also, the development of genetic and neurologic toxicity models was continued to improve the Agency's capability to perform risk assessments based on data obtained from animal studies.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $1,051,300 supported by 8.0 total workyears for 1985, of which $451,300 is for Salaries and Expenses and $600,000 is for Research and Development. This reflects an increase of $204,400 and a decrease of $50,000, respectively, and an increase of 3.0 total workyears. This increase reflects a multi-disciplinary initiative to determine the contribution of air pollution to human cancer.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. The program will focus on characterizing emissions and evaluating mitigation technologies for HAPs to assist OAQPS in formulating regulatory strategies and in developing priorities for reducing HAP emissions. In addition, as a component of the integrated cancer assessment program, research will be conducted to characterize HAP emissions from high priority industries and combustion sources. For a given source, hazardous air pollutants emitted will be characterized to establish source emission factors, and the performance of potential mitigation technologies will be described.

1984 Program

In 1984, the Agency is allocating a total to $896,900 and 5.0 total workyears to this program, of which $246,900 is for the Salaries and Expenses appropriation and $650,000 is for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. Research is being initiated to: (1) characterize HAP emissions and evaluate mitigation technology performance for industrial and combustion sources such as the metallurgical, petroleum, and organic chemical industries and residential wood heaters; (2) provide OAQPS with assistance in developing a methodology for ranking sources of HAPs; and (3) characterize sources of indoor air pollution and the factors affecting them.

1984 Explanation of Changes from the Amendment

The net increase of +$79,000 results from the following actions:

-Reprogrammings. (+$79,000) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$79,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

No resources were expended in this program in 1983.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $975,100 supported by 3.9 total workyears for this program, of which $338,200 is for Salaries and Expenses and $636,900 is for Research and Development. This reflects increases of $18,400 and $94,600, respectively. There will be an increased emphasis on characterizing HAPs in the ambient air as part of ORD's integrated program to assess the contribution of air pollution to the human cancer risk in the United States.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. Research on atmospheric transport, transformation and fate of hazardous air pollutants will continue to be conducted to support the regulatory needs of OAQPS. Studies will be continued to determine the factors such as meteorology and atmospheric chemistry influencing the concentration levels, and temporal and spatial variability of volatile organic HAPs in urban air. Smog chamber studies will continue to be conducted to determine lifetimes and chemical removal rates of HAPs from the atmosphere and to identify the products remaining from atmospheric reaction. The results of these studies will be used to simulate what occurs physically and chemically in the atmosphere. Studies to determine the extent, quality and accuracy of existing ambient air data on more than 150 volatile organic compounds (VOCs) will be continued. Also, as part of an integrated ORD program to assess the contribution of air pollution to cancer risk in the United States, research will be initiated to simulate atmospheric photochemistry; to collect and identify the transformation products and ultimately describe the atmospheric processes which led to the formation of bioactive products in the ambient air.

1984 Program

In 1984, the Agency is allocating a total of $862,100 and 3.9 total workyears to this program, of which $319,800 is for the Salaries and Expenses appropriation, and $542,300 is for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring and Transport and Fate to Support HAP Regulatory Activities. Studies to determine the factors responsible for the concentration levels, and temporal and spatial variability of VOCs in urban air are being evaluated. In addition, studies are being conducted to determine the extent, quality, and accuracy of existing ambient air data on more than 150 VOCs. A study to determine the wet and dry deposition rates of HAPs is being completed.

1984 Explanation of Changes from the Amendment

The net decrease of -$1,400 results from the following actions:

- Reprogramming. (-$1,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$1,400 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $979,200 and 5.7 total workyears for this program, of which $302,600 was under the Salaries and Expenses appropriation, and $676,600 was for extramural purposes under the Research and Development appropriation.

Develop Information on Health, Emission Reduction Technologies, Monitoring, and Transport and Fate to Support HAP Regulatory Activities. An assessment was made on the accuracy of available ambient air quality data bases for a variety of volatile organic compounds. Also, results from ambient air characterization studies in ten urban areas for a selected number of potentially hazardous VOCs were compiled.

AIR

Mobile Sources

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Scientific Assessment							
Salaries & Expenses	$54.6	$51.7	$51.7	$51.7		$66.9	$15.2
Research & Development	$18.7	$425.0	$425.0	$425.0		$25.0	-$400.0
TOTAL	$73.3	$476.7	$476.7	$476.7		$91.9	$384.8
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$630.2	$545.5	$545.5	$540.5		$496.8	-$43.7
Research & Development	$1,091.5	$338.4	$338.4	$338.4		$338.4	
TOTAL	$1,721.7	$883.9	$883.9	$878.9		$835.2	-$43.7
Health Effects							
Salaries & Expenses	$639.8	$565.3	$565.3	$565.3		$595.6	$30.3
Research & Development	$2,052.0	$256.7	$3,256.7	$3,256.7		$3,297.3	$40.6
TOTAL	$2,691.8	$822.0	$3,822.0	$3,822.0		$3,892.9	$70.9
Environmental Processes & Effects							
Salaries & Expenses	$530.3	$496.9	$496.9	$496.9		$335.4	-$161.5
Research & Development	$1,175.2	$403.9	$403.9	$403.9		$263.3	-$140.6
TOTAL	$1,705.5	$900.8	$900.8	$900.8		$598.7	-$302.1
TOTAL:							
Salaries & Expenses	$1,854.9	$1,659.4	$1,659.4	$1,654.4		$1,494.7	-$159.7
Research & Development	$4,337.4	$1,424.0	$4,424.0	$4,424.0		$3,924.0	-$500.0
Mobile Sources TOTAL	$6,192.3	$3,083.4	$6,083.4	$6,078.4		$5,418.7	-$659.7

AIR

Mobile Sources

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Scientific Assessment	1.0	1.0	1.0	1.0		1.0	
Monitoring Systems & Quality Assurance	10.0	5.3	5.3	5.3		6.2	.9
Health Effects	5.5	3.7	3.7	3.7		3.7	
Environmental Processes & Effects	10.0	6.2	6.2	6.2		6.2	
TOTAL PERMANENT WORKYEARS	26.5	16.2	16.2	16.2		17.1	.9
TOTAL WORKYEARS							
Scientific Assessment	1.0	1.0	1.0	1.0		1.0	
Monitoring Systems & Quality Assurance	13.5	8.0	8.0	8.0		8.0	
Health Effects	8.6	7.4	7.4	7.4		7.4	
Environmental Processes & Effects	15.6	12.2	12.2	12.2		7.7	-4.5
TOTAL WORKYEARS	38.7	28.6	28.6	28.6		24.1	-4.5

Mobile Sources

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Assess Health Risks and Exposure to Carbon Monoxide			
- Final addendum to 1979 carbon monoxide criteria document (Scientific Assessment)		1/84	
- Reports on Denver and Washington, D.C. CO exposure studies (Monitoring)	3/84	3/84	1/85
- Report on validation of microenvironmental exposure model (Monitoring)		6/85	6/85
- Report on relationship of CO exposure profiles to breath CO levels in Denver and Washington, D.C. (Monitoring)		3/85	3/85
- Journal article on validated equations predicting COHb formation during CO inhalation at rest and exercise (Health)	6/85	6/85	6/85
- Journal article on pre-anginal events of cardiac function in patients with heart disease exposed to CO (Health)	6/87	6/87	6/87
Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants			
- Report on the assessment of low ambient temperature on emissions from late model gasoline fueled vehicles (Env. Processess)		2/86	2/86
- Report on the evaluation of methods for measuring emissions from vehicles utilizing blended fuels (Env. Processes and Effects)		10/84	10/84
- Report on pollutant emission factors for heavy duty Class VIII in-use diesel tractor trailers and buses (Env. Processes)	9/84	9/84	
Collect and Maintain Data in Support of the Fuel and Fuel Additives Program			
- Updated list of fuels and fuel additives (Monitoring)	8/83	8/84	8/85
Provide QA Support for Mobile Sources			
- Report on accuracy and precision of CO personal exposure monitors (Monitoring)	8/83		

Mobile Sources

Budget Request

The Agency requests a total of $5,418,700 supported by 24.1 total workyears for 1985, a decrease of $659,700 and 4.5 total workyears from 1984. Included in this total is $1,494,700 for Salaries and Expenses and $3,924,000 for Research and Development, with decreases of $159,700 and $500,000, respectively. The decreases occur primarily in the scientific assessment and environmental processes programs, reflecting completion of the first revision of the carbon monoxide criteria document and completion of studies on gaseous and particulate emissions from in-use, heavy-duty diesel trucks and buses.

Program Description

Title II of the Clean Air Act, as amended in 1977, requires the Agency to prescribe emission standards for carbon monoxide (CO), hydrocarbons, and oxides of nitrogen for heavy-duty and light-duty vehicles. In order to set justifiable and cost-effective standards, the Agency requires information on the chemical composition of fuels, fuel additives, and diesel and gasoline exhausts. Also required is information on the exposure of drivers, passengers and the population at large to motor vehicle pollutants, the effects of that exposure, and the risks of sustaining continued exposure. The Clean Air Act also requires the Agency to periodically reevaluate the adequacy of the National Ambient Air Quality Standards (NAAQS) for all the criteria pollutants, including CO, based upon the most scientifically credible data available.

The following objectives support these goals:

Objective 1. Assess the Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Work in this objective includes determining population exposure profiles to CO using personal monitors and developing a data base for evaluating the impact of CO on cardiovascular performance and neurobehavior in normal and susceptible humans. The Administrator must evaluate the NAAQS for CO every five years as provided by Section 109 of the Clean Air Act.

Objective 2. Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. Research in this area seeks to determine population exposure distribution to pollutants other than CO such as polynuclear aromatic (PNA) organics and particulates; characterize the gaseous and particulate emissions from in-use light and heavy-duty diesel and gasoline powered vehicles; refine existing air quality models; and provide short-term testing guidelines to evaluate potential acute health risks from unregulated emissions.

Objective 3. Collect and Maintain Data in Support of the Fuel and Fuel Additives Program. Sections 211 and 302(d) of the Clean Air Act require the Environmental Protection Agency (EPA) to provide a data base to determine whether the use of any motor vehicle fuels or fuel additives pose an unreasonable risk to human health.

Objective 4. Provide Quality Assurance Support for Mobile Sources Program Requirements. The Office of Research and Development is required to ensure that all measurement data related to mobile source pollutants are reliable and accurate.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $91,900 supported by 1.0 workyear for this program, of which $66,900 is for Salaries and Expenses and $25,000 is for Research and Development. This reflects an increase of $15,200 for Salaries and Expenses and a decrease of $400,000 for Research and Development. The net decrease of $384,800 reflects the cyclical nature of the revision process for the carbon monoxide criteria document.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Analyses of risk assessment issues related to the proposal or promulgation of a carbon monoxide standard will be provided. Also, assistance in interpreting health and environmental risk data related to the carbon monoxide standard will be provided.

1984 Program

In 1984, the Agency is allocating a total of $476,700 and 1.0 workyear to this program, of which $51,700 is under the Salaries and Expenses appropriation and $425,000 is for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. After taking into account comments received from public reviews, the final addendum to the 1979 CO Criteria Document will be completed.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $73,300 and 1.0 workyear for this program, of which $54,600 was under the Salaries and Expenses appropriation and $18,700 was for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. The addendum to the 1979 carbon monoxide criteria document was completed for public review and comment and Clean Air Scientific Advisory Committee (CASAC) review.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

In 1985, the Agency requests a total of $835,200 supported by 8.0 total workyears for this program, of which $496,800 is for Salaries and Expenses and $338,400 is for Research and Development. This reflects a decrease of $43,700 in Salaries and Expenses. This decrease represents a reduction in equipment expenses associated with quality assurance audits.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. To support the NAAQS for CO, analyses and reports based on the human exposure data bases collected in the Washington, D.C., and Denver studies will be completed. The existing NAAQS is

designed to assure that 99% of the population has blood levels below 2.5% carboxyhemoglobin, and the data from these urban-scale studies will be evaluated to assess the proportion of the population below this level for various candidate NAAQS values. An evaluation will be completed of the validity of existing activity profiles in actual urban settings. The methodology for the Denver and Washington, D.C., field studies will continue to be evaluated for its applicability to other criteria air pollutants for which NAAQS must be reviewed and revised.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. The results from human exposure field studies will be evaluated for their applicability to unregulated mobile source air pollutants, including organics and inhaled particulates. The activity pattern data base obtained in these two urban-scale studies will be evaluated for potential use with human activity pattern-exposure models that may be applicable to unregulated emissions from mobile sources. Evaluation will be undertaken of personal monitoring techniques for inhaled particulates.

Collect and Maintain Data in Support of the Fuel and Fuel Additives Program. The registration of fuels and fuel additives program, as mandated by Congress, will be continued.

Provide Quality Assurance Support for Mobile Source Program Requirements. The quality assurance program will support the State and Local Air Monitoring System (SLAMS). The nationwide audit program will obtain, test, verify, and distribute carefully specified quality assurance samples. The quality assurance and standards laboratory will function in assisting State and local agencies in generating precise and accurate air monitoring data used to judge compliance with the NAAQS.

1984 Program

In 1984, the Agency is allocating a total of $878,900 and 8.0 total workyears for this program, of which $540,500 is under the Salaries and Expenses appropriation and $338,400 is for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Work completed on the Denver, Colorado, and Washington, D.C., human exposure CO field studies has provided a large, valuable data base that will be extensively analyzed and evaluated.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. The methodology developed for the Denver and Washington, D.C., population exposure studies is being evaluated for possible use with unregulated mobile source pollutants, including organics and inhaled particles. The activity pattern data base obtained in these two field surveys is being analyzed for validation of exposure models.

Collect and Maintain Data in Support of the Fuel and Fuel Additives Program. The registration of fuels and fuel additives program, as mandated by Congress, continues.

Provide Quality Assurance Support for Mobile Source Program Requirements. The quality assurance program supports the State and Local Air Monitoring System (SLAMS). The nationwide audit program obtains, verifies, and distributes carefully specified quality assurance samples. Quality assurance audits are being conducted on the CO exposure field studies in Denver and Washington, D.C.

1984 Explanation of Changes from the Amendment

The net decrease of -$5,000 results from the following action:

-Reprogramming. (-$5,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$5,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,721,700 and 13.5 total workyears for this program, of which $630,200 was under the Salaries and Expenses appropriation and $1,091,500 was for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Exposure studies of CO were undertaken comparing the levels people come into contact with during their daily lives with actual readings at fixed air monitoring stations. A field survey of 454 respondents was completed in Denver, Colorado, and another field survey of 712 respondents was completed in Washington, D.C.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. The statistical design and approach used in the Denver and Washington, D.C. population exposure studies were evaluated for use with other air pollutants such as particulates and nitrogen dioxide where exposure data are needed.

Collect and Maintain Data in Support of the Fuel and Fuel Additives Program. The program to register fuels and fuel additives, as mandated by Congress, registered over 250 fuels.

Provide Quality Assurance Support for Mobile Source Program Requirements. The quality assurance program supported the State and Local Air Monitoring System (SLAMS) for those pollutants generated by mobile sources. Carefully specified quality assurance samples for mobile source air pollutants were obtained, verified, and distributed. An evaluation was conducted of several new CO personal monitoring instruments to determine their precision, accuracy, and sensitivity to temperature variation.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $3,892,900 supported by 7.4 total workyears for this program, of which $595,600 is for Salaries and Expenses and $3,297,300 is for Research and Development. This reflects increases of $30,300 and $40,600 respectively to support additional testing of instruments that can be used in field studies to measure changes in cardiac function.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. The health research program for this objective has two goals: (1) to develop and validate techniques to produce dose-response data on the toxic effects of carbon monoxide; and (2) to produce dose-response data on the toxic effects of carbon monoxide.

The possibility of toxic effects of exposures to CO concentrations (at or near the ambient standard) needs to be more definitively determined; therefore, clinical and animal studies to produce dose-response data on the toxic effects of low-level exposure to CO will be conducted. Techniques have been developed to measure, non-invasively, the cardiac effects of CO exposure. These techniques will improve our ability to produce dose-response data in humans. This information will be used in risk assessments, the results of which will improve the data base upon which OAQPS can update the CO standard.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. Under this program funding continues for the Health Effects Institute (HEI). The HEI was established and is funded by both EPA and the motor vehicle industry to perform independent studies and produce health data on pollutants emitted from motor vehicles.

1984 Program

In 1984, the Agency is allocating a total of $3,822,000 and 7.4 total workyears to this program, of which $565,300 is under the Salaries and Expenses appropriation and $3,256,700 is for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Studies are being performed to provide dose-response data on cardiac and respiratory effects in humans following exposure to low levels of CO. In the human studies, both healthy volunteers and patients with heart disease are being studied. The data from these studies will contribute to ongoing risk assessments which will refine the data base for updating the CO standard.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. The Health Effects Institute (HEI) is completing arrangements for its second year of funding, both for ongoing work and new projects. The research needs submitted for consideration include formaldehyde, methanol, and bioassay development for fuels and fuel additives, as well as ongoing work on carbon monoxide, nitrogen oxides, and ozone.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,691,800 and 8.6 total workyears for this program, of which $639,800 was under the Salaries and Expenses appropriation and $2,052,000 was for extramural purposes under the Research and Development appropriation.

Assess Health Risks and Exposure to Carbon Monoxide to Support Review and Revision of NAAQS and Motor Vehicle Emission Standards. Studies were begun to provide dose-response data on cardiac and respiratory effects in healthy humans and those with cardiovascular disease exposed to low levels of CO.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. The Health Effects Institute completed arrangements for its initial year of funding, and studies were initiated on the health effects of diesel emissions, other organic emissions, carbon monoxide, nitrogen oxides, and ozone.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $598,700 supported by 7.7 total workyears for this program, of which $335,400 will be for the Salaries and Expenses appropriation and $263,300 is for the Research and Development appropriation. This represents decreases of $161,500 and $140,600 respectively, and 4.5 workyears. The decreases reflect completion of research on the gaseous and particulate emissions from in-use, heavy-duty diesel trucks and buses.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. In 1985, studies will continue to provide the information necessary to accurately assess and evaluate the impacts of unregulated mobile source emissions on ambient air quality. Studies initiated in 1984 will continue to: 1) determine the impact of emissions from vehicles utilizing blended fuel mixtures on ozone air quality, 2) assess and evaluate the effects of low ambient temperature on emissions from late model, in-use light-duty diesel and gasoline powered vehicles, 3) develop and refine real-time measurement procedures to permit accurate analysis of emissions from vehicles utilizing fuel mixtures, and 4) characterize the gaseous and particulate emissions from late model, in-use light-duty diesel vehicles.

Information from these research activities will provide an updated, comprehensive in-use emissions data base; provide for the refinement of existing air quality models to assess the impacts of mobile source emissions on ambient air quality; and support the Agency's mobile source regulatory development programs.

1984 Program

In 1984, the Agency is allocating a total of $900,800 and 12.2 total workyears to this program, of which $496,900 is for the Salaries and Expenses appropriation and $403,900 is for extramural purposes under the Research and Development appropriation.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. Studies to characterize the gaseous and particulate emissions (and the influence of load on emissions) from heavy-duty diesel and gasoline powered trucks and buses will be concluded. In response to program office information needs, the four studies listed above have been initiated. Information obtained from these studies will enable researchers to develop and/or modify analytical techniques to more accurately measure mobile source emissions and to establish the experimental foundation for more detailed characterization studies.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,705,500 and 15.6 total workyears for this program, of which $530,300 was under the Salaries and Expenses appropriation and $1,175,200 was for extramural purposes under the Research and Development appropriation.

Assess the Health Risks and Exposure to Unregulated Mobile Source Pollutants. Emissions characterization studies on heavy-duty diesel and gasoline vehicles using transient engine dynamometers were completed. In addition, studies to characterize the gaseous and particulate emissions, including volatile organic compounds (VOCs), from in-use gasoline powered passenger cars were also completed. The information was provided to the program office for use in determining the need for regulatory action. The information was also used to improve the data bases for models used to assess the impact of mobile source emissions on ambient air quality.

AIR

Gases and Particles

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
Scientific Assessment							
Salaries & Expenses	$513.5	$536.6	$536.6	$536.6		$549.6	$13.0
Research & Development	$250.5	$500.0	$500.0	$500.0		$494.2	-$5.8
TOTAL	$764.0	$1,036.6	$1,036.6	$1,036.6		$1,043.8	$7.2
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$3,658.5	$3,376.9	$3,376.9	$3,270.8		$3,354.8	$84.0
Research & Development	$3,110.1	$2,472.7	$2,472.7	$2,416.7		$2,238.9	-$177.8
TOTAL	$6,768.6	$5,849.6	$5,849.6	$5,687.5		$5,593.7	-$93.8
Health Effects							
Salaries & Expenses	$3,637.2	$3,734.8	$3,767.9	$3,967.9		$3,778.1	-$189.8
Research & Development	$3,458.2	$4,159.1	$5,159.1	$5,159.1		$6,209.9	$1,050.8
TOTAL	$7,095.4	$7,893.9	$8,927.0	$9,127.0		$9,988.0	$861.0
Environmental Engineering & Technology							
Salaries & Expenses	$1,817.9	$1,473.4	$1,570.6	$1,375.4		$1,992.0	$616.6
Research & Development	$4,647.8	$900.3	$2,420.3	$2,420.3		$2,374.0	-$46.3
TOTAL	$6,465.7	$2,373.7	$3,990.9	$3,795.7		$4,366.0	$570.3
Environmental Processes & Effects							
Salaries & Expenses	$2,573.7	$2,509.3	$2,509.3	$2,509.3		$2,440.1	-$69.2
Research & Development	$8,381.5	$6,773.3	$6,773.3	$6,609.3		$6,001.8	-$607.5
TOTAL	$10,955.2	$9,282.6	$9,282.6	$9,118.6		$8,441.9	-$676.7

AIR

Gases and Particles

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$12,200.8	$11,631.0	$11,761.3	$11,660.0		$12,114.6	$454.6
Research & Development	$19,848.1	$14,805.4	$17,325.4	$17,105.4		$17,318.8	$213.4
Gases and Particles TOTAL	$32,048.9	$26,436.4	$29,086.7	$28,765.4		$29,433.4	$668.0
PERMANENT WORKYEARS							
Scientific Assessment	8.4	7.5	7.5	7.5		7.5	
Monitoring Systems & Quality Assurance	65.0	54.9	54.9	54.0		55.0	1.0
Health Effects	50.5	54.9	55.8	55.8		55.9	.1
Environmental Engineering & Technology	27.8	15.2	18.1	17.1		25.0	7.9
Environmental Processes & Effects	35.2	30.5	30.5	30.5		30.5	
TOTAL PERMANENT WORKYEARS	186.9	163.0	166.8	164.9		173.9	9.0

AIR

Gases and Particles

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	10.9	10.0	10.0	10.0		10.0	
Monitoring Systems & Quality Assurance	75.2	64.1	64.1	63.2		63.2	
Health Effects	55.3	65.5	66.5	66.5		66.5	
Environmental Engineering & Technology	36.5	25.3	28.2	27.2		37.2	10.0
Environmental Processes & Effects	46.4	40.5	40.5	40.5		37.5	-3.0
TOTAL WORKYEARS	224.3	205.4	209.3	207.4		214.4	7.0

Gases and Particles

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Develop and Validate Air Quality Models			
- Develop a users guide for an interim regional particulate model (Env. Processes)	6/85	6/85	6/85
- Report on extrapolation of turbulent fluctuation with height (Env. Processes)	3/85	3/85	3/85
- Receptor modeling results and data base for comparison with dispersion modeling results for Philadelphia (Env. Processes)	9/85	9/85	9/85
- Deliver an improved urban and mesoscale aerosol model to UNAMAP (Env. Processes)	11/85	11/85	11/85
- Evaluate a complex terrain dispersion model for stable plume impaction (Env. Processes)	1/86	1/86	1/86
Develop Health and Welfare Effects Information			
- Publication on the response of an atmospheric corrosion monitor as a proxy for damage to materials (Env. Processes)	10/84	10/84	10/84
- Report evaluating the occurrence of pollutant mixtures and exposure regimes for dose/ response studies (Env. Processes)	12/84	12/84	12/84
- Journal articles on the response of asthmatics to SO_2 exposure (Health)	3/84	3/84	3/84
- Journal article on the neurobehavioral effects of lead in children and adults (Health)	11/84	11/84	11/84
- Journal article on the deposition of SO_2 and hygroscopic particles in the respiratory tract (Health)	9/85	9/85	9/85

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Journal article on the responses of patients with chronic lung disease (Health)	10/86	10/86	10/86
- Publish criteria document for PM/SO_x (Scientific Assessment)		12/84	12/84
- Publish criteria document for lead (Scientific Assessment)	12/84	12/84	12/84
Develop and Validate GAP Measurement and Monitoring Methods			
- Analyze filters and summarize IP data (Monitoring)	6/83	6/84	6/85
- Review and process reference and equivalent methods applications (Monitoring)	9/83	9/84	9/85
- Apply airborne lidar to plume particulate transport (Monitoring)	9/83	9/84	9/85
Provide QA Support for the GAP Program Requirements			
- Provide QA for IP, SLAMS/NAMS ambient monitoring networks and for continuous emissions and other source monitors (Monitoring)	9/83	9/84	9/85
Research and Assess Emissions Reduction Technologies			
- Issue assessment of fugitive emissions particle control methods (Env. Technology)	9/83		
- Report on prospective cost model for integrated air pollutant emissions reduction options for power utilities (Env. Technology)	12/83		
- Report on the field evaluation of the first generation full-scale utility spray dryer FGD system (Env. Technology)	8/84	8/84	
- Report for first generation two-stage electrostatic precipitators (Env. Technology)	12/84	12/84	

Gases and Particles

Budget Request

The Agency requests a total of $29,433,400 supported by 214.4 total workyears for 1985, an increase of $668,000 and 7.0 total workyears from 1984. Included in this total is $12,114,600 for Salaries and Expenses and $17,318,800 for Research and Development which reflects an increase of $454,600 and $213,400, respectively. The increase results from an enhancement of the epidemiology research program, added emphasis on providing environmental engineering and technology technical assistance, and identifying the options and advantages of integrated air pollution control technologies in coal-fired power plants.

Program Description

The Gases and Particles research program provides regulatory decision-makers, the regulated community and enforcement officials with the monitoring methodologies, air quality models, health and welfare assessments and emission reduction technology evaluations required to regulate atmospheric particulate matter (PM) and its major components, lead, and gaseous sulfur dioxide (SO_2) under the Clean Air Act (CAA). The following objectives support these goals:

Objective 1. Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of the National Ambient Air Quality Standards (NAAQS). Research under this objective provides the air quality models, emissions data, monitoring tools, and technical support needed by States to develop, adopt and enforce cost-effective control strategies required by the CAA. The results of this work are disseminated for use in the development of State Implementation Plans (SIPs), Prevention of Significant Deterioration (PSD) determinations, and for protection from visibility degradation in Class I pristine areas.

Objective 2. Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Research under this objective provides the Office of Air Quality Planning and Standards (OAQPS) with data on the adverse health and welfare effects of gases and particles needed to periodically re-evaluate the adequacy of National Ambient Air Quality Standards (NAAQS) for SO_2, lead, and particulate matter. Criteria documents for health and welfare effects provide the primary documentation for the review.

Objective 3. Develop and Validate Measurement and Monitoring Methods for the Gases and Particles Program. To determine air quality trends, compliance with permit conditions, and the need for enforcement actions, research under this objective provides OAQPS and the Regions with new and improved air pollution methodologies and monitoring techniques. Research focuses on ambient, source, and exposure measurement methods.

Objective 4. Research and Assess Emission Reduction Technologies to Support Permitting, the New Source Performance Standards (NSPS) and Compliance Activities. Research under this objective provides OAQPS, the Regions, and industry with data on the performance, cost and reliability of existing, new, and emerging emissions reduction technologies. This information helps to establish New Source Performance Standards (NSPS) and is used for SIPs, PSD determinations, and for the protection from visibility degradation in Class I pristine areas.

Objective 5. Provide Quality Assurance (QA) Support for the Gases and Particles Program: Research under this objective supports Title 40, Part 58 of the Clean Air Act which specifies mandatory QA for State and local monitoring.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $1,043,800 supported by 10.0 total workyears for this program, of which $549,600 is for Salaries and Expenses and $494,200 is for Research and Development. This reflects an increase of $13,000 and a decrease of $5,800, respectively.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. The final lead criteria document will be available in December, 1984. Support will be provided to OAQPS to develop regulatory analyses, respond to public comments and participate in the Clean Air Science Advisory Committee (CASAC) review for the lead standard update. Also, consultative guidance will be provided to assist OAQPS in the development of revised particulate matter (PM) and sulfur oxide (SO_x) standards. The next update of the PM/SO_x criteria document will be initiated.

1984 Program

In 1984, the Agency is allocating a total of $1,036,600 and 10.0 total workyears to this program, of which $536,600 is for the Salaries and Expenses appropriation and $500,000 is for the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Work on the lead criteria document is continuing to develop a final document in December, 1984. The revised criteria document for lead was made available for public review and comment in October 1983. Technical assistance is being provided to OAQPS on the PM/SO_x criteria document to help develop regulatory proposals, and participate in the CASAC peer review of regulatory options for PM and SO_x.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $764,000 and 10.9 total workyears, of which $513,500 was under the Salaries and Expenses appropriation and $250,500 was for the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Efforts were directed towards revising and updating the current criteria document for lead. Also, technical assistance was provided to OAQPS on the PM/SO_x criteria document to help develop regulatory options, respond to public comments on regulatory proposals and participate in the CASAC peer review of regulatory options for PM and SO_x.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $5,593,700 supported by 63.2 total workyears for this program, of which $3,354,800 is for Salaries and Expenses and $2,238,900 is for Research and Development. This reflects an increase of $84,000 and a decrease of $177,800, respectively. The net decrease results from a reduction in the number of routine and special quality assurance audits required.

Develop and Validate Measurement and Monitoring Methods for the Gases and Particles Program. The Office of Research and Development will analyze the mass and chemical composition of gases and particles from filters collected by the Inhalable Particulate (IP) Network. Study of the operational characteristics of the 10u filter system will be carried out. Glass fiber filters from National, State and local Air Monitoring Stations (SLAMS and NAMS) will be analyzed for mass and trace metals. Reference and equivalent methods for gases and particles will be evaluated. Continuous emission monitoring methods for stationary sources will be evaluated. Data support will be provided for international monitoring programs. Regional plume transport will be studied using airborne lidar techniques.

Provide Quality Assurance (QA) Support for the Gases and Particles Program. Quality assurance support will be provided to the IP Network, the SLAMS/NAMS network, and other air monitoring efforts. A standards laboratory and a repository of QA materials will be maintained for the user community. Routine and special audits will be conducted on laboratories making ambient and source measurements and on compressed gas vendors. The QA guidelines, Handbook, Data Handling System and Precision and Accuracy Reporting Systems will be updated and maintained. An audit program for continuous emission monitors for stationary sources will be carried out. Statistical techniques will be carried out for investigating temporal and spatial distributions of pollutants and corresponding human exposures.

1984 Program

In 1984, the Agency is allocating a total of $5,687,500 and 63.2 total workyears to this program, of which $3,270,800 is for the Salaries and Expenses appropriation and $2,416,700 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Measurement and Monitoring Methods for the Gases and Particles Program. The IP Network was originally planned to be transferred to the States in 1984. However, OAQPS requested that 20 of the sites be kept active and under the supervision of the Office of Research and Development. Thus, these 20 sites will be operated for at least one more year to develop data for OAQPS. Monitoring systems for pollutants in ambient air and in source emissions are being developed and improved. Selected systems are being subjected to single and multilaboratory evaluation to identify and correct sources of error.

Provide Quality Assurance (QA) Support for the Gases and Particles Program. Quality control samples are being obtained and used in audits, and QA support is being provided to the IP Network and the SLAMS/NAMS networks.

1984 Explanation of Changes from the Amendment

The net decrease of -$162,100 results from the following actions:

-Reprogrammings. (-$162,100) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$106,100 to the Salaries and Expenses appropriation and a net decrease of -$56,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $6,768,600 and 75.2 total workyears for this program, of which $3,658,500 was under the Salaries and Expenses appropriation and $3,110,100 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Measurement and Monitoring Methods in Support of the Gases and Particles Program. Planning continued for the transfer of the IP Network to the States. The mass and chemical composition of samples were determined. The SLAMS/NAMS networks were continued and the filters analyzed to determine ambient air quality trends and the effects of Agency actions on national air quality.

Provide Quality Assurance (QA) Support for the Gases and Particles Program. In 1983, performance audits of SLAMS/NAMS stations were conducted; a repository of reference samples and standards was maintained; new and expanded QA guidelines were published; and the Mandatory QA Program was continued to respond to Regional, State and local needs.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $9,988,000 supported by 66.5 total workyears for this program, of which $3,778,100 is for Salaries and Expenses and $6,209,900 is for Research and Development activities. This reflects a decrease of $189,800 for Salaries and Expenses and an increase of $1,050,800 for Research and Development. The net increase results from the enhancement of the Agency's epidemiology research program.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. The research program has three major goals: 1) to provide data on a full range of health effects of exposure to gases, SO_2, particles, and lead from human and animal studies; 2) to provide better models to extrapolate animal data to humans; and 3) to develop improved test methods for use by the Environmental Protection Agency (EPA) and others to conduct improved research into the physiologic response of humans to gaseous air pollutants and particles.

Work will be initiated to develop an aerosol particle generation system to study coarse mode particles in animals. Also, screening tests will be performed to rank the potency of coarse mode particles in animals and man. Animal toxicology studies of fine and coarse mode particles will provide data on chronic and subchronic effects, including pulmonary structure and function, host defense mechanisms, and lung biochemistry. Human studies will evaluate the respiratory and cardiovascular effects of gases and particles on persons with cardiovascular or chronic pulmonary disease. Research will continue on the effects of SO_2 on susceptible populations, with expanded efforts on biochemical and immunological changes.

Efforts to improve extrapolation techniques and their application will be initiated. Theoretical models of respiratory tract deposition of gases and particles will be developed and lung dosimetry modeling efforts will be expanded to include additional compounds. A portable personal monitor which provides objective measurements of human physiologic response to gases will be refined.

Since the developing nervous system of animals and humans is known to be more vulnerable to lead toxicity than the mature system, it is necessary to obtain quantitative data on the neurological effects of lead at lower levels, especially at levels previously considered to be safe in children. In 1985, a study will be completed which uses electrophysiological assessments of several behavioral and central nervous system responses. The significance of the effects noted will then be evaluated for use in assessing health risks from lead at these levels.

Under the U.S.-China Protocol for Scientific and Technical Cooperation in Environmental Protection, a comprehensive study of the relationship between air pollution and lung disease is being undertaken in China. U.S. experts in epidemiology, cell biology, and chemistry are working with Chinese scientists, using state-of-the-art techniques and equipment, to monitor and sample indoor and outdoor air, with special attention on coal and wood burning in the home. Organic extracts from these samples, and similar ones taken using U.S. coal, will be bioassayed for oncogenic cell transformation and gene mutation. Ultimately, the mutagenicity of air samples and lung cancer incidence data from the Peoples Republic of China (PRC) will be compared.

Epidemiology studies initiated in 1984 will be continued in 1985 and new ones initiated where feasible. It is anticipated that the increased resources available for this program will enable EPA to collaborate with other agencies to improve population exposure estimates.

1984 Program

In 1984, the Agency is allocating a total of $9,127,000 and 66.5 total workyears to this program, of which $3,967,900 is for the Salaries and Expenses appropriation and $5,159,100 is for extramural purposes under the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. In response to program office priorities, additional clinical studies of normal and susceptible populations are being conducted. In addition, the effects of acute and chronic exposure to large inhalable particles are being closely examined. Both human and animal dose-response studies are focussed on determining the deposition, clearance, and pulmonary effects of particles, alone and in combination with ozone, nitrogen oxide and SO_2. Extrapolation efforts are being refined in accordance with findings of the 1983 extrapolation workshop.

Field work began on the China study of air pollution and lung disease. In 1984, Chinese scientists will assist with bioassay activities and epidemiological data analysis. Feasibility studies will be conducted to determine the role of epidemiology in identifying health risks from gases and particles under varying atmospheric and climatic conditions.

1984 Explanation of Changes from the Amendment

The net increase of +$200,000 results from the following action:

-Reprogramming. (+$200,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$200,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $7,095,400 and 55.3 total workyears for this program, of which $3,637,200 was under the Salaries and Expenses appropriation and $3,458,200 was for extramural purposes under the Research and Development appropriation.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. Major accomplishments included a report on acute physiological responses on normal subjects following inhalation of gases, particles, and mixtures of both. A national workshop was held on extrapolation modeling resulting in a long-term research strategy.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $4,366,000 supported by 37.2 total workyears for this program, of which $1,992,000 is for Salaries and Expenses and $2,374,000 is for Research and Development. This reflects an increase of $616,600 for Salaries and Expenses and 10.0 total workyears and a decrease of $46,300 in Research and Development. This net increase results from greater emphasis on intensive in-house activities to support the Agency's compliance programs. Specifically, the additional resources will be used to provide additional technical assistance and to identify the options and advantages of integrating air pollution control technologies in coal-fired power plants.

Research and Assess Emissions Reduction Technologies to Support Permitting, NSPS and Compliance Activities. Low cost, highly reliable emissions reduction technology design and performance criteria need to be disseminated to the user and permitting communities. To meet this need, ORD will conduct the following research activities.

Research will identify the potential of the most promising sorbents for use in spray dryer and dry injection processes for sulfur dioxide controls from coal fired boilers as a means to amplify the potentials of these very recent commercial technologies. The effects of wide plate spacing on ESP performance will be evaluated with special emphasis on retrofit applications.

The potential of coal cleaning techniques to further reduce pyritic sulfur in coals will be assessed, and a first full scale module test of an electrostatically enhanced fabric filter (ESFF) pilot baghouse will be conducted under electric utility operating conditions.

The Tenth Flue Gas Desulfurization (FGD) Symposium and Sixth Particle Collection Symposia will be held jointly with the Electric Power Research Institute to transfer information on the technologies in these areas to the regulated community. An engineering operations research program will be initiated to identify the options and advantages of integrating air pollution control technologies in coal fired power plants.

1984 Program

In 1984, the Agency is allocating a total of $3,795,700 and 27.2 total workyears to this program, of which $1,375,400 is for the Salaries and Expenses appropriation and $2,420,300 is for extramural purposes under the Research and Development appropriation.

Research and Assess Emissions Reduction Technologies to Support Permitting NSPS, and Compliance Activities. Research on advanced particle and SO_x capture techniques is being conducted to enhance the performance of fabric filters and ESP's and ease their transition and acceptance by the regulating and regulated communities. The engineering pilot testing of these systems are being continued with the objective of increasing performance at lower costs.

Research on the fundamentals of combined SO_x and particle emissions capture by new and conventional technology is being evaluated. Emphasis is on assessing the potential for dry sorbents as a means to capture SO_x.

The potential for optimizing the combination of air pollution reduction technologies for coal-fired power plants is being assessed. An effort to assess the impacts resulting from integrating air pollution control technologies on power plant operation and emission reductions is being initiated to identify the potential of this approach.

1984 Explanation of Changes from the Amendment

The net decrease of -$195,200 results from the following actions:

-Reprogrammings. (-$195,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$195,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $6,465,700 and 36.5 total workyears for this program, of which $1,817,900 was under the Salaries and Expenses appropriation and $4,647,800 was for extramural purposes under the Research and Development appropriation.

Research and Assess Emissions Reduction Technologies to Support Permitting, NSPS, and Compliance Activities. Fabric filter baghouses are being accepted as an option for utility and certain industrial particle emissions reduction applications and are known to have potential for SO_x reductions. Therefore, an evaluation of conventional baghouses for particle control was completed and the data made available to support the 1985 NSPS review for utility boilers. Also, field assessments of the performance of baghouses in conjunction with spray dryers for combined SO_x-particle capture were conducted to ascertain the reliability of this technology.

A state-of-the-art FGD technology assessment for fossil fuel fired boilers was completed. In addition, the use of organic acids to enhance limestone scrubbing performance and reliability with reduced costs was commercialized. These results will be used for the 1985 NSPS review and for regional and enforcement permitting purposes. Evaluations of two methods for fugitive particles emissions reduction were completed and a technology assessment made. Operation and maintenance guides for electrostatic precipitators were completed and include flue gas conditioning methods as stop-gap techniques to improve existing ESP performance in low sulfur coal applications.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $8,441,900 supported by 37.5 total workyears for this program, of which $2,440,100 is for Salaries and Expenses and $6,001,800 is for Research and Development, with decreases of $69,200 and $607,500, respectively. This also reflects a decrease of 3 workyears. The decrease reflects completion of work in the air ecology research program as well as an extension to the required schedule for the development of air quality models for urban scale particulate matter and complex terrain SO_2.

Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of NAAQS. Improved particulate models will be developed for urban and mesoscale distances. Fugitive dust transport and modeling studies will be conducted and the reactive plume model for ozone will be modified to include the non-linear chemistry for sulfate, nitrate, and organics.

A regional scale particulate matter air quality model is being developed to demonstrate the long range transport of particles and to demonstrate the effectiveness of alternative control strategies in meeting acceptable ambient air quality levels. A users guide for the interim linear model for fine and inhalable particles will be completed. Long range tracer experiments in conjunction with the Department of Energy (DOE), the National Oceanic and Atmospheric Administration (NOAA), and the Electric Power Research Institute (EPRI) will be conducted during the summer of 1985. These experiments will involve multiple tracer releases from Ohio and Canada to study transport and dispersion to the East.

Work will begin on the development of second generation source apportionment methods to identify the most effective mathematical and analytical models to use in receptor modeling; to evaluate several second generation receptor models using real and simulated aerosol data sets; to determine the limitation of receptor modeling; to develop internal and external verification procedures for each method; and, to develop protocols for combining receptor and dispersion models in order to address source apportionment problems.

Present SO_2 air quality dispersion models for single and multiple sources in complex terrain are inadequate to meet the needs of the Regions, States, local governments and industry, especially in the mountainous West where there is a great deal of energy development activity. A full-scale plume study of a three dimensional complex terrain area will be continued. Also, a users guide for the complex terrain dispersion model for stable plume impaction will be delivered to OAQPS by early FY 1986.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. The results of research on the effects of sulfur dioxide and particles on steel will be integrated into the materials risk model. In addition, a field research program will be initiated to evaluate the effects of gaseous pollutants on such building surfaces as paints, stone, and concrete, and will include an analysis of weathering factors.

1984 Program

In 1984, the Agency is allocating a total of $9,118,600 and 40.5 total workyears to this program, of which $2,509,300 is for the Salaries and Expenses appropriation, and $6,609,300 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of NAAQS. Research focuses on the following projects: 1) development of a regional particulate model which will provide information on the meteorological conditions that lead to prolonged, elevated pollution episodes; 2) development of an interim linear regional particulate model for fine and inhalable particles; 3) analysis of results of the 1983 Cross Appalachian Tracer Experiments (CAPTEX); 4) completion of first generation source apportionment methods; 5) development and validation of urban and mesoscale particulate models; 6) initiation of a full scale plume study of a three dimensional complex terrain area; 7) development and validation of visibilty models; and 8) development of improved procedures for treating dispersion parameters from elevated sources.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. A material risk model is being developed for use in the assessment of the effects of SO_2 and particles on various types of materials such as steel and paints. A corrosion monitor is being developed and tested to provide greater quantification of the impacts of air pollutants on metals. The air ecology program is evaluating the frequency and extent of potentially adverse air quality conditions relevant to pollutant mixtures (SO_2, O_3, and NO_2).

1984 Explanation of Changes from the Amendment

The net decrease of -$164,000 results from the following actions:

-Reprogrammings. (-$164,000) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$164,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $10,955,200 and 46.4 total workyears for this program, of which $2,573,700 was under the Salaries and Expenses appropriation, and $8,381,500 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Air Quality Models to Support Implementation, Maintenance, and Enforcement of NAAQS. The major accomplishments of this program were as follows: 1) a new dispersion scheme for elevated releases was developed; 2) the Small Hill Impaction Study #2 was conducted; 3) improved local scale and mesoscale air quality models for western Colorado and eastern Utah were delivered; 4) a user's guide for the Particulate Episodic Model (PEM) was developed and validated; 5) Source Apportionment Methods (SAM) were developed; and 6) a long range tracer experiment (CAPTEX) was conducted jointly with DOE, EPRI, and Canada.

Develop Health and Welfare Effects Information to Support Review and Revision of NAAQS. The air ecology program focused on the ecological effects of pollutant combinations (SO_2, O_3, and NO_2). A workshop was held to develop a research strategy for evaluating the impacts of pollutant combinations. Research in materials damage concentrated on the development of an atmospheric corrosion monitor to be used as a proxy for damage to materials from SO_2 and particles.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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Air Quality & Stationary Source Planning & Standards

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Emission Standards & Technology Assessment								
Salaries & Expenses		$4,180.1	$3,848.2	$4,112.8	$4,180.9		$4,395.8	$214.9
Abatement Control and Compliance		$9,700.5	$8,793.2	$9,193.2	$9,193.2		$8,610.3	-$582.9
	TOTAL	$13,880.6	$12,641.4	$13,306.0	$13,374.1		$13,006.1	-$368.0
Pollutant Strategies & Air Standards Development								
Salaries & Expenses		$2,804.7	$2,316.7	$2,482.1	$2,580.8		$3,532.7	$951.9
Abatement Control and Compliance		$1,128.0	$1,593.0	$1,593.0	$1,593.0		$1,992.0	$399.0
	TOTAL	$3,932.7	$3,909.7	$4,075.1	$4,173.8		$5,524.7	$1,350.9
State Program Guidelines & Regulations Development								
Salaries & Expenses		$3,124.4	$2,626.2	$2,791.6	$2,791.6		$3,285.4	$493.8
Abatement Control and Compliance		$959.7	$1,235.0	$1,235.0	$1,235.0		$1,574.5	$339.5
	TOTAL	$4,084.1	$3,861.2	$4,026.6	$4,026.6		$4,859.9	$833.3
TOTAL:								
Salaries & Expenses		$10,109.2	$8,791.1	$9,386.5	$9,553.3		$11,213.9	$1,660.6
Abatement Control and Compliance		$11,788.2	$11,621.2	$12,021.2	$12,021.2		$12,176.8	$155.6
Air Quality & Stationary Source Planning & Standards	TOTAL	$21,897.4	$20,412.3	$21,407.7	$21,574.5		$23,390.7	$1,816.2

AIR

Air Quality & Stationary Source Planning & Standards

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Emission Standards & Technology Assessment	92.6	84.8	92.1	92.1		91.8	-.3
Pollutant Strategies & Air Standards Development	52.1	47.8	52.4	55.9		76.8	20.9
State Program Guidelines & Regulations Development	72.0	60.3	64.8	64.8		71.1	6.3
TOTAL PERMANENT WORKYEARS	216.7	192.9	209.3	212.8		239.7	26.9
TOTAL WORKYEARS							
Emission Standards & Technology Assessment	97.0	90.6	98.6	98.6		98.6	
Pollutant Strategies & Air Standards Development	63.6	54.4	59.4	63.4		81.4	18.0
State Program Guidelines & Regulations Development	76.0	63.9	68.9	68.9		76.9	8.0
TOTAL WORKYEARS	236.6	208.9	226.9	230.9		256.9	26.0

Air Quality and Stationary Source Planning and Standards

Budget Request

The Agency requests a total of $23,390,700 supported by 256.9 total workyears for 1985. Of the total request, $11,213,900 is for the Salaries and Expenses appropriation and $12,176,800 is for the Abatement, Control and Compliance appropriation, an increase of $1,816,200 and 26 total workyears.

Program Description

The program areas under this subactivity include:

Emission Standards and Technology Assessment -- This program provides for the establishment, review and revision of national emission standards for stationary sources under Sections 111 and 112 of the Clean Air Act. Section 111 requires the Environmental Protection Agency (EPA) to establish New Source Performance Standards (NSPSs). Section 112 authorizes National Emission Standards for Hazardous Air Pollutants (NESHAPs).

NSPSs reflect the performance of the best control systems for reducing emissions. The standards are set taking into consideration technical feasibility, cost, and economic, energy, and environmental impacts. The background information published as part of the process for setting NSPSs provides useful data to State agencies in defining best available control technology, lowest achievable emission rates, and reasonably available control technology, when such determinations of appropriate control levels must be made under other sections of the Clean Air Act.

NESHAPs protect the public from pollutants that cause or contribute to air pollution that results in an increase in mortality or an increase in serious irreversible or incapacitating reversible illness.

Pollutant Strategies and Air Standards Development -- The major activities of this program include: (1) regular review and revision, as appropriate, of all existing National Ambient Air Quality Standards (NAAQSs); (2) identification and assessment of potential hazardous air pollutants, including the determination as to the appropriateness of a listing under Section 112 of the Clean Air Act; and (3) analytic support to Agency efforts to set emission standards for pollutants regulated under Sections 111(d) and 112 of the Act.

State Program Guidelines and Regulations Development -- This program includes: (1) development of guidelines and regulations that set forth requirements for air pollution control programs implemented by the States under the Clean Air Act; (2) development of technical guidance for air quality modeling, emission inventory development, and air quality standard attainment demonstrations; and (3) overview of the development and implementation of State and local air pollution control programs. The State and local programs provide for the attainment and maintenance of NAAQSs, prevention of significant deterioration of air quality in clean areas, and the protection of visibility in national parks and wilderness areas. The overview carried out under this program helps ensure consistency among EPA Regional Offices, States, and local agencies in carrying out the requirements of the Clean Air Act.

EMISSION STANDARDS AND TECHNOLOGY ASSESSMENT

1985 Program Request

The Agency requests a total of $13,006,100 supported by 98.6 total workyears for this program. Of this request, $4,395,800 is for the Salaries and Expenses appropriation and $8,610,300 is for the Abatement, Control and Compliance appropriation. This is an increase of $214,900 for the Salaries and Expenses appropriation, but no increase for total workyears. There is a decrease of $582,900 for the Abatement, Control and Compliance appropriation. The increase reflects increased personnel and support costs and the decrease reflects the completion of technical studies done on an expedited basis to support standards required by court order.

Efforts will continue in 1985 towards meeting the requirements of the Clean Air Act for establishing NSPSs. In 1985 seven NSPS proposals (five new standards; two revisions) and 20 promulgations (15 new standards; five revisions) are planned. The promulgations cover 13 source categories on EPA's list of high priority categories. Reviews will be completed for five more existing NSPSs in 1985. In addition, two NESHAPs proposals and three NESHAPs promulgations are scheduled for 1985. The proposals include revisions to NESHAPs for vinyl chloride sources and asbestos demolition and renovation. The promulgations will cover coke oven emissions from wet coal charging, arsenic from glass manufacturing, and arsenic from low arsenic copper smelters.

1984 Program

In 1984, the Agency is allocating a total of $13,374,100 and 98.6 total workyears to this program. Of the total, $4,180,900 is for the Salaries and Expenses appropriation and $9,193,200 is for the Abatement, Control and Compliance appropriation.

In 1984 efforts are continuing to complete NSPSs for all source categories required by the Clean Air Act. Proposals for 15 NSPSs (12 new standards; three revisions) and promulgations of 12 NSPSs (nine new standards; three revisions) are scheduled for 1984 covering nine additional priority list source categories. Six reviews of existing standards will be completed. In addition, Control Technique Guidelines for five sources of volatile organic compounds are being completed. An evaluation of auto surface coating controls is also being initiated. An assessment of waterborne surface coatings is being conducted for the wood furniture industry. The Control Technology Document for stationary sources of lead is being revised.

Two NESHAPs, one for coke oven emissions from wet charging and one for benzene from coke oven by-product recovery plants, are scheduled for proposal. Three NESHAPs, one for benzene fugitive leaks, one for high arsenic copper smelters, and one for asbestos work practices, are scheduled for promulgation. The review of the NESHAPs for mercury is also scheduled to be completed.

1984 Explanation of Changes from the Amendment

The net increase of +$68,100 results from the following action:

-Reprogramming. (+$68,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$68,100 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $13,880,600 and 97.0 total workyears for this program. Of the amount obligated, $4,180,100 was for the Salaries and Expenses appropriation and $9,700,500 was for contract work under the Abatement, Control, and Compliance appropriation. The contract resources were used to continue work related to setting NSPSs and NESHAPs.

In 1983, work continued on setting NSPSs for all source categories on EPA's priority list. NSPSs activity included: proposal of nine new standards and two revisions; promulgation of six new standards, covering six additional priority list source categories, and six other standards, including four revisions. Reviews of two existing NSPSs were completed. The Control Technique Guideline for petroleum solvent dry cleaning was published and the Control Technology Document for nitrogen oxides was completed.

Work continued toward promulgation of four NESHAPs for benzene sources and proposal of a fifth. Work also continued on proposal of a NESHAPs for coke oven wet charging and topside leaks. Three arsenic NESHAPs and the asbestos work practices revision were proposed.

POLLUTANT STRATEGIES AND AIR STANDARDS DEVELOPMENT

1985 Program Request

The Agency requests a total of $5,524,700 supported by 81.4 total workyears for this program. Of this request, $3,532,700 is for the Salaries and Expenses appropriation and $1,992,000 is for the Abatement, Control and Compliance appropriation. The request includes increases of $951,900 for the Salaries and Expenses appropriation and $399,000 for the Abatement, Control and Compliance appropriation, an increase of 18 total workyears. The increase in total workyears and extramural support will be used primarily to initiate development of a comprehensive national air toxics program and accelerate the assessment and decision-making on potentially toxic air pollutants.

In 1985, revisions to the NAAQSs for particulate matter and sulfur dioxide will be promulgated. Risk assessment will be applied and regulatory impact analyses will be developed as part of the review of the NAAQSs for ozone and lead. Regulatory decisions will be published for 17 potential hazardous pollutants evaluated in 1984. Also in 1985, health, exposure, and source assessments will begin for three to five additional potential hazardous pollutants. In addition, operation of the air toxics clearinghouse to assist State and local agencies will be continued.

1984 Program

In 1984, the Agency is allocating a total of $4,173,800 and 63.4 total workyears to this program. Of this amount, $2,580,800 is for the Salaries and Expenses appropriation and $1,593,000 is for the Abatement, Control and Compliance appropriation.

Revisions to the NAAQSs for particulate matter, nitrogen dioxide, and sulfur dioxide will be proposed in 1984. The final promulgations of revised NAAQSs for carbon monoxide and nitrogen dioxide are also expected. Reviews of the NAAQSs for lead and ozone are in process. Application of a risk assessment methodology is planned in 1984 as part of the review of the NAAQSs for lead.

Pollutant assessment activities are to result in the development of strategy recommendations for several pollutants. Decisions on whether to regulate five substances are also expected in 1984: coke oven emissions, acrylonitrile, manganese, carbon tetrachloride, and polycyclic organic matter. Decisions on whether to regulate various benzene source categories are also being issued in 1984. Work will be underway on an additional 12 pollutants in 1984. Other activities include the design of an air toxics clearinghouse to assist State and local agencies and initiate operation of the clearinghouse.

1984 Explanation of Changes from the Amendment

The net increase of +$98,700 results from the following action:

-Reprogramming. (+$98,700) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$98,700 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $3,932,700 and 63.6 total workyears for this program. Of the amount obligated, $2,804,700 was for the Salaries and Expenses appropriation and $1,128,000 was for contract work under the Abatement, Control, and Compliance appropriation. The contract funds provided support for evaluation of NAAQSs; analysis of the environmental, economic, and regulatory impacts of possible revisions to the NAAQSs; and development of an improved risk assessment methodology.

The NAAQSs for hydrocarbons were revoked in 1983. In addition, work was underway to promulgate revisions to the NAAQSs for carbon monoxide and to propose appropriate changes to the NAAQSs for nitrogen dioxide, sulfur dioxide, particulate matter, and ozone. In the pollutant assessment area, detailed health and source assessments were underway for 22 pollutants. Regulatory recommendations were developed for polycyclic organic matter and acrylonitrile. Work on the regulatory decision for toluene was completed in 1983. The decision was expected to be published in early 1984. However, recent studies indicate toluene may be carcinogenic and further assessment will be required. A proposal and negative determinations for arsenic sources were published.

STATE PROGRAM GUIDELINES AND REGULATIONS DEVELOPMENT

1985 Program Request

The Agency requests a total of $4,859,900 supported by 76.9 total workyears for this program. Of this request, $3,285,400 is for the Salaries and Expenses appropriation and $1,574,500 is for the Abatement, Control and Compliance appropriation. The amounts represent increases of $493,800 and $339,500, respectively, an increase of eight total workyears. The increases in workyears and intramural resources will provide technical assistance, guidance and additional analyses for visibility, particulates, lead, and sulfur dioxide issues.

In 1985, the Agency will maintain a management and overview role for the review and approval of State Implementation Plans (SIPs). Program policy and guidance will be provided for SIP development and approval. During 1985, States should complete SIPs for most of the 200 areas where the NAAQSs for particulate matter, sulfur dioxide, ozone, carbon monoxide, and nitrogen dioxide were not met by December 1982. Policy and guidance will be developed to resolve any issues associated with these SIPs. Regulations will be promulgated and guidance provided to help States implement revised NAAQSs for particulate matter and sulfur dioxide. Guidance will be developed to implement revised NAAQSs for lead. Regulations will be promulgated for protection of visibility and use of intermittent control systems. Procedures will be implemented for oversight of State programs. A report summarizing the 1984 results of the National Air Audit will be completed.

Emission factors for toxic chemicals and other related information will be developed and issued in 1985. Technical assistance and guidance on data bases and modeling techniques for areas not attaining the NAAQSs in 1982 will be provided. A revised version of EPA's Air Quality Modeling Guideline will be issued. Also, guidance will be provided to Regional Offices and the modeling clearinghouse will be continued to promote and ensure Regional consistency in the use of models.

1984 Program

In 1984, the Agency is allocating a total of $4,026,600 and 68.9 total workyears to this program. Of the total, $2,791,600 is for the Salaries and Expenses appropriation and $1,235,000 is for contract work under the Abatement, Control and Compliance appropriation. Contract funds are being used to support development of emission factors, evaluation of air quality models, and refinement of guidance for implementing the revised NAAQSs for particulate matter and sulfur dioxide.

In 1984, national management and oversight of major SIP programs is continuing to ensure that deficient SIPs are corrected and that backlogs of SIP revisions do not recur. Emphasis is being placed on completing SIPs for areas that did not meet the December 1982 attainment deadline for existing NAAQSs. A major policy for post-1982 nonattainment areas was published in early 1984 outlining steps that must be taken to meet NAAQSs and establishing schedules for action. Guidance is also being provided for SIP revisions for implementing revised NAAQSs, including technical guidance for revision of SIPs for the particulate matter NAAQSs. Development of lead SIPs is being coordinated to meet the requirements of a settlement agreement resulting from litigation. Visibility regulations for 35 States and intermittment control system regulations are being proposed. New source review program guidance is being provided. Efforts to develop alternative approaches to regulations are continuing. The multi-year program for evaluation and validation of air quality models and development of emission factors for SIP revisions is being continued. The National Air Audit System is being implemented for four program areas: air quality planning, new source review, compliance assurance, and air monitoring.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $4,084,100 and 76.0 total workyears for this program. Of the amount obligated, $3,124,400 was for the Salaries and Expenses appropriation and $959,700 was for contract work under the Abatement, Control, and Compliance appropriation. The contract efforts supported general SIP development and air quality modeling.

The emphasis in 1983 continued to be national management and evaluation of all major SIP programs. Policy guidance and program assistance were continued for the areas that had been granted attainment date extensions to 1987 for the NAAQSs for ozone and carbon monoxide. A major policy was proposed for areas where the 1982 deadline for meeting NAAQSs was not met. A settlement agreement, outlining a program for completing lead SIPs, was agreed upon by EPA, the Natural Resources Defense Council, and other plaintiffs.

Management of the new source review and prevention of significant deterioration programs continued with efforts to encourage additional States to take over all permitting programs. Assistance was furnished to States and Regional offices in regulation development. Policy guidance, modeling, and monitoring support for control strategy development was also provided. The model evaluation program was continued and a draft of revisions to the Air Quality Modeling Guideline was prepared. Emission factors for criteria pollutants and potentially toxic substances were developed.

AIR

Mobile Source Air Pollution Control & Fuel Economy

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)					
Emission Standards, Technical Assessment & Characterization								
Salaries & Expenses		$3,759.9	$3,188.3	$3,268.8	$3,268.8		$3,429.9	$161.1
Abatement Control and Compliance		$2,079.6	$2,563.3	$2,563.3	$2,563.3		$2,563.3	
	TOTAL	$5,839.5	$5,751.6	$5,832.1	$5,832.1		$5,993.2	$161.1
Testing, Technical & Administrative Support								
Salaries & Expenses		$4,232.1	$4,262.1	$4,824.3	$4,824.3		$5,154.6	$330.3
Abatement Control and Compliance		$943.3	$900.0	$900.0	$900.0		$900.0	
	TOTAL	$5,175.4	$5,162.1	$5,724.3	$5,724.3		$6,054.6	$330.3
Emissions & Fuel Economy Compliance								
Salaries & Expenses		$1,366.0	$1,332.7	$1,332.7	$1,332.7		$1,403.8	$71.1
Abatement Control and Compliance			$35.0	$35.0	$35.0		$35.0	
	TOTAL	$1,366.0	$1,367.7	$1,367.7	$1,367.7		$1,438.8	$71.1
TOTAL:								
Salaries & Expenses		$9,358.0	$8,783.1	$9,425.8	$9,425.8		$9,988.3	$562.5
Abatement Control and Compliance		$3,022.9	$3,498.3	$3,498.3	$3,498.3		$3,498.3	
Mobile Source Air Pollution Control & Fuel Economy	TOTAL	$12,380.9	$12,281.4	$12,924.1	$12,924.1		$13,486.6	$562.5

AIR

Mobile Source Air Pollution Control & Fuel Economy

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Emission Standards, Technical Assessment & Characterization	67.8	60.7	60.7	60.7		63.9	3.2
Testing, Technical & Administrative Support	50.4	50.1	65.6	65.6		84.0	18.4
Emissions & Fuel Economy Compliance	30.3	25.9	25.9	25.9		32.0	6.1
TOTAL PERMANENT WORKYEARS	148.5	136.7	152.2	152.2		179.9	27.7
TOTAL WORKYEARS							
Emission Standards, Technical Assessment & Characterization	88.4	71.9	71.9	71.9		71.9	
Testing, Technical & Administrative Support	78.0	75.1	92.1	92.1		93.6	1.5
Emissions & Fuel Economy Compliance	35.0	33.3	33.3	33.3		33.3	
TOTAL WORKYEARS	201.4	180.3	197.3	197.3		198.8	1.5

Mobile Source Air Pollution Control and Fuel Economy

Budget Request

The Agency requests a total of $13,486,600 supported by 198.8 total workyears for this subactivity, of which $9,988,300 will be for the Salaries and Expenses appropriation and $3,498,300 will be for the Abatement, Control and Compliance appropriation, an increase of $562,500 and 1.5 total workyears.

Program Description

This subactivity includes the following mobile source programs:

Emission Standards, Technical Assessment and Characterization -- This program provides the standards development and analysis required for the control of mobile source emissions, as specified by the Clean Air Act. Work is also carried out to improve fuel economy testing procedures and evaluate fuel economy retrofit devices, as required by the Motor Vehicle Information and Cost Savings Act. This program is responsible for developing both light-duty vehicle and heavy-duty engine emission standards. Other major program activities include: characterization of hazardous emissions, assessment of emissions control technology, technical assistance to the States for implementation of local control programs, assessment of actual emissions levels from in-use vehicles, and analysis of the current and prospective impacts of motor vehicle emissions on air quality.

Testing, Technical, and Administrative Support -- This program provides basic testing, technical, and administrative support to the mobile source operating programs of EPA.

Emissions and Fuel Economy Compliance -- This program implements the emissions certification and compliance requirements of the Clean Air Act and the fuel economy information and compliance requirements of the Motor Vehicle Information and Cost Savings Act. As part of this program, fuel economy information is made available to the consumer through the mile per gallon values published in the Gas Mileage Guide and on new vehicle labels.

EMISSIONS STANDARDS, TECHNICAL ASSESSMENT, AND CHARACTERIZATION

1985 Program Request

The Agency requests $5,993,200 supported by 71.9 total workyears for this program, of which $3,429,900 is for the Salaries and Expenses appropriation and $2,563,300 is for the Abatement, Control and Compliance appropriation. This request represents a $161,100 increase for the Salaries and Expenses appropriation due to increased personnel costs. There is no change in total workyears.

In 1985, standards setting activity will focus primarily upon heavy-duty engines. The final rulemaking for the heavy-duty particulate standards and the heavy-duty engine/light-duty truck nitrogen oxides standards will be promulgated. Assessment of emissions control technology will continue.

Acquisition of emissions data from in-use vehicles using new control technology remains an important activity. Analysis of these data will allow EPA to determine the impacts of mobile source control programs on air quality. Technical support to States will also continue to be an important priority. Many States are expected to be implementing local control programs, as mandated by the Clean Air Act. All of their programs will be dealing with new technology vehicles. A report on the implication of new technology vehicles for local control programs will be prepared.

The characterization of emissions resulting from the use of alternative motor vehicle fuels will continue. The implications of new vehicle technologies and the numerous emissions problems that may result will also be addressed. An assessment of the driving cycle for light-duty vehicles is anticipated to result in recommendations for test procedure changes. Fuel economy work will focus on the differences between in-use fuel economy and the EPA fuel economy values, in addition to further enhancements to EPA's fuel economy information program. The testing and evaluation of fuel economy retrofit devices will continue.

1984 Program

In 1984, the Agency is allocating a total of $5,832,100 and a total of 71.9 workyears to this program. Of the total, $3,268,800 is for the Salaries and Expenses appropriation and $2,563,300 is for extramural purposes under the Abatement, Control and Compliance appropriation.

In 1984, work will concentrate on the proposal of standards for heavy-duty engine particulate emissions and heavy-duty engine and light-duty truck nitrogen oxides emissions. Adjustment factors, accounting for changes in EPA's fuel economy testing procedures, are under development. The program continues to provide technical assistance and review of State plans, particularly as they relate to local motor vehicle emission control programs. Additional work will focus on testing in-use vehicles, including the evaluation of new technology vehicles. Characterization of emissions from vehicles powered by alternative fuels continues, as well as testing and evaluation of eight fuel economy retrofit devices.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $5,839,500 and used a total of 88.4 workyears. Of the amount obligated, $3,759,900 was for the Salaries and Expenses appropriation and $2,079,600 was for extramural purposes under the Abatement, Control and Compliance appropriation.

Standards development work focused on diesel particulates, heavy-duty engine emissions, and the emissions from vehicles operated at high altitudes. Efforts related to heavy-duty engine emissions included promulgation of standards for evaporative hydrocarbon emissions and standards for exhaust hydrocarbon and carbon monoxide emissions. Light-duty diesel particulate standards, originally set for model year 1985, were postponed to provide time for the industry to develop adequate control systems. Support was furnished to States developing implementation plans. The testing and evaluation of 20 fuel economy retrofit devices were performed.

TESTING, TECHNICAL, AND ADMINISTRATIVE SUPPORT

1985 Program Request

The Agency requests a total of $6,054,600 supported by 93.6 total workyears for this program of which $5,154,600 is for the Salaries and Expenses appropriation and $900,000 is for the Abatement, Control and Compliance appropriation. The request represents an increase of $330,300 for the Salaries and Expenses appropriation and 1.5 total workyears from 1984 to 1985. The increase reflects emphasis on in-house testing in support of in-use vehicle emissions determinations. This testing allows EPA to improve and update data bases with information on those vehicle technologies that will dominate the fleet during calendar year 1985 and later periods.

This program provides testing, technical, and administrative support to the operating programs of the Office of Mobile Sources at the EPA Motor Vehicle Emissions Laboratory. Activities supported include recall, tampering and fuel switching, standard setting, emissions characterization, technology assessment, fuel economy, in-use vehicle emissions assessment, certification, and State and local vehicle emission control. The support provided includes: automated data processing (ADP) timesharing services, laboratory data acquisition, and computer operations; testing of motor vehicles to measure emissions and fuel economy; quality control and correlation services for EPA and industry testing programs; maintenance and engineering design of emission testing equipment; and personnel, administration, safety, and facilities support services.

1984 Program

In 1984, the Agency is allocating a total of $5,724,300 and a total of 92.1 workyears for this program. Of the total, $4,824,300 is for the Salaries and Expenses appropriation and $900,000 is for extramural purposes under the Abatement, Control and Compliance appropriation. Testing and technical support activities have been increased to operate at a level where significant economies of scale can be obtained. Similar testing activities have been consolidated.

Testing support to the certification and fuel economy labeling and compliance programs continues, with 1,000 tests scheduled for these purposes. An additional 1,700 tests of in-use vehicles at the Motor Vehicle Emissions Laboratory support the following programs: recall, surveillance, and tampering and fuel switching programs; testing in-use vehicles for assessing emissions performance; and testing of heavy-duty engines. Correlation programs maintain correspondence among test facilities between manufacturers and EPA. Personnel, facility support services, safety, ADP, and administrative management functions are provided for the Laboratory.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $5,175,400 and a total of 78.0 workyears. Of the total, $4,232,100 was for the Salaries and Expenses appropriation and $943,300 was for extramural purposes under the Abatement, Control and Compliance appropriation.

During 1983, the program focused on increasing the efficiency of testing at the Motor Vehicle Emissions Laboratory. The resultant improvements resulted in a sizeable increase in the number of tests from 1982, while maintaining the same level of quality. A total of 2,154 tests were performed at the laboratory during the year. Data from these tests were analyzed by other programs. The Laboratory has developed substantial expertise in procuring and testing in-use vehicles.

EMISSIONS AND FUEL ECONOMY COMPLIANCE

1985 Program Request

The Agency requests a total of $1,438,800 supported by a total of 33.3 workyears for this program, of which $1,403,800 will be for the Salaries and Expenses appropriation and $35,000 for the Abatement, Control and Compliance appropriation. This represents no change for either the total workyears or the Abatement, Control and Compliance funds from 1984 to 1985 and a $71,100 increase for the Salaries and Expenses appropriation due to increased personnel costs.

The emissions and fuel economy compliance program will continue to issue between 300 and 400 certificates of compliance during the year. The fuel economy information and compliance program will generate information for the Gas Mileage Guide, calculate fuel economy labels, and calculate each manufacturer's Corporate Average Fuel Economy (CAFE). Evaluation of road load and its implications for certification and fuel economy programs will be pursued. Consideration of alternative compliance programs will continue. Analytical work related to such programs will be completed during 1985. Alternatives for improving the effectiveness of the certification program, aimed at reducing high mileage in-use noncompliance, will be identified.

1984 Program

In 1984, the Agency is allocating $1,367,700 and 33.3 total workyears for this program, of which $1,332,700 is for the Salaries and Expenses appropriation and $35,000 is for extramural purposes under the Abatement, Control and Compliance appropriation.

The Agency is continuing to streamline the certification process by revising requirements to reduce the burden on industry without sacrificing emissions reductions. Programs to assess the performance of high mileage in-use vehicles in order to gather data on in-use emissions and emission control system deterioration are underway. The fuel economy program continues to generate 1,600 to 1,700 fuel economy labels a year, data for the Gas Mileage Guide, and 40 CAFE calculations. Increased effort is being devoted to revising the fuel economy program to more closely approximate in-use results, improving the labeling data base, and reducing the manufacturers' reporting costs.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,366,000 and used 35.0 total workyears for this program, all of which was for the Salaries and Expenses appropriation.

Certificates were issued for 302 light-duty engine families. The fuel economy program produced 1,700 labels and performed 40 CAFE calculations. The final rulemaking for changes to improve the certification process was promulgated.

AIR

State Programs Resource Assistance

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Control Agency Resource Supplementation (Section 105 Grants)							
Abatement Control and Compliance	$84,968.0	$69,954.7	$87,734.7	$87,734.7		$87,734.7	
TOTAL	$84,968.0	$69,954.7	$87,734.7	$87,734.7		$87,734.7	
Training							
Salaries & Expenses	$220.5	$254.7	$254.7	$254.7		$248.7	-$6.0
Abatement Control and Compliance	$934.5	$476.9	$851.9	$851.9			-$851.9
TOTAL	$1,155.0	$731.6	$1,106.6	$1,106.6		$248.7	-$857.9
TOTAL:							
Salaries & Expenses	$220.5	$254.7	$254.7	$254.7		$248.7	-$6.0
Abatement Control and Compliance	$85,902.5	$70,431.6	$88,586.6	$88,586.6		$87,734.7	-$851.9
State Programs Resource Assistance TOTAL	$86,123.0	$70,686.3	$88,841.3	$88,841.3		$87,983.4	-$857.9
PERMANENT WORKYEARS							
Training	3.8	4.0	4.0	4.0		4.0	
TOTAL PERMANENT WORKYEARS	3.8	4.0	4.0	4.0		4.0	

AIR

State Programs Resource Assistance

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Training	3.8	4.0	4.0	4.0		4.0	
TOTAL WORKYEARS	3.8	4.0	4.0	4.0		4.0	

State Programs Resource Assistance

Budget Request

The Agency requests a total of $87,983,400 supported by 4.0 total workyears for 1985. Included in this total are $248,700 for the Salaries and Expenses appropriation and $87,734,700 for the Abatement, Control and Compliance appropriation. The request is a decrease of $6,000 for the Salaries and Expenses appropriation and a decrease of $851,900 for the Abatement, Control and Compliance appropriation. There is no change in the number of total workyears requested.

Program Description

This subactivity provides financial support to State and local air pollution control agencies, including Indian lands, for the prevention, abatement, and control of air pollution. The primary objective of this subactivity is to support the development and implementation of effective State and local programs for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQSs), in accordance with provisions of the Clean Air Act.

Direct grants assistance to control agencies that have major roles for developing and carrying out these programs constitutes the major form of EPA resource assistance. Direct grants assistance is supplemented by the training of State and local air pollution control personnel and the provision of services of contractors for specific tasks identified by the States and localities. Grants support State and local control agencies in carrying out their roles under the Clean Air Act. This includes: development of State Implementation Plans (SIPs) for the attainment and maintenance of the NAAQSs; enforcement of source emission regulations and requirements; review and permitting of new sources; monitoring of ambient air quality, and development of data bases necessary for regulatory decisions. In addition, these funds promote the assumption and implementation of other Clean Air Act responsibilities including those for the prevention of significant deterioration (PSD), and the implementation of New Source Performance Standards (NSPSs), and National Emission Standards for Hazardous Air Pollutants (NESHAPs).

Control Agency Resource Supplementation (Section 105 Grants) -- Under the Clean Air Act, the control of air pollution at its source is primarily the responsibility of State and local governments. States, in cooperation with local agencies, are responsible under the Act for developing and implementing programs to attain and maintain the NAAQSs. EPA grant assistance partially supports the costs for the operation and continued efforts of State and local agency programs in meeting these responsibilities.

Training -- Traditionally, resource assistance is further supplemented by the provision of training in specialized areas of air pollution control. New courses are developed as needed, instruction manuals and materials are revised and updated, and manuals and instructional materials are provided to university training centers. The EPA staff works with university centers to develop State and local self-sufficiency in training by offering courses at area training centers.

CONTROL AGENCY RESOURCE SUPPLEMENTATION (SECTION 105 GRANTS)

1985 Program Request

The Agency requests a total of $87,734,700 for grants in the Abatement, Control and Compliance appropriation, which is identical to the 1984 Congressional appropriation.

In 1985, States will emphasize the development of those additional regulatory steps or programs necessary for the attainment of NAAQSs, particularly in areas missing the statutory 1982 attainment deadline or having extensions of the deadline to 1987. Additional States will assume responsibility for the PSD program. States will also assume responsibility for newly promulgated NSPSs and NESHAPs. SIP revisions involving visibility protection and stack heights will be required to meet the requirements of court orders.

States will maintain the full operation and quality assurance of the National Air Monitoring System (NAMS) and State and Local Air Monitoring System (SLAMS) networks. A number of States will continue to develop new or expanded air toxics programs. Several will establish air toxics monitoring facilities for the permanent collection of selected ambient air data. These data will allow the assessment of trends in key areas, consistent with the Agency's newly developed noncriteria pollutant monitoring strategy.

States will continue to perform required inspections and provide associated follow-up on all significant sources. States will maintain the compliance program at the level required by established Agency policies, including efforts to implement newly assumed or expanded responsibilties for new sources and to secure compliance of sources subject to newly enacted SIP requirements in nonattainment areas.

Grant resources will support the development in a limited number of States of new programs for reducing vehicle tampering and fuel switching. Grants will also help States initiate the development of strategies to implement the revised NAAQSs for size-specfic particulates within the most probable nonattainment areas.

1984 Program

In 1984, the Agency is allocating a total of $87,734,700 to this program, all in the Abatement, Control and Compliance appropriation.

In 1984, States are initiating efforts for the correction of deficient SIPs in the over 200 areas missing the statutory December 1982 attainment deadline for NAAQSs. States are also developing necessary regulations and programs in areas having extensions to 1987 for meeting the carbon monoxide and ozone NAAQSs. States without approved SIPs for lead are completing and submitting plans consistent with the requirements of the litigation settlement agreement.

Additional States are implementing newly assumed responsibilities for regulation of new sources, and performing the initial compliance determinations for the additional existing sources subject to newly enacted SIP requirements for nonattainment areas. States are continuing inspections for all significant sources, consistent with Agency policy. States are continuing the operation and quality assurance of the NAMS and SLAMS networks. The development of size specific particulate data bases required for regulatory decisions in the most probable nonattainment areas is being initiated. Other major efforts include the acceptance of PSD review responsibilities by most remaining States and the assumption of implementation responsibilities for newly promulgated NSPSs and NESHAPs.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $84,968,000 for this program, all in the Abatement, Control, and Compliance appropriation. Air management efforts included: development and submission of the attainment SIPs for the 1987 extension areas; continued development of the overdue SIPs for lead; continued development of mobile and stationary source regulatory measures required in the 1987 extension areas; and implementation of previously transferred responsibilities for the regulation of new sources. Enforcement efforts focused on continued efforts to verify and maintain compliance (principally through inspections and appropriate enforcement actions) of all major actions, review and permitting of new sources, as well as enforcement of delegated responsibility for NSPSs and NESHAPs. Monitoring programs provided for the maintenance of current ambient monitoring activities, including the NAMS network, and for the completion of the SLAMS network. A number of States, on their own initiative, undertook efforts to assess potential air toxic problems within their jurisdictions and to develop ongoing air toxic programs.

TRAINING

1985 Program Request

The Agency requests a total of $248,700, all for the Salaries and Expenses appropriation supported by 4.0 total workyears for this program. This request is a decrease of $6,000 for the Salaries and Expenses appropriation and a decrease of $851,900 for the Abatement, Control and Compliance appropriation. The decrease reflects the Agency's decision that States are capable of providing sufficient training in the basic aspects of air pollution control.

The program will manage self-study training courses; provide support to universities, and to State and local agencies in planning courses and workshops; update existing courses through use of in-house skills; and develop guidebooks to accompany technical and legal control documents to be used by State and local agency personnel.

1984 Program

In 1984, the Agency is allocating $1,106,600 and 4.0 total workyears for this program. Of the allocation, $254,700 is for the Salaries and Expenses appropriation and $851,900 is for the Abatement, Control and Compliance appropriation.

Thirty training courses are being conducted in the six area training centers. Also, six new and revised classroom, self-instructional, and correspondence courses are being prepared. In addition, competitive procurement mechanisms to support State and local agency training activities are being investigated.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,155,000 and 3.8 total workyears for this program. Of the amount obligated, $220,500 was for the Salaries and Expenses appropriation and $934,500 was for the Abatement, Control and Compliance appropriation. A total of 28 training courses were conducted covering 12 subject areas for 659 students at seven area training centers. Graduate traineeships or fellowships were provided for 26 control agency employees. In addition, 10 new and revised classroom, self-instructional, and correspondence courses were prepared.

Air Quality Management Implementation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Air Quality Management Implementation							
Salaries & Expenses	$9,821.3	$10,116.9	$10,981.7	$10,972.6		$11,478.8	$506.2
Abatement Control and Compliance	$77.0	$294.6	$294.6	$294.6		$294.6	
TOTAL	$9,898.3	$10,411.5	$11,276.3	$11,267.2		$11,773.4	$506.2
TOTAL:							
Salaries & Expenses	$9,821.3	$10,116.9	$10,981.7	$10,972.6		$11,478.8	$506.2
Abatement Control and Compliance	$77.0	$294.6	$294.6	$294.6		$294.6	
Air Quality Management Implementation TOTAL	$9,898.3	$10,411.5	$11,276.3	$11,267.2		$11,773.4	$506.2
PERMANENT WORKYEARS							
Air Quality Management Implementation	235.9	246.5	260.1	260.1		273.3	13.2
TOTAL PERMANENT WORKYEARS	235.9	246.5	260.1	260.1		273.3	13.2
TOTAL WORKYEARS							
Air Quality Management Implementation	262.5	266.8	282.4	282.4		294.4	12.0
TOTAL WORKYEARS	262.5	266.8	282.4	282.4		294.4	12.0

Air Quality Management Implementation

Budget Request

The Agency requests a total of $11,773,400 supported by 294.4 total workyears for this program, of which $11,478,800 will be for the Salaries and Expenses appropriation and $294,600 for the Abatement, Control and Compliance appropriation. The request represents an increase of $506,200 and 12 total workyears.

Program Description

This subactivity provides resources for the operation and maintenance of an air quality management program in each of the Agency's ten Regional Offices. The Regional program, in partnership with State and local air pollution control agencies, has a major responsibility for meeting the requirements of the Clean Air Act and related EPA regulations. The air management program provides policy guidance and technical consultation to States in the development and implementation of the strategies and regulatory programs for the attainment and maintenance of National Ambient Air Quality Standards (NAAQSs). The program also conducts the necessary regulatory review and coordination for approval of strategies and regulations in State Implementation Plans (SIPs) submitted to EPA. The Regional Offices negotiate air quality program grants to State and local control agencies and provide oversight of the progress of these agencies in developing, implementing, and enforcing regulatory programs.

Extensive efforts are frequently necessary to provide timely and effective guidance to States. Under the Clean Air Act, the States have primary responsibility for preparing attainment strategies and meeting the commitments for the development and implementation of multiple regulatory programs essential to the attainment of NAAQSs. These programs may have to be revised when NAAQSs are revised as a result of the periodic reviews by EPA.

The 1977 Amendments to the Act also impose new requirements for reviewing and permitting new sources to assure that they will not cause deterioration of air quality in areas attaining the NAAQSs, or will not delay attainment in areas not yet attaining the NAAQSs. Effective guidance and support to States assuming responsibility for these review and permitting requirements involve extensive Regional Office efforts.

AIR QUALITY MANAGEMENT IMPLEMENTATION

1985 Program Request

The Agency requests a total of $11,773,400 supported by 294.4 total workyears for this program. Of this request, $11,478,800 is for the Salaries and Expenses appropriation and $294,600 is for the Abatement, Control and Compliance appropriation. The request is an increase of $506,200 for Salaries and Expenses and 12 total workyears. The request provides increased support to States for completing regulatory programs to meet NAAQSs and for improving air toxics programs.

The resources needed for the review and approval of State regulatory plans and actions will ultimately decline as States implement regulatory reforms, as EPA continues to streamline its review and approval process, and as certain regulatory planning tasks are completed. There will, however, still be a significant number of plans and actions requiring review and approval in 1985, especially for areas that missed the statutory 1982 deadline or that cannot

adequately demonstrate attainment by 1987. The Agency policy for the correction of deficient SIPs and the imposition of necessary sanctions in certain areas was published on November 2, 1983. The policy povides for a case-by-case approach to remedying the SIPs. Implementation of the policy will remain resource-intensive during 1985.

Direct Agency review and permitting of new sources will be essentially eliminated in 1985. The program for the prevention of significant deterioration (PSD) will be delegated to the few remaining States that do not have responsibility for the program. Responsibility for implementing newly promulgated New Source Performance Standards (NSPSs) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) will also continue to be delegated. The fewer EPA review actions will facilitate the provision of air management support activities considered critical to the Agency's goal of increased State self-sufficiency, including the implementation of the recommendations of the Administrator's Task Force on State Federal Roles. These recommendations called for increased and improved program support to States. This includes guidance and support for the transfer of key regulatory programs and responsibilities to the States, and for preparing States to respond effectively to new emerging programs and air quality problems.

Significant resources will be provided to assist States in developing the necessary regulatory programs for attainment of NAAQSs within areas missing the 1982 deadline. Particular attention will be given to the more populated urban areas where regulatory programs may require highly complex stationary and mobile source controls. Resources will be provided to help a sizeable number of States and local air pollution control agencies develop programs to prevent vehicle tampering and fuel switching in areas not attaining NAAQSs for ozone, carbon monoxide, or nitrogen dioxide. Also, resources will be provided to help States respond to the anticipated revised NAAQSs for size-specific particulates.

Major resources will be provided for improving the air toxics programs at the Regional Offices, reflecting the increasing concern and evolving regulation of air toxics by the Agency and the States. In response to provisions of various settlements of litigation against the Agency, SIP approval or promulgation of Federal plans will be required where States fail to provide approvable SIPs for lead or for the protection of visibility. Court ordered regulatory changes on stack heights will be required. The recently developed National Air Audit System will be fully operational during 1985, implementing Agency policies for effective oversight and audit of State regulatory programs.

Additional activities supportive of this request will support other Regional baseline air management functions, including attention to the continuing development and implementation of tools for improving regulatory decisionmaking, as well as the negotiation of air grants. Extramural dollars are provided to continue support of interagency agreements with the National Oceanic and Atmospheric Administration for the detail of meteorologists in four Regional Offices, providing modeling expertise to the Regions and States.

1984 Program

In 1984, the Agency is allocating $11,267,200 and 282.4 total workyears for this program. Of the total, $10,972,600 is for the Salaries and Expenses appropriation and $294,600 is for the Abatement, Control and Compliance appropriation.

In 1984, the Regional air management program is completing necessary modifications to attainment status designations for specific areas and making the final notifications to States for those areas failing to meet the December 1982 attainment deadline. Some notifications may include proposed sanctions, consistent with the Agency's recently published policy. The Regional program is also working with a number of States to complete the development of lead SIPs. In addition, the Regions are completing review and approval or disapproval actions for lead SIPs, where submitted, and for a number of other major State regulatory actions or plans.

The program is providing extensive guidance and support to States missing the 1982 deadlines, to States developing additional regulatory programs in areas having extensions to 1987, and to States defining requirements and assessing the most probable nonattainment areas in anticipation of the promulgation of a size-specific particulate NAAQSs in 1985. Rulemaking actions for State strategies and revisions are continuing to be processed in an efficient manner to prevent recurrence of any major SIP backlog. The program is also continuing to perform the necessary reviews for the permitting of PSD sources within the few remaining States which do not have program responsibility. Finally, the program is continuing to negotiate air grants and is initiating the National Air Audit System for review of State air quality planning, new source review, compliance assurance, and air monitoring.

1984 Explanation of Changes from the Amendment

The net decrease of -$9,100 results from the following actions:

-Reprogrammings. (-$9,100) Several reprogrammings were made to this activity which move all non-program specific "support" type expense dollars into the Regional Support program element. These reprogrammings to Salaries and Expenses, totaling -$9,100, were included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $9,898,300 and 262.5 total workyears for this program. Of the amount obligated, $9,821,300 was for the Salaries and Expenses appropriation and $77,000 was for the Abatement, Control and Compliance appropriation. Extramural resources under the Abatement, Control, and Compliance appropriation were used to continue interagency agreements providing meteorologists for four EPA Regional offices in support of air quality modeling efforts.

The Regional air management efforts focused on completing the review and approval of State submitted strategies for the attainment of NAAQSs for ozone and carbon monoxide by deadlines extended through December 1987. These efforts included follow-up with individual States whose strategies included schedules for the development of specific regulatory programs. The Regional Offices provided, upon request, specialized guidance and support to the States developing the additional or expanded regulatory programs approved as part of the SIP for the extension areas. The regulatory programs included additional controls for stationary sources and additional motor vehicle inspection and maintenance programs, where required programs were not yet operational.

Also in 1983, approval and support efforts for a number of other major strategies and regulatory programs were provided. Included were: (1) the transfer to additional States of responsibilities for implementing PSD programs and newly promulgated NSPSs and NESHAPs; (2) performance of new source reviews for States not having responsibility for PSD; (3) regulatory reviews and rulemaking for proposed emission trades; and (4) assistance to States in developing overdue SIPs for lead. In addition, State-submitted SIP revisions continued to be processed efficiently to minimize a SIP backlog, air grants negotiations were conducted and grants awarded, and oversight of State and local agency performance in meeting grant commitments was maintained.

AIR

Trends Monitoring & Progress Assessment

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Ambient Air Quality Monitoring								
Salaries & Expenses		$3,026.6	$3,318.2	$3,393.8	$3,291.1		$3,501.7	$210.6
Abatement Control and Compliance		$157.4	$135.6	$110.4	$123.0		$114.2	-$8.8
	TOTAL	$3,184.0	$3,453.8	$3,504.2	$3,414.1		$3,615.9	$201.8
Air Quality & Emissions Data Analysis & Progress Assessment								
Salaries & Expenses		$1,600.5	$1,631.0	$1,631.0	$1,631.0		$1,816.0	$185.0
Abatement Control and Compliance		$243.9	$203.9	$1,538.9	$1,538.9		$224.3	-$1,314.6
Operations, Research and Facilities		$200.0						
	TOTAL	$2,044.4	$1,834.9	$3,169.9	$3,169.9		$2,040.3	-$1,129.6
TOTAL:								
Salaries & Expenses		$4,627.1	$4,949.2	$5,024.8	$4,922.1		$5,317.7	$395.6
Abatement Control and Compliance		$401.3	$339.5	$1,649.3	$1,661.9		$338.5	-$1,323.4
Operations, Research and Facilities		$200.0						
Trends Monitoring & Progress Assessment	TOTAL	$5,228.4	$5,288.7	$6,674.1	$6,584.0		$5,656.2	-$927.8

AIR

Trends Monitoring & Progress Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Ambient Air Quality Monitoring	80.3	82.1	85.7	85.7		85.5	-.2
Air Quality & Emissions Data Analysis & Progress Assessment	30.1	30.2	30.2	30.2		35.0	4.8
TOTAL PERMANENT WORKYEARS	110.4	112.3	115.9	115.9		120.5	4.6
TOTAL WORKYEARS							
Ambient Air Quality Monitoring	84.4	87.8	92.5	92.5		92.5	
Air Quality & Emissions Data Analysis & Progress Assessment	33.5	34.0	34.0	34.0		35.9	1.9
TOTAL WORKYEARS	117.9	121.8	126.5	126.5		128.4	1.9

Trends Monitoring and Progress Assessment

Budget Request

The Agency requests a total of $5,656,200 supported by 128.4 total workyears for 1985. Included in this total is $5,317,700 for the Salaries and Expenses appropriation and $338,500 for the Abatement, Control and Compliance appropriation, a decrease of $927,800 and an increase of 1.9 total workyears. The decrease reflects a reduction of $1,323,400 for the Abatement, Control and Compliance appropriation offset by an increase of $395,600 for the Salaries and Expenses appropriation.

Program Description

Ambient Air Quality Monitoring -- Activity in this program includes: (1) EPA's management overview of State ambient air quality monitoring networks, associated laboratory and field quality assurance activities, and implementation of air monitoring strategies described in EPA air monitoring regulations; (2) the coordination of Regional and State field investigation activities for collecting ambient air quality samples for subsequent sample analysis and related quality control; (3) the review of source emissions data; and (4) the necessary management and coordination to ensure timely storage and validation of the data collected.

Air Quality and Emissions Data Analysis and Progress Assessment -- Major activities include: national coordination of Regional office, State, and local ambient monitoring programs; issuance of new and revised regulatory requirements and related technical guidance; active oversight and auditing of the National Air Monitoring System (NAMS) network to ensure continuing conformance with all regulatory criteria; operation of computer systems for storing, retrieving, and analyzing ambient air quality and emission data; development and implementation of systems to meet user requirements; and preparation of trends analyses and related air quality and emission progress assessments for policy evaluation and development and for public information needs.

AMBIENT AIR QUALITY MONITORING

1985 Program Request

The Agency requests a total of $3,615,900 supported by 92.5 total workyears for this program. Of this request, $3,501,700 is for the Salaries and Expenses appropriation and $114,200 is for the Abatement, Control and Compliance appropriation. This request is an increase of $210,600 for the Salaries and Expenses appropriation and a decrease of $8,800 for the Abatement, Control, and Compliance appropriation. The increase reflects increased personnel and support costs.

The Regional offices will continue overview and management of State air monitoring programs, including Section 105 grants review. They will also continue the coordination of air data bases involving emissions data, criteria pollutant air quality data, and related precision and accuracy information necessary for quantifying data quality. A limited number of monitoring networks and data supporting highly controversial or technically difficult permits for the prevention of significant deterioration will be reviewed.

The data bases from the NAMS and State and Local Air Monitoring System (SLAMS) Networks will be validated for completeness and accuracy. Most of the SLAMS networks will be evaluated, as required by 40 CFR 58. Approximately 130 new or revised NAMS sites will be visited, evaluated, and documented. Data analyses, including air quality trends information, will be developed as input to various Regional environmental management and indicator efforts. In the area of quality assurance, significant resources will be used for on-site systems and performance audits of State networks and monitors. In addition, the Regional labs will participate in the national air audit program. The start-up of State networks for measurement of

size-specific particulates will require review of the NAMS and SLAMS networks, including site visits to verify compliance with 40 CFR 58 monitoring regulations. Also, resources will be used to increase the level of Regional oversight and audits of State programs through evaluations of additional SLAMS monitors. The Regional offices will expedite the reporting of data from around 200 critical SLAMS stations.

Regional offices will be involved in the implementation of the air toxics monitoring strategy. This involvement will include coordinating with State and local agencies and the EPA Office of Research and Development to set up 15 air toxics monitoring trend stations throughout the Nation, assisting in site selection for monitoring stations, and ensuring samples are collected and sent to a central laboratory for analysis. Regional offices will also coordinate or manage special air toxics studies with a high priority in their Regions.

1984 Program

In 1984, the Agency is allocating a total of $3,414,100 and 92.5 total workyears for this program. Of the allocation, $3,291,100 is for the Salaries and Expenses appropriation and $123,000 is for the Abatement, Control and Compliance appropriation.

In 1984, the Regions are continuing the baseline program of overview and management of State air quality monitoring programs, including Section 105 grants review. The validation, management, and coordination of State and local air quality and emission data before the data are submitted to central EPA data banks is also continuing. In 1984 special emphasis is being placed on reviewing the data bases upon which attainment status determinations will be made for the revised size-specific particulate matter NAAQSs. The Regions and States are beginning their analysis of the total monitoring network needed to support development of SIPs for size-specific particulates and subsequent tracking of progress and trends in meeting the revised NAAQSs. The data needed for various environmental management efforts are being compiled and displayed for use in determining existing conditions, trends, and progress toward environmental objectives. Quality assurance activities and auditing of State programs are continuing.

1984 Explanation of Changes from the Amendment

The net decrease of -$90,100 results from the following actions:

-Reprogrammings. (-$90,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$12,600 to the Abatement, Control and Compliance appropriation.

An additional reprogramming was made which moves all non-program specific "support" type expense dollars into the Regional Support program element (-$102,700). This reprogramming to Salaries and Expenses, totaling -$102,700, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $3,184,000 and 84.4 total workyears for this program. Of the amount obligated, $3,026,600 was for the Salaries and Expenses appropriation and $157,400 was for the Abatement, Control and Compliance appropriation. Contract funds from the Abatement, Control, and Compliance appropriation were used for Regional data analyses and preparation of the Regional Environmental Management Reports.

The five-year program for implementing the national air monitoring strategy was completed in 1983. The SLAMS networks (including lead networks) were completely installed and operating during 1983. The Regional offices continued to work with States, through the annual review process, in identifying and eliminating air monitoring sites which have only marginal utility or are the least useful in supporting program decisions. The Regions continued their programs of site visits to review and audit NAMS stations, as well as a small percentage of SLAMS stations. Laboratories were evaluated for proper operating and quality assurance procedures. The validation, management, and coordination of State and local air quality and emission data bases before submission to EPA central data banks also continued.

AIR QUALITY AND EMISSIONS DATA ANALYSIS AND PROGRESS ASSESSMENT

1985 Program Request

The Agency requests a total of $2,040,300 supported by 35.9 total workyears for this program. Of the request, $1,816,000 is for the Salaries and Expenses appropriation and $224,300 is for the Abatement, Control, and Compliance appropriation. The request is an increase of $185,000 for the Salaries and Expenses appropriation. Total workyears increase by 1.9. There is a decrease of $1,314,600 for the Abatement, Control and Compliance appropriation. Increased workyears will provide additional statistical analyses for toxics data bases. The decrease reflects the completion in 1984 of the one-time purchase of size-specific particulate monitoring equipment for use by States in anticipation of the promulgation of size specific particulate matter NAAQSs in 1985.

Existing air data systems will be maintained and guidance provided to users. Monitoring regulations, computer software, and data files will be modified to accommodate changes to NAAQSs. The program also will produce ambient and emission trends analyses and progress assessments, provide national oversight of Regional Office and State and local air monitoring programs, and manage the NAMS network. The NAMS management will include maintaining a site information base, reviewing and validating data, and issuing status reports on regulatory compliance. Statistical analyses will be provided to support new or revised NAAQSs.

In the area of air toxics, the program will implement the national toxic monitoring strategy. Implementation includes national assessment of progress in strategy implementation, preparation of an annual status report on toxic pollutant trends, analyses of ambient toxics data, and development of audit procedures for toxic monitoring. Consultation on various environmental management efforts and use of environmental indicators will be provided. In addition, the program will develop and publish air quality statistics, maintain the State Implementation Plan (SIP) Design Value Tracking System, and develop and publish an estimation methodology for determining the costs of air toxics monitoring. The program will conduct on-site audits at NAMS stations measuring size-specific particulates and update NAMS operational guidance. The program will also coordinate Agency-wide emission data base efforts, including support to the Office and Research and Development and the Office of Solid Waste and Emergency Response on data base management. This program will develop software and convert data for the air quality and facilities segments of the new air data system and develop user materials and initiate training.

1984 Program

In 1984, the Agency is allocating a total of $3,169,900 and 34.0 total workyears for this program. Of the allocation, $1,631,000 is for the Salaries and Expenses appropriation and $1,538,900 is for the Abatement, Control and Compliance appropriation.

All major program activities are continuing. These activities include: operation of existing air data systems and provision of training and guidance to system users; production of the annual trends report and other statistical analyses; national oversight of State and local monitoring programs; and evaluations of NAMS stations, including on-site audits. Support is also being provided to other Agency offices for data base management. Also, the program is evaluating the compliance of SLAMS networks with regulations and issuing status reports. Revised monitoring regulations and siting guidelines for the revised NAAQSs for particulate matter are being proposed. Revisions to the monitoring regulations and guidance for sulfur dioxide will be developed, if required.

The program is also responsible for the procurement of ambient monitoring equipment necessary to collect initial data for the implementation of a revised ambient standard for particulate matter. In addition, system design, programming, and data base conversion for the new air data base is continuing. The program to implement the strategy for air toxics monitoring is continuing. These efforts include preparing guidance on network design and operation; assessing progress in toxics monitoring by Federal, State, and local agencies; and developing a long-term plan for the implementation of the toxic monitoring strategy.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $2,044,400 and 33.5 total workyears for this program. Of the amount obligated, $1,600,500 was for the Salaries and Expenses appropriation, $243,900 was for the Abatement, Control and Compliance appropriation and $200,000 was for the Operations, Research and Facilities appropriation. Contract funds supported trends reports and analyses, regulation review and revision, guidance development, NAMS management, National Emissions Data Systems (NEDS) improvement and progress toward the development of a new data system.

In 1983 emphasis continued on operating and updating existing air data systems, and on providing training and guidance to system users. This program provided support to 35 State and local agencies using EPA developed data systems. Other major activities included preparation of special air quality and emission analyses, statistics, and reports; national oversight of State and local monitoring programs, evaluation of NAMS, including on-site audits; and work toward revising monitoring regulations to reflect revisions to the NAAQSs for particulate matter. In addition, a national strategy for air toxics monitoring was developed. Work was initiated on a long-term plan for toxics monitoring and on guidance for siting and statistical design. Development of the new air data system continued, with substantial progress toward conversion of software for the air quality segment.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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AIR

Stationary Source Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Stationary Source Enforcement							
Salaries & Expenses	$9,543.8	$10,356.7	$10,689.7	$10,477.8		$11,666.0	$1,188.2
Abatement Control and Compliance	$4,990.1	$4,808.7	$4,808.7	$4,808.7		$3,038.0	-$1,770.7
TOTAL	$14,533.9	$15,165.4	$15,498.4	$15,286.5		$14,704.0	-$582.5
TOTAL:							
Salaries & Expenses	$9,543.8	$10,356.7	$10,689.7	$10,477.8		$11,666.0	$1,188.2
Abatement Control and Compliance	$4,990.1	$4,808.7	$4,808.7	$4,808.7		$3,038.0	-$1,770.7
Stationary Source Enforcement TOTAL	$14,533.9	$15,165.4	$15,498.4	$15,286.5		$14,704.0	-$582.5
PERMANENT WORKYEARS							
Stationary Source Enforcement	246.5	271.9	291.8	291.8		295.6	3.8
TOTAL PERMANENT WORKYEARS	246.5	271.9	291.8	291.8		295.6	3.8
TOTAL WORKYEARS							
Stationary Source Enforcement	263.0	287.6	309.5	309.5		309.5	
TOTAL WORKYEARS	263.0	287.6	309.5	309.5		309.5	

Stationary Source Enforcement

Budget Request

The Agency requests a total of $14,704,000 supported by 309.5 total workyears in 1985, of which $11,666,000 is for the Salaries and Expenses appropriation and $3,038,000 is for the Abatement, Control and Compliance appropriation. There is no change in the number of total workyears. The request is an increase of $1,188,200 for Salaries and Expenses and a decrease of $1,770,700 for Abatement, Control and Compliance.

Program Description

The stationary source enforcement program provides support to and coordination with State and local air pollution control agencies and direct Federal enforcement as required to ensure that stationary sources achieve and maintain compliance with the requirements of the Clean Air Act, as amended in 1977. The Headquarter's component provides national policy and guidance, while the regional program implements the enforcement effort and assists the States.

Stationary Source Enforcement -- This program focuses primarily on enforcement of the requirements established in State Implementation Plans (SIPs) for meeting National Ambient Air Quality Standards (NAAQSs). The enforcement program also focuses on new source programs such as New Source Performance Standards (NSPSs) and National Emission Standards for Hazardous Air Pollutants (NESHAPS).

As a result of industry efforts in controlling emissions and the effectiveness of State, local, and Federal control programs, approximately 90 percent of the more than 18,000 major stationary sources have achieved compliance with all applicable emission limitations. An additional 2.4 percent are meeting acceptable compliance schedules. Although the current rate of compliance represents a significant achievement, efforts must continue to ensure that remaining sources come into compliance with present standards, or any new or revised standards, and that compliance, once achieved, is maintained. EPA will continue to provide State and local agencies with technical support in their efforts to realize these goals and, where appropriate, to initiate their own enforcement actions.

STATIONARY SOURCE ENFORCEMENT

1985 Program Request

The Agency requests a total of $14,704,000 supported by 309.5 total workyears for this program. Of the request, $11,666,000 is for the Salaries and Expenses appropriation and $3,038,000 is for the Abatement, Control and Compliance appropriation. The increase of $1,188,200 for the Salaries and Expenses is due to increased personnel costs. The decrease of $1,770,700 in extramural funds reflects a greater reliance on the use of EPA Headquarter's personnel rather than contractors in the presentation of technical workshops to States and a similar shift to the use of EPA Regional personnel rather than contractors for conducting source inspections. This shift in contractor inspections is due, in part, to court rulings limiting the use of contractors for inspection purposes. The higher personnel levels initiated in 1984 are maintained in 1985. Extramural funds will be used primarily for enforcement case support; compliance monitoring and field surveillance; Regional Office data management support; and technical workshops and manuals to enhance the capabilities of State and local programs.

In 1985, the stationary source compliance program will carry forward the basic thrust of the 1984 budget. The program, working in close cooperation with State and local agencies, will continue to ensure that noncomplying significant sources in areas not meeting NAAQSs are brought into compliance, consistent with

the Clean Air Act. A major focus in 1985 will be sources of volatile organic compound (VOC) emissions. These sources are of concern not only because of their contribution to ozone levels, but also because many of the constituents of the VOC emissions are toxic in nature.

Previous efforts have focused on VOC emissions only to the extent that they affect attainment of ozone standards. In 1985, efforts will be substantially increased to enforce VOC control requirements in nonattainment areas. Efforts to ensure continued high compliance levels with NSPSs and NESHAPs requirements and those for the prevention of significant deterioration (PSD) are continuing. Fundamental activities such as permitting and compliance functions for non-delegated programs, maintenance of data systems, participation in Section 105 grant management and negotiation of grant agreements, review of State programs, and response to formal inquiries will also be maintained.

During 1985, the Regional compliance program will continue to provide assistance in selected Federal judicial referrals, consent decrees, and Section 120 actions. Also, EPA will issue administrative orders, as necessary, in environmentally significant cases where States cannot or will not take appropriate enforcement action. There are plans to conduct an estimated 1,685 inspections, and issue approximately 46 administrative orders during 1985. The shift begun in 1984 to the use of EPA Regional personnel rather than contractors in conducting inspections will be fully accomplished in 1985.

Major Headquarter's program accomplishments in 1985 will include: review of proposed agency regulations under NSPSs, NESHAPs, and new source/PSD programs; management of the Compliance Data System; support of State compliance data programs development; provision of technical analysis and case support for Regional office compliance activities, development of three new technical workshops to enhance the capabilities of State and local programs; and development of four new compliance manuals for State and local programs.

1984 Program

The Agency is allocating a total of $15,286,500 and 309.5 total workyears for this program, of which $10,477,800 is for the Salaries and Expenses appropriation and $4,808,700 is for extramural purposes under the Abatement, Control and Compliance appropriation. The extramural funds are being used for enforcement case support, compliance monitoring and field surveillance, Regional data management support, development of technical workshops and manuals to enhance the capabilities of State and local programs, and providing limited assistance to specific State cases.

The major focus of the stationary source compliance program for 1984, as it will be in 1985, is to ensure that noncomplying significant sources in nonattainment areas are brought into compliance, consistent with the provisions of the Clean Air Act. Federal enforcement actions will focus heavily on sources subject to the Agency's Post-1982 Enforcement Policy which stipulates the manner in which the Agency will respond to violating sources in nonattainment areas after the December 31, 1982 Clean Air Act attainment deadline. The policy calls for a vigorous enforcement program to bring such sources into compliance, and for collection of civil penalties, as part of the Agency's comprehensive response to the failure of many areas and sources to meet the December 31, 1982 deadline. Although the States will play an important role in implementing the policy, a significant level of Federal involvement will be required. To address the problem of noncompliance by sources of VOC emissions, the regions will undertake a major program to improve the inventory of regulated VOC sources and to gather information on their compliance status.

Federal efforts will also be directed at resolution of NSPS and NESHAPs violators, where the standards have not been delegated or where State action is inadequate. The stationary source compliance program continues to provide assistance in selected judicial referrals, consent decrees, and Section 120 actions, and to issue notices of violation and administrative orders as necessary. In addition, the program continues to manage the Compliance Data System.

The 1984 budget reflects a major shift in the way EPA conducts inspections. EPA is relying more on its regional personnel, rather than contractors, for most classes of inspections due, in part, to court rulings limiting the use of contractors for inspection purposes. Contractor inspections are being limited primarily to inspections of non-delegated NSPSs and NESHAPs sources.

EPA will continue to review performance tests, monitor enforcement actions, issue waivers and permits, make noncompliance penalty determinations under Section 120, and bring enforcement actions in environmentally significant cases where States cannot or will not take such actions. To encourage States to assume primary responsibility, EPA provides limited direct case assistance to State enforcement efforts, when requested.

Efforts designed to expand the technical capabilities of State and local programs continue in 1984. This effort includes Headquarter's development and presentation of technical workshops, development of compliance manuals, and further development of the State pilot programs begun in 1983. Use of continuous emission monitoring equipment continues to be a major objective for 1984. In addition, to ensure the validity of the compliance data base, EPA is initiating a qualitative audit of State compliance monitoring techniques.

Program accomplishments in 1984 include final promulgation of second-round nonferrous smelter orders establishing a regulatory framework for compliance extensions through January 1, 1988; development of three new technical workshops to enhance the capabilities of State and local programs; and development of four new compliance manuals for State and local programs. During 1984, the compliance program continues to assist the Office of Enforcement and Compliance Monitoring in the development of civil and criminal referrals. In addition, the program is to conduct 2,017 inspections and issue an estimated 47 administrative orders in 1984.

1984 Explanation of Changes from the Amendment

The net decrease of -$211,900 results from the following actions:

-Reprogrammings. (-$211,900) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$30,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made which moves all non-program specific "support" type expense dollars into the Regional Support program element (-$181,900). This reprogramming to Salaries and Expenses, totaling -$181,900, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $14,533,900 and 263.0 total workyears for this program, of which $9,543,800 was for the Salaries and Expenses appropriation and $4,990,100 was for the Abatement, Control and Compliance appropriation. Extramural resources were used for enforcement case development activities, compliance monitoring and field surveillance, Regional data management, development of technical workshops and manuals to enhance the capabilities of State and local programs, and limited direct case assistance to States.

A major Headquarter's initiative during 1983 was the development of a comprehensive compliance strategy for stationary sources of air pollution which brings together in one document all of the major thrusts of the program. The strategy reaffirms the basic soundness of the program, but recognizes the need for addi-

tional attention to certain elements of the program, especially in compliance by sources that have already installed control equipment and expanded use of continuous emission monitoring techniques. In addition, the program established guidelines during 1983 for conducting qualitative audits of State compliance programs, to be implemented beginning in 1984.

Also during 1983, the program provided technical and cost evaluations of applications submitted by steel companies under the provisions of the Steel Industry Compliance Extension Act of 1981. In addition, regulations for issuance and approval of second-round nonferrous smelter orders were proposed. Program accomplishments during 1983 also included development of three new technical workshops to enhance the capabilities of State and local programs, implementation of three continuous compliance pilot programs, development of three new workshops, and development of four new compliance manuals. During 1983, EPA issued 35 administrative orders and conducted 1,739 inspections.

AIR

Mobile Source Enforcement

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
PROGRAM								
Mobile Source Enforcement								
Salaries & Expenses		$4,005.7	$3,733.2	$4,148.8	$4,209.1		$4,740.1	$531.0
Abatement Control and Compliance		$1,921.6	$1,821.5	$1,821.5	$1,821.5		$1,821.5	
	TOTAL	$5,927.3	$5,554.7	$5,970.3	$6,030.6		$6,561.6	$531.0
TOTAL:								
Salaries & Expenses		$4,005.7	$3,733.2	$4,148.8	$4,209.1		$4,740.1	$531.0
Abatement Control and Compliance		$1,921.6	$1,821.5	$1,821.5	$1,821.5		$1,821.5	
Mobile Source Enforcement	TOTAL	$5,927.3	$5,554.7	$5,970.3	$6,030.6		$6,561.6	$531.0
PERMANENT WORKYEARS								
Mobile Source Enforcement		71.4	60.0	73.6	74.6		99.3	24.7
TOTAL PERMANENT WORKYEARS		71.4	60.0	73.6	74.6		99.3	24.7
TOTAL WORKYEARS								
Mobile Source Enforcement		95.1	78.4	93.4	94.4		101.4	7.0
TOTAL WORKYEARS		95.1	78.4	93.4	94.4		101.4	7.0

Mobile Source Enforcement

Budget Request

The Agency requests a total of $6,561,600 supported by 101.4 total workyears for 1985, of which $4,740,100 will be for the Salaries and Expenses appropriation and $1,821,500 will be for the Abatement, Control and Compliance appropriation, an increase of $531,000 in the Salaries and Expenses appropriation for personnel and support costs and 7.0 workyears.

Program Description

The mobile source enforcement program is directed primarily at ensuring compliance with the motor vehicle emission standards and fuel regulations required by the Clean Air Act. The activities carried out as part of this program are designed to ensure that new vehicles are capable of meeting emission standards throughout their useful lives, that vehicle emission control systems are not removed or rendered inoperative, and that harmful additives are not present in gasoline. The program also includes the issuance of California and statutory emissions waivers.

MOBILE SOURCE ENFORCEMENT

1985 Program Request

The Agency requests a total of $6,561,600 supported by 101.4 total workyears for this program, of which $4,740,100 will be for the Salaries and Expenses appropriation and $1,821,500 will be for the Abatement, Control and Compliance appropriation, representing increases of $531,000 for personnel costs and 7.0 workyears. The increase in resources will enable the Agency to expand the 1984 recall initiative and to work with State and local governments in the development and implementation of their own tampering and fuel switching enforcement programs.

The expanded recall initiative will include additional testing and investigation of both mid-mileage and high-mileage vehicles. In addition, developmental work will proceed on new recall programs for heavy-duty engines and light-duty evaporative emissions. California emissions waiver requests will be processed, as will applications for retroactive waivers of the Federal carbon monoxide and nitrogen oxides standards. Regulatory changes to the imports program, scheduled for promulgation in 1984, will be implemented, increasing the efficiency of the program. The Selective Enforcement Audit (SEA) program will conduct 17 audits of manufacturer facilities to ensure that new production vehicles meet emissions requirements. The lead phasedown regulations will be enforced through monitoring of reports from refiners. Issuance of 32 notices of violation is anticipated.

Approximately 500 consumer inquiries on emissions warranty issues will be answered. The anti-tampering and anti-fuel switching enforcement program will be expanded and will include investigations and notices of violation. Surveys of the incidence of tampering and fuel switching will be carried out at various sites. EPA will continue to assist with the development of State and local initiatives aimed at preventing tampering and fuel switching. Implementation of eight new State programs is anticipated.

1984 Program

In 1984, the Agency is allocating a total of $6,030,600 and a total of 94.4 workyears. Of the allocation, $4,209,100 is for the Salaries and Expenses appropriation and $1,821,500 is for extramural purposes under the Abatement, Control and Compliance appropriation.

A major focus in the recall program involves the testing and investigation of high mileage vehicles in order to assure that these vehicles meet emissions standards throughout their useful lives. The recall program will continue surveillance and confirmatory testing, follow up and investigation of suspect engine classes, and, if warranted, issuance of recall orders. Statutory and California waivers will be issued as required. The SEA program will continue to ensure that new production vehicles comply with emission requirements. Regulatory revisions for the SEA program will be proposed. Inquiries and applications for the importation of noncertified vehicles will continue, and regulations revising the imports program will be promulgated.

Also underway is the development and implementation of a strategy aimed at attaining increased State participation to reduce automobile emissions that result from tampering and fuel switching. This will result in the establishment of 12 new anti-tampering and fuel switching programs by States and localities. Other activities include: conducting fuels inspections for compliance with lead, nozzle, and label regulations; administering tampering and fuel switching cases; evaluating fuel and fuel additive waiver requests; and collecting data on fuel switching to assess misfueling rates.

1984 Explanation of Changes from the Amendment

The net increase of +$60,300 results from the following action:

-Reprogramming. (+$60,300) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$60,300 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $5,927,300 and used 95.1 total workyears. Of the amount obligated, $4,005,700 was for the Salaries and Expenses appropriation and $1,921,600 was for extramural purposes under the Abatement, Control and Compliance appropriation.

Recall investigations were conducted for 42 mid-mileage and 3 high-mileage vehicle classes, and 17 SEAs were performed. Twelve emissions waivers were issued. About 22,000 import inquiries were answered and 6,000 applications processed. Revised import regulations were prepared. Forty notices of violation were issued under the lead phasedown program, and 485 notices of violation under the anti-tampering and fuel switching program. Six States and localities implemented anti-tampering and fuel switching programs.

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BUILDINGS AND FACILITIES

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Buildings & Facilities	$4,116.1	$2,600.0	$2,600.0	$2,600.0		$10,500.0	$7,900.0
TOTAL, Buildings & Facilities	$4,116.1	$2,600.0	$2,600.0	$2,600.0		$10,500.0	$7,900.0
OUTLAYS	$3,266.0	$4,689.0	$4,233.0	$4,233.0		$4,148.0	-85.0
AUTHORIZATION LEVELS	Authorization is by virtue of Appropriation Act.						

BUILDINGS AND FACILITIES

Buildings and Facilities

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
New Facilities							
Buildings & Facilities	$462.7					$6,900.0	$6,900.0
TOTAL	$462.7					$6,900.0	$6,900.0
Repairs & Improvements							
Buildings & Facilities	$3,653.4	$2,600.0	$2,600.0	$2,600.0		$3,600.0	$1,000.0
TOTAL	$3,653.4	$2,600.0	$2,600.0	$2,600.0		$3,600.0	$1,000.0
TOTAL:							
Buildings & Facilities	$4,116.1	$2,600.0	$2,600.0	$2,600.0		$10,500.0	$7,900.0
Buildings and Facilities TOTAL	$4,116.1	$2,600.0	$2,600.0	$2,600.0		$10,500.0	$7,900.0

BUILDINGS AND FACILITIES

OVERVIEW AND STRATEGY

The Buildings and Facilities program funds the design, construction, repair, and improvement of buildings occupied by EPA. The Agency currently has ten Regional offices, three large Research and Development laboratories, several field stations and laboratories, and a large headquarters facility.

This program provides a safe and healthful work environment for EPA employees by producing continuous maintenance and repairs of our facilities. Major efforts are directed towards implementing intermediate and long-range plans which assess alternative housing options for EPA operations, and continuing a repair program that protects the investment in EPA's real property holdings. Resources are also used to adapt current facilities to more adequately and efficiently address expanding Agency programs. Particular emphasis will continue to be placed on modifying current facilities in order to respond to the growth in the hazardous waste program. In addition, in 1985 the Agency is requesting funds to build a new radiation laboratory to replace our outmoded facility in Montgomery, Alabama.

BUILDINGS AND FACILITIES

Budget Request

The Agency requests $10,500,000 for 1985, all of which will be for the Buildings and Facilities appropriation, an increase of $7,900,000 over 1984.

The Agency has recently completed an assessment of our facilities and evaluated our expanding program operations in relation to the need for repairs and improvements. The increase in this appropriation reflects the results of this assessment, the need to address deferred maintenance and repair projects ($1,000,000), as well as funding for construction of a new radiation laboratory in Montgomery, Alabama ($6,900,000).

Program Description

This program funds the design and construction of new EPA facilities, as well as necessary repairs and improvements to buildings already occupied by EPA. This program contains the following two elements:

New Facilities -- This includes engineering and design services and construction costs of new, federally owned facilities to be occupied by EPA, or the expansion of existing federally owned and EPA occupied facilities.

Repairs and Improvements -- This covers major repairs and capital improvements to any buildings or facilities occupied by EPA. Most of the projects relate to the correction of health and safety deficiencies, the prevention of serious deterioration, or improvements required for program operations.

NEW FACILITIES

1985 Program Request

The Agency requests $6,900,000, all of which will be for the Building and Facilities appropriation, and represents an increase of $6,900,000 over 1984. These funds will be used to construct a new radiation laboratory in Montgomery, Alabama. At present, EPA's primary radiation facility consists of 12 wood frame buildings in Montgomery, Alabama, which are 30 to 50 years old. These separate wooden buildings offer no fire protection and have asbestos ceilings that fragment whenever repairs are attempted. The physical location of some of these buildings raises questions of public safety. With these funds we will construct a modern, safe facility as our primary radiation laboratory, assuring the continuity of the radiation program without risk to employees or to the public.

1984 Program

No funds are allocated for New Facilities in 1984.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $462,700, all of which was for the Buildings and Facilities appropriation, to construct a shop and warehouse facility in Gulf Breeze, Florida, which provides storage and work space for the EPA operations at that installation.

REPAIRS AND IMPROVEMENTS

1985 Program Request

The Agency requests $3,600,000 for this program, all of which will be for the Buildings and Facilities appropriation, an increase of $1,000,000 over 1984. The increase will be used to address deferred projects. These funds will provide planning, engineering design, and construction related to the repair and improvement of buildings occupied by EPA. Our projects include health and safety improvements, maintenance and repairs, space alterations, engineering and planning, energy conservation, emergency repairs, and facility adaptations related to program changes.

In 1985, we will address the maintenance and repair projects which resulted from our delay of facilities projects in 1982 and 1983 while we reviewed all of the Agency's real property holdings with emphasis on program plans and cost effectiveness of specific lab operations. We now have an excellent assessment of our facilities, and an understanding of the facilities needs of our programs. Our strategy will establish a level of effort which will complete the projects and maintain a strong on-going facilities management program.

Again in 1985, in conformance with the Appropriation Committees' concerns, this request contains funding for all repairs and improvement projects over $20,000. The Salaries and Expenses appropriation contains funds for project under $20,000.

1984 Program

In 1984, the Agency is allocating $2,600,000 for this program, all of which is for the Buildings and Facilities appropriation. We will continue across-the-board health and safety changes to protect EPA employees and respond to the shifting emphasis on hazardous substances. We are also addressing basic facility needs, such as the installation of a heating and cooling system and electrical supply at our Edison, New Jersey facility, and roof and emergency repairs at several other sites. This program, in conformance with the Appropriation Committees' concerns, contains funding for all repairs and improvement projects greater than $20,000. The Salaries and Expenses appropriation contains funds for repairs and improvement projects under $20,000.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $3,653,400 all of which was for the Buildings and Facilities appropriation for health and safety projects and for facilities alterations and modifications. These projects included fume hood modifications, heating and ventilation system repairs, laboratory containment improvements, fire protection devices, and emergency repairs such as those to the collapsed ceiling in our motor vehicle testing laboratory in Ann Arbor, Michigan.

ENVIRONMENTAL PROTECTION AGENCY

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CONSTRUCTION GRANTS

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 vs 1984
			(DOLLARS IN THOUSANDS)			
Appropriation	$2,430,000.0	$2,400,000.0	$2,430,000.0	$2,430,000.0	$2,400,000.0	-$30,000.0
Obligations*	$3,737,469.5	$2,700,000.0	$3,000,000.0	$3,000,000.0	$2,700,000.0	-$300,000.0
Outlays	$2,982,669.3	$2,800,000.0	$2,500,000.0	$2,500,000.0	$2,500,000.0	...
Authorization Levels	$2,600,000.0	$2,600,000.0	$2,600,000.0	$2,600,000.0	$2,600,000.0	...

* Net obligations in 1983 are $544 million less, $400 million less in 1984 and $300 million less in 1985.

CONSTRUCTION GRANTS

OVERVIEW AND STRATEGY

The long range goal of the construction grants program is to reduce the discharge of municipal wastewater pollutants in order to improve water quality and protect public health. To meet this goal, the program provides grants to municipal and intermunicipal agencies to assist in financing the construction of cost-effective and environmentally sound municipal wastewater treatment facilities to comply with requirements of the Clean Water Act. In addition, the program provides funds to assist States in carrying out their responsibilities in managing the Construction Grants program and to assist them in carrying out water quality management planning programs. To meet long-range goals, EPA is working with the States to direct funds to projects with the greatest water quality and public health impacts; minimize expenditures for wastewater treatment construction, and local operation and maintenance, and replacement costs; prevent waste, fraud, and mismanagement; ensure timely construction; eliminate remaining project completion and closeout backlogs; and ensure effective results-oriented program management by States.

The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) created the basis of today's Federal program. From 1973 through 1983, Congress authorized approximately $42 billion and appropriated approximately $40 billion. An estimated $39 billion has been obligated and $30 billion outlayed under P.L. 92-500. As of the end of FY 1983, approximately 3,550 P.L. 92-500 plants have been completed and 8,035 Step 1, 2, 3, and 2+3 projects remained active. During these years the program has had two major midcourse corrections. Amendments in 1977 provided for delegation of the program to the States, provided financial relief for small communities, encouraged innovative and alternative technologies, and extended the secondary treatment compliance deadline. Amendments in 1981 recognized that national economic realities dictated that Federal dollars must be targeted towards the most urgent treatment needs with greatest water quality impact. They limited Federal eligibilities, provided for ensuring that treatment plants operate to meet design specifications, established State water quality management planning activities, and again extended the secondary treatment compliance deadline.

EPA anticipates that the construction grants program will be essentially fully delegated by the end of 1984 and that no significant changes in delegation status will occur in the foreseeable future. With the passage of the 1981 amendments and the development of simplified program regulations, discretionary guidance and State and EPA program oversight systems, States will have appropriate flexibility for implementing delegated construction grants management. EPA will continue to maintain Federal responsibilities for ensuring effective use of Federal funds; ensure program integrity in meeting statutory requirements; provide technical assistance and training; monitor projects with overriding Federal interest; define with States annual program objectives and priorities; and oversee annual program accomplishments.

During 1984, EPA will be conducting a major study of alternative Federal and non-Federal financial involvement in municipal wastewater treatment which may lead to recommendations for the program's future when the current authorization expires in 1985. The Agency intends to work closely with States, communities, and various interest groups throughout the process to assure that all interests are effectively represented in formulating feasible recommendations which will continue to support priority national water quality and public health goals and objectives. Future program directions will be determined during the 1984-1985 time period.

Budget Request

The Agency requests an appropriation of $2,400,000,000 for 1985 for the municipal construction grants program established under Title II of the Clean Water Act (CWA), as amended. This represents a decrease of $30,000,000 from 1984. Net obligations for 1985 are expected to total $2,400,000,000, which is a decrease of $200,000,000 from 1984. This decrease in obligations is attributable to a decline in total funds available as a result of the reduction in carryover funds.

Program Description

This program provides grants to municipal and intermunicipal agencies to assist in financing the construction of cost-effective and environmentally sound municipal wastewater treatment facilities; to assist delegated States in carrying out their responsibilities to manage the Construction Grants program; and to assist States in carrying out water quality management planning programs. The program also provides special funding to address marine combined sewer overflow problems. Resources associated with the management of these funds are described in the Municipal Source Control subactivity.

From its annual construction grants allotment, a State may reserve up to four percent of its authorization or $400,000, whichever is greater, to manage its delegated activities and may reserve up to one percent of its allotment or $100,000, whichever is greater, for water quality management planning. The Act also requires that each State set aside between four and seven and one half percent of its allotment to provide incentives to communities to use innovative and alternative technologies in constructing their wastewater treatment facilities and that States having substantial rural populations set aside four percent of their funds for alternative projects in small communities. All grants for assisting in the development and construction of wastewater treatment facilities are to be awarded on the basis of a State's priority system, which is designed to ensure that funds are awarded to projects with the greatest potential for improving water quality.

Before the 1981 amendments, projects were done in three stages with separate grants awarded to a community for the planning (Step 1), design (Step 2), and construction (Step 3) phases of each project. (Smaller communities sometimes combined design and construction into a single "Step 2 and 3" grant.) In order to make the process more efficient, the 1981 amendments eliminated the three-step procedure at the time of grant award and provided instead for allowances for planning and design costs and for advances of funds to enable small communities to plan and design projects. Other provisions designed to make the program more cost-effective include eliminating funding to construct reserve capacity, limiting project eligibilities beginning in 1985, providing for State discretion on certain funding eligibilities, expanding the secondary treatment definition, and extending for one year the period for coastal cities to seek secondary treatment waivers.

The 1981 amendments also emphasized increased non-Federal responsibility for financing, constructing, and operating cost-effective works that meet their permit requirements. The local funding share will increase from 25 percent to 45 percent for awards made beginning in 1985. Grantees must demonstrate prior to award that the most economical alternative has been selected, including construction, operation, maintenance, and replacement costs. Value engineering review is mandatory for projects above $10 million. Additionally, engineering firms will be required to oversee a project's first year of operation to help ensure that it meets design and permit specifications. As a result of these amendments, the Federal funding potential under the current program is $37.3 billion as reported in the 1982 Needs Survey published by EPA. As also reported by the Survey, significant progress has been made since the 1980 Needs Survey in meeting treatment needs.

The goal of the State management assistance grant program under Section 205(g) is to encourage States to assume responsibility for management of construction grants and other priority programs, leading to full delegation of the program. A grant is provided to a State when it is able to exercise effective management for a substantial portion of program activities. EPA is working with all States to continue ensuring optimum delegation and effective State oversight. EPA anticipates that all States and Puerto Rico will have signed delegation agreements by the end of 1985, with 38 of the States fully delegated by that time.

The goal of the water quality management planning grant program under Section 205(j) is to support priorities for determining the nature and extent of water quality problems; identifying cost-effective means to meet and maintain water quality standards, including nonpoint source control programs; and identifying municipal wastewater treatment construction needs. States are required to consult with local, Regional and interstate agencies in developing work plans for using these funds.

In accordance with Congressional directives, the Administrator is reviewing all proposed advanced treatment (AT) projects where the incremental cost of the advanced component is greater than $3,000,000. The Regional offices are responsible for a similar review of projects with an incremental cost of less than $3,000,000. With the issuance of the Agency's AT policy, increased EPA guidance, and State awareness of appropriate AT review procedures, EPA is requesting Congressional consent to delegate AT review functions for all projects to those States and Regions which demonstrate capability. Headquarters will continue to maintain appropriate oversight.

1985 Program Request

In 1985, EPA requests a construction grants appropriation of $2,400,000,000, a decrease of $30,000,000 from 1984. The decrease reflects elimination of separate funding to correct Marine Combined Sewer Overflow problems under Section 201(n); such projects are eligible for funding under State discretionary authorities. This funding level will provide for a total of 650 grant awards and $2,400,000,000 in net obligations. The Agency estimates that outlays will total approximately $2,500,000,000. A total of 1,060 projects are expected to complete construction. With this appropriation States are expected to obligate $92,776,000 for Section 205(g) delegation management and $24,447,320 for water quality management planning under Section 205(j).

EPA expects that all States will have accepted initial delegation by the end of 1985. We expect that 38 States will be fully delegated, including support from the Corps of Engineers, an increase of six from 1984. The remaining States are expected to continue at approximately the same level of delegation for the forseeable future. Including expected 205(g) obligations of $92,776,000, States will provide 2,086 workyears or 68 percent of the total program management staffing, EPA 19 percent, and the Corps of Engineers the remaining 13 percent.

EPA will continue working with States in targeting funds towards priority water quality needs; assuring that proposed plants are within each community's financial capabilities and use the most appropriate, cost-effective technology; completing and closing out projects as quickly as possible; ensuring effective facilities construction including improved first year operations; preventing waste, fraud or mismanagement and taking necessary corrective action; meeting grants obligation and outlay projections and reducing excessive unliquidated balances; and managing effectively shared EPA, State, and Corps of Engineers responsibilities.

EPA anticipates that States will obligate $24,447,320 under Section 205(j) in support of water quality management priorities including review and revision of water quality standards; development of needed nonpoint source control and groundwater management programs; and ensuring consistency of proposed permits and construction grants with approved water quality management plans.

1984 Program

With a 1984 construction grants appropriation of $2,430,000,000, EPA expects to award 726 Step 3 and 2+3 grants and to obligate $2,600,000,000 (net). A total of 885 projects are expected to complete construction. These funds will also support construction grants management activities in 50 delegated States with estimated 205(g) obligations of $97,752,000; 205(j) water quality management planning activities with estimated obligations of $38,472,077 including $14,100,000 from 1983 appropriations; and funding of Marine Combined Sewer Overflow projects. Federal outlays are expected to total $2,500,000,000.

By the end of 1984, EPA expects that the construction grants program will have achieved essentially full delegation. Although States may assume responsibility for a limited number of additional activities, the delegated workload will remain relatively constant. Of the 50 jurisdictions with delegation agreements, 32 States are expected to assume full delegation, an increase of three over 1983. EPA will primarily exercise the role of overall program manager for the States.

The Agency will work with States to define annual national program priorities and objectives, monitor delegated State programs, and provide needed management assistance. The Federal program will emphasize results-oriented oversight of high priority activities where there are direct financial, water quality, or public health concerns. EPA will ensure that funds are targeted to identified water quality and public health needs; projects are technologically appropriate and are within the financial capability of the communities served; appropriate advanced treatment funding decisions are made; projects are completed and closed out as quickly as possible; waste, fraud, and mismanagement in the program are prevented; and that obligation and outlay projections are met and unnecessary unliquidated balances reduced.

The $38,472,077 to be obligated under Section 205(j) will primarily support updates of water quality plans and standards; development of nonpoint source control and ground-water management programs; and development of wasteload allocations on priority waterbodies for determining treatment needs.

1983 Accomplishments

In 1983, construction grant obligations totaled $3,193,777,000 (net) and supported 809 awards (280 step 2+3 and 529 step 3). This funding resulted in 8,035 active projects by year end. Federal outlays totaled $2,982,669,000. During the year 1,125 projects completed construction and, by year end, approximately 3,550 P.L. 92-500 funded plants were completed and on line.

During 1983, four additional States signed an initial delegation agreement. Of the 50 jurisdictions with delegation agreements, 29 are considered to be fully delegated. Delegated States obligated $126,849,000 under Section 205(g) in 1983 to support construction grants and other eligible program needs. States provided 1,973 workyears, or 63 percent of the total construction grants management program. States obligated $34,349,839 Section 205(j) funds, including $23,927,276 from the 1982 appropriation, to support priority water quality management planning needs.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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WATER QUALITY

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$90,589.7	$83,728.8	$89,770.1	$88,177.1		$96,172.9	$7,995.8
Abatement Control and Compliance	$107,111.9	$61,324.0	$117,562.9	$117,509.3		$110,776.6	-$6,732.7
Research & Development	$12,486.6	$6,316.5	$10,496.5	$10,470.5		$10,761.3	$290.8
TOTAL, Water Quality	$210,188.2	$151,369.3	$217,829.5	$216,156.9		$217,710.8	$1,553.9
PERMANENT WORKYEARS	1,867.4	1,662.9	1,790.1	1,792.1		1,902.5	110.4
TOTAL WORKYEARS	2,230.9	2,065.5	2,205.2	2,207.2		2,259.4	52.2
OUTLAYS	$282,029.0	$205,682.0	$234,912.7	$235,483.7		$239,873.9	$4,390.2
AUTHORIZATION LEVELS	Authorization for the Clean Water Act, except Construction Grants, expired September 30, 1982. Reauthorization pending.						

OVERVIEW AND STRATEGY

The Agency derives its water quality objectives from two statutes: the Clean Water Act and the Marine Protection, Research and Sanctuaries Act. Both laws direct the Agency to take measures to protect the Nation's waters so as to safeguard public health, recreational use, and aquatic life.

The Agency's charge under the Clean Water Act is to meet the goals of clean water by (1) making regulatory decisions based on sound, comprehensive, scientific and technical assessments; (2) implementing and enforcing control measures directly, or indirectly through State and local programs; (3) providing technical, managerial, and administrative assistance to State programs, as well as providing program oversight; and (4) providing financial assistance to supplement State and local resources.

The Clean Water Act relies on a well-defined partnership between EPA and the States, and EPA continues to encourage the States to take on primary responsibility for implementing the Act. The Act envisions a dual approach to point-source pollution control: the technology-based approach, which uses nationally prescribed effluent limitations to achieve pollutant reductions, and the water quality-based approach, which is used to set permit limits on a site-specific basis where technology controls are insufficient to achieve ambient water quality standards.

EPA and States issue permits under the National Pollutant Discharge Elimination System to impose discharge limitations on municipal and industrial point-source dischargers. To date, permitting has focused primarily on technology-based limits, with industrial permits developed using best professional judgment in cases where technology standards are not available. Water quality-based permitting has been used to some extent in the past and will be used to a greater extent as the Agency and States refine biomonitoring and wasteload allocation techniques.

The Marine Protection, Research and Sanctuaries Act authorizes the Agency to develop criteria for the ocean disposal of materials based on a number of statutory factors including environmental considerations and the need for disposal. The Agency is also authorized to designate disposal sites for those materials and issue permits for all nondredged materials. Another aspect of the ocean disposal program is incineration-at-sea, for which EPA issues permits and designates sites.

Relevant to all these areas are the activities of the research and development program, which must provide the timely analysis, information, and analytical techniques to support the regulatory program.

ISSUING NPDES PERMITS

The primary focus of the NPDES permit program in 1985 will be the reduction of the backlog of major permits to be issued by EPA so that industrial and municipal dischargers receive permits in sufficient time to comply with requirements by July 1988, the Administration's proposed statutory deadline for industrial dischargers, and by July 1988 for municipal dischargers with extensions authorized under Section 301(i) of the Act.

Primary emphasis will be on the issuance of expired major industrial permits, using Best Available Technology guidelines (BAT) to impose toxic limitations and water quality controls as necessary. The Agency will also emphasize the issuance of major municipal permits using available tools (e.g., biomonitoring, wasteload allocations) consistent with Section 301(h) discharge waivers, pretreatment requirements, and revision to secondary treatment standards. EPA will also provide technical assistance to the States in implementing BAT permit requirements. The majority of major expired or expiring permits will be reissued by the end of 1985.

Research in this area will focus on developing a method for conducting site-specific toxicity reduction evaluations to be used by permitting authorities to issue discharge permits to industry, based on toxicity as a major parameter. Work will also take place to develop Toxicity Reduction Manuals, which will identify the in-plant sources of aquatic toxicity and define the ability of various treatment options to reduce or eliminate this toxicity.

IMPLEMENTING THE PRETREATMENT PROGRAM

Local POTW pretreatment program development and approvals will also be emphasized in 1984 and 1985, resulting from the July 1983 deadline for State and EPA approval of local programs. An estimated 370 of 1,700 needed programs have been approved to date. If local programs are not approved, EPA and States will ensure that the program is implemented.

In addition to overseeing development of pretreatment programs, EPA will also take appropriate enforcement measures to assure implementation of the national pretreatment compliance strategy. In cases where cities have not implemented approved programs, EPA will enforce national pretreatment requirements.

IMPROVING COMPLIANCE WITH NPDES PERMITS

In 1985, compliance efforts will emphasize implementation of a municipal compliance strategy to assure compliance by all municipalities by July 1988, wherever possible. Our goal will be to assure that Federally funded treatment facilities are constructed as necessary and properly operated and maintained, and that unfunded municipal dischargers take necessary steps to meet effluent limits. Where significant noncompliance persists, EPA will take necessary enforcement action. The research program will provide expanded engineering support to solve operational and design problems, reduce costs, and improve compliance for existing POTWs.

We will also continue to maintain a strong enforcement presence with industrial noncompliers to assure a continued high rate of industrial compliance. Industrial wastewater research will continue to provide quality assurance support for NPDES compliance and to operate the Discharge Monitoring Report - Quality Assurance Program.

COMPLETING EFFLUENT GUIDELINES

The Agency should finish promulgating all the effluent guidelines covered under the Natural Resources Defense Council Consent Decree in 1985. Twenty regulations have been promulgated, and twelve more have been proposed to date. The guidelines will be used by the Agency and the States in developing toxic limitations for industrial dischargers. Activities in 1985 will also include litigation and negotiation support for the guidelines that have already been issued.

IMPROVING TOOLS AND KNOWLEDGE FOR ENVIRONMENTAL DECISIONS

The 1985 abatement and control program will continue to develop tools for determining control needs beyond technology-based controls with work in areas such as biomonitoring, site-specific criteria protocols, sediment criteria, sludge criteria, and criteria for marine and estuarine situations. We will continue to work with States to improve the quality of monitoring data generated by the States, including data collected in cooperation with local governments and industry. In 1984 we will begin and in 1985 continue development of environmental criteria for municipal sludge disposal for use in determining sludge toxicity and selecting environmentally appropriate disposal options.

In 1985 we will carry out national studies, such as the Dioxin Study begun in 1984, to determine the extent of contamination by these specific pollutants in the ambient environment. These studies will increase our knowledge base and enable the Agency to make better environmental decisions in the future.

The research program will continue to define, develop, and validate protocols for adapting water quality criteria to site-specific field applications and will upgrade and validate the field models needed to identify water quality limited stream reaches and to calculate wasteload allocations. Research will also focus on development of wasteload allocation procedures based on the net toxicity of a complex effluent. An expanded effort for integrating pollutant-specific toxic control techniques with toxicity testing procedures for complex effluents for use in permitting will also be undertaken.

As the Nation completes initial implementation of technology-based controls for municipal and industrial point sources, nonpoint source pollution is being increasingly identified as a significant pollution problem which must be addressed in many areas of the country. In recognition of this problem, specific activites which EPA will undertake include issuing in 1984 a policy statement addressing nonpoint source pollution and the use of available funds under Sections 106 and 205(j) on these programs and developing a new agreement with the U.S. Department of Agriculture to focus technical assistance and dissemination of information to farmers in water quality limited basins on the economic and environmental advantages of applying various proven best management practices. EPA will also continue working with the Department of the Interior on controlling nonpoint source problems on Federal lands.

FOCUSING ON BASINS OF MAJOR IMPORTANCE

The Water Program will continue in 1985 to focus on basins of major importance to the public and the Congress, by significantly expanding the Federal commitment to cleanup of the Cheasapeake Bay. The Agency will work with the States of Maryland, Viginia, and Pennsylvania and with the District of Columbia to implement management plans resulting from the research findings of the seven-year Chesapeake Bay Water Quality Study. The Study identified three areas of concern facing the Bay: (1) the disappearance of submerged aquatic vegetation; (2) the influx of nutrient loads from point and nonpoint sources; and (3) the contamination of the Bay and its tributaries by toxic substances.

A State and Federal effort has been organized to address these concerns. The Bay Executive and Implementation Committees were established on December 9, 1983 by the EPA Administrator, the Governors of the three States, and the Mayor of the District. The Agency in 1985 will support actions to address these concerns, to include cost-sharing grants to the States for demonstration of nonpoint source control practices, for development of stringent toxic control permits using biomonitoring procedures, for wastewater plant operator training, for improvement of local pretreatment programs, and for technical assistance to farmers and small businesses in designing controls.

EPA's Great Lakes National Program Office will continue to carry out the International Agreement with Canada to support water pollution control in the Great Lakes with continued support from our Grosse Ile lab and other research laboratories. The focus will be on the use of fish, water, and air sampling to determine water quality improvement and to identify emerging problems as a basis for resource management and allocations. The Agency will also continue to award Clean Lakes grants to complete existing lake restoration projects.

IMPLEMENTING A MARINE PROTECTION PROGRAM

In 1985, the Agency will promulgate the revisions required by a court decision to the ocean dumping regulation, which will provide for balancing the environmental effects of ocean disposal versus other disposal methods while meeting

specific environmental criteria contained in the statute. The Agency will continue to review, process, and issue permits for ocean disposal. EPA will complete the environmental impact statements on ocean disposal sites for site designations required under the National Wildlife Federation Consent Decree. Additional site designation work will begin on dredged material disposal sites not covered under the Consent Decree. The Agency will conduct monitoring surveys for dredged material and other ocean dumping sites to determine the environmental impact of ocean disposal. Regulations will be promulgated for the control and monitoring of incineration-at-sea activities. The Agency will continue to survey and monitor existing ocean incineration sites and will process additional applications for incineration-at-sea permits.

The research program will continue to develop and validate techniques for assessing the impact of ocean disposal of wastes, develop monitoring techniques to evaluate the long-term effects of ocean disposal, and evaluate the trade-offs of alternative treatment technologies with respect to environmental effects. The research program will also work on procedures to evaluate acute and chronic toxicity and bioaccumulation potential of contaminants in sediments for use in the dredge disposal and ocean dumping permit programs. This effort is coordinated with the National Oceanic and Atmospheric Administration and the Corps of Engineers.

MANAGING CONSTRUCTION GRANTS

EPA will continue to provide responsible fiscal stewardship of Federal construction funds and to ensure that this program, which is essentially fully delegated, continues to achieve statutory objectives. EPA will ensure that the $2.4 billion requested in 1985 is focused on priority projects with the greatest water quality and health impact, while emphasizing local financial capability and implementation of the most cost-effective wastewater treatment approaches. Building upon years of experience, EPA will assist States and communities in making appropriate technological and funding decisions through dissemination of information on effective and ineffective wastewater treatment technologies and sludge management approaches. EPA will also assist States in implementing the remaining statutory reforms which become effective in 1985, particularly revised funding eligibilities and engineering performance requirements. In addition to maintaining effective oversight of delegated activities, EPA will continue to exercise responsibility for providing needed program guidance and assistance, performing nondelegated activities, working with the U.S. Corps of Engineers in assuring technical integrity of wastewater treatment projects and monitoring projects with overriding Federal interest.

The municipal wastewater research program will continue to provide the technical information and engineering assistance needed by EPA and municipalities to develop regulations and guidance for disposal of sludge and control of pollution from municipal treatment plants and to bring treatment plants into compliance with State discharge permits. The specific objectives of the research program in 1985 are to 1) accelerate the use of Innovative and Alternative (I/A) technologies through post-construction evaluations of I/A treatment technologies; 2) develop more effective sludge treatment methods to enhance the use of sludge as well as reduce the volumes of sludge expected from construction of new systems; 3) support guidance development to control toxic pollutants and minimize water quality impacts; and 4) provide the scientific assessment, health, engineering, and monitoring information base for a systems analysis approach for the States to use in evaluating control options.

IMPROVING ASSISTANCE TO STATES

To ensure that States have sufficient Federal support to carry out requirements the Federal government has placed on them, EPA will maintain the 1984 appropriated level for Section 106 grants. Together with available funds under Sections 205(g) and (j), States will be able to carry out their basic water programs and deal with priority needs, including incorporation of toxics in State

water quality standards, incorporation of toxic limits in permits, reduction of permit backlogs, implementation of pretreatment programs, and development of nonpoint source control programs. EPA will improve its efforts to make States accountable for outputs agreed to under delegation agreements and will continue to strengthen our oversight of State performance to fulfill EPA's responsibility to ensure that the Congressionally mandated program is carried out.

CONTINUING PROTECTION OF WETLANDS

The major effort in 1985 in the dredge and fill program will be to develop and apply technical guidance and regulations to ensure effective protection of the wetland waters of the United States and to encourage States to assume Section 404 permitting authority from the Federal government.

Headquarters will develop guidance and revise regulations and procedures to identify and address the most significant environmental problems in wetlands and other aquatic systems. The Regions will review and comment on public notices of permit applications; elevate permits, when necessary, to higher levels of management; and establish jurisdictional boundaries.

In addition, Headquarters will work with the Regions to develop innovative techniques (e.g., a joint pilot permitting program with the States and Federal government) to encourage State assumption of the program. Regions will manage State program development grants, consult before submittal, review submissions, and coordinate with other agencies.

MAINTAINING ENVIRONMENTAL EMERGENCY RESPONSE CAPABILITY

The environmental emergency response program will continue to maintain an around-the-clock capability to receive notice of and respond to major incidents of accidental releases of oil and other petroleum products (spills of hazardous substances are covered under Superfund). Removal actions will be directed by Regional field personnel at serious incidents where the responsible party is unidentifiable, refuses to clean up, or is incapable of providing adequate response and where State or local authorities lack appropriate expertise or resources.

The cleanup monitoring program will continue to provide incentives for adequate removal by the responsible party, as well as serve as a mechanism for drawing State and local agencies into directing removals themselves. The Agency's focus in 1985 will be on encouraging State and local governments to assume a greater share of the responsibility for responding to oil spills. Federal resources, therefore, will be concentrated on major actions where State, local, or private response is not feasible.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Effluent Guidelines					
Proposed	13	18	3	0	Completed
Promulgated	11	29	7	4	- 3
Ocean Dumping Permits	11	55	25	25	
Construction Grants Awards	809	597	726	650	- 76
Active Construction Grants Proj...	8,035	4,764	6,328	4,711	-1,617
Step 3 and Step 2+3 Project Completions	1,125	1,200	885	1,060	+ 175
Signed 205(g) Agreements	50	49	50	51	+ 1
State Program Approvals, National Pollutant Discharge Elimination System (NPDES)	36	38	38	40	+ 2
Adjudicatory Hearings Settled-Major Sources	76	76	136	114	- 22
Permits Issued by EPA:					
Municipal-					
Major	125	181	201	300	+ 99
Minor	337	...	...	...	...
Non-municipal					
Major	381	300	385	450	+ 65
Minor	1,357	...	...	...	...
General	6	58	40	60	+ 20
Enforcement Actions					
Judicial Enforcement Actions Supported	85	88	88	124	+ 35
Notices of Violation (Administrative Orders)	831	673	673	658	- 15
Compliance Inspections	1,994	1,978	2,052	1,951	- 101
Clean Lakes Projects Awarded	16	0	25	12	- 13
Clean Lakes Projects Completed	11	40	26	20	- 6
Spill Prevention Control and Countermeasure Inspections	1,700	2,000	2,000	2,000	--
Spill Removal Actions Conducted	120	120	120	120	--
Spill Removal Actions Monitored	400	400	400	400	--

ENVIRONMENTAL PROTECTION AGENCY

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Water Quality Research

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
Scientific Assessment							
Salaries & Expenses	$498.4	$197.5	$197.5	$197.5		$212.7	$15.2
Research & Development	$217.0	$100.0	$100.0	$100.0		$90.0	-$10.0
TOTAL	$715.4	$297.5	$297.5	$297.5		$302.7	$5.2
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$2,313.0	$1,887.6	$1,887.6	$1,791.3		$1,858.1	$66.8
Research & Development	$268.0	$425.0	$675.0	$669.0		$425.0	-$244.0
TOTAL	$2,581.0	$2,312.6	$2,562.6	$2,460.3		$2,283.1	-$177.2
Health Effects							
Salaries & Expenses	$864.6	$420.7	$420.7	$420.7		$443.6	$22.9
Research & Development	$200.0		$200.0	$200.0			-$200.0
TOTAL	$1,064.6	$420.7	$620.7	$620.7		$443.6	-$177.1
Environmental Engineering & Technology							
Salaries & Expenses	$97.4	$225.0	$225.0	$225.0		$237.5	$12.5
TOTAL	$97.4	$225.0	$225.0	$225.0		$237.5	$12.5
Environmental Processes & Effects							
Salaries & Expenses	$6,193.5	$6,424.1	$6,583.4	$6,436.5		$7,796.4	$1,359.9
Research & Development	$1,524.9	$2,507.5	$2,507.5	$2,507.5		$1,560.0	-$947.5
TOTAL	$7,718.4	$8,931.6	$9,090.9	$8,944.0		$9,356.4	$412.4

WATER QUALITY

Water Quality Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Great Lakes Research							
Salaries & Expenses	$999.2		$1,000.0	$1,000.0		$1,010.7	$10.7
Research & Development	$1,499.8		$1,500.0	$1,500.0		$1,500.0	
TOTAL	$2,499.0		$2,500.0	$2,500.0		$2,510.7	$10.7
TOTAL:							
Salaries & Expenses	$10,966.1	$9,154.9	$10,314.2	$10,071.0		$11,559.0	$1,488.0
Research & Development	$3,709.7	$3,032.5	$4,982.5	$4,976.5		$3,575.0	-$1,401.5
Water Quality Research TOTAL	$14,675.8	$12,187.4	$15,296.7	$15,047.5		$15,134.0	$86.5
PERMANENT WORKYEARS							
Scientific Assessment	5.0	1.5	1.5	1.5		1.5	
Monitoring Systems & Quality Assurance	40.0	30.7	30.7	29.7		31.7	2.0
Health Effects	12.0	3.0	3.0	3.0		3.0	
Environmental Engineering & Technology	2.3	2.9	2.9	2.9		2.9	
Environmental Processes & Effects	119.9	112.1	112.1	112.1		113.2	1.1

WATER QUALITY

Water Quality Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Great Lakes Research	7.3		6.4	6.4		6.4	
TOTAL PERMANENT WORKYEARS	186.5	150.2	156.6	155.6		158.7	3.1
TOTAL WORKYEARS							
Scientific Assessment	12.6	4.0	4.0	4.0		4.0	
Monitoring Systems & Quality Assurance	51.7	38.9	38.9	37.9		36.9	-1.0
Health Effects	17.7	6.1	6.1	6.1		6.1	
Environmental Engineering & Technology	2.3	4.1	4.1	4.1		4.1	
Environmental Processes & Effects	157.8	183.5	182.9	182.9		179.5	-3.4
Great Lakes Research	7.3		8.0	8.0		8.0	
TOTAL WORKYEARS	249.4	236.6	244.0	243.0		238.6	-4.4

Water Quality Research

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Evaluate and Standardize Monitoring Methods			
- Sampling technology for representative analysis of ambient water quality (Monitoring)	9/83	8/84	6/85
- Evaluate enforcement potential of *in vivo* stress indicators for monitoring water quality (Monitoring)		8/85	8/86
Provide Quality Assurance			
- Provide status report for repository, referee analytical services, QC sample program, and performance evaluation survey (Monitoring)	7/83	7/84	7/85
- Provide reference cultures of biological test organisms (fish, microbiota, etc) (Monitoring)	8/83	8/84	8/85
Develop the Data to Support Water Quality Standards and Permits			
- Health effects bioassay methods for determining whether receiving streams meet wasteload allocations (Health Effects)	6/86	6/86	6/86
- Determine the effect of particulate size and density on the incidence rate of swimming-associated gastroenteritis (Health Effects)	12/84	12/84	12/84
- Assistance in modifying or determining health criteria/ standards for site-specific situations (Scientific Assessment)	9/83	9/84	9/85

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Report on the feasibility of using chemical speciation models to derive site-specific criteria (Env. Processes)	12/84	12/84	12/84
- Feasibility report on integrating single pollutant criteria and complex effluent approaches for regulatory application (Env. Processes)			12/86
- Manual of field validated wasteload allocation models (Env. Processes)	9/86	9/86	9/86
Develop Data To Support a Sound Ocean Disposal Program			
- Project report on partitioning of harmful materials in sludge between sludge and seawater (Env. Engineering)	10/85	10/85	10/85
- Report on removal of metals and organics in alternative treatment systems for ocean discharge (Env. Engineering)	1/85	1/85	1/85
- User manual for evaluation of a waste proposed for ocean dumping (Env. Processes)	9/86	9/86	9/86
- Final report on hazard assessment methods for evaluating ocean dumping impacts (Env. Processes)	9/86	9/86	9/86
Implement Great Lakes Study			
- Documentation of Great Lakes Models (Env. Processes)	6/85	6/85	6/85
- Report on methodology/protocol for field exposure/effects assessment of a Great Lakes area of concern (Env. Processes)	1/86	1/86	1/86

Water Quality Research

Budget Request

The Agency requests a total of $15,134,000 supported by 238.6 total workyears for 1985, an increase of $86,500 and a decrease of 4.4 total workyears from 1984. Included in this total are $11,559,000 for Salaries and Expenses and $3,575,000 for Research and Development, with an increase of $1,488,000 and a decrease of $1,401,500 respectively. The increase in the Salaries and Expenses appropriation reflects a shift of resources to support increased costs of laboratory operations and joint research with the People's Republic of China. The decrease in R&D reflects the shift for laboratory operations, the concentration of health research in the Drinking Water decison unit, and completion of a large part of the environmental processes research work on ocean dumping waste evaluation protocols.

Program Description

Over the next several years, uniform technology-based requirements mandated by the Clean Water Act (CWA) for municipal and industrial effluent discharges will largely be in place nationwide. However, in water bodies where these controls have achieved State water quality standards, the Clean Water Act provides for additional control measures. The EPA's research and development program will provide the scientific and technical base to help States implement site-specific standards through water quality permitting. We are shifting our emphasis from development of single chemical criteria to development of methods required for permitting on water quality limited segments where there are multiple dischargers with complex effluents. The ocean disposal research is structured to provide information to support the Agency in evaluating the use of the oceans for waste disposal.

The following objectives support these goals:

Objective 1. Evaluate and Standardize Monitoring Methods to Support Water Quality Programs. This activity develops and standardizes water monitoring methods needed for identifying toxic pollution problems, evaluating stream flow and effluent variabilities, and evaluating compliance with ambient water quality standards and permit requirements.

Objective 2. Provide Quality Assurance to Support Water Quality Programs. This research develops and standardizes quality assurance methods, provides continuing basic quality control materials and guidance, and determines the adequacy of analytical procedures.

Objective 3. Develop the Data to Support Water Quality Standards and Permits. This activity provides the information and tools needed by Federal and State permit programs to correct ambient water quality problems that remain after the mandated minimum pollution control technology (e.g., secondary treatment, effluent guidelines) is in place.

Objective 4. Develop Scientific Data to Support an Environmentally Sound Ocean Disposal Program. This research program develops and validates protocols needed by EPA for predicting and evaluating impacts from ocean disposal practices. The major focus is on hazard assessments, biomonitoring techniques, and identifying acceptable disposal practices.

Objective 5. Implement Great Lakes Study. This program evaluates, measures, and develops predictive tools needed for understanding the distribution of pollutants and resulting effects on water quality, aquatic life, and human exposure through aquatic food chains of Great Lakes ecosystems.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $302,700 supported by 4.0 total workyears for this program, of which $212,700 is for Salaries and Expenses and $90,000 is for Research and Development. This reflects an increase of $15,200 in the Salaries and Expenses appropriation and a decrease of $10,000 in the Research and Development appropriation. The increase in Salaries and Expenses and the decrease in Research and Development are due to increased support for in-house operations and a shift of extramural resources to support this.

Develop the Data to Support Water Quality Standards and Permits. ORD will continue to support program offices, States, and local officials in the implementation of site-specific human health criteria. This will include: providing assistance in the evaluation of potential local health hazards caused by exposure to chemical pollutants; developing methods for evaluating effects of exposure to complex mixtures; and providing input to Clean Water Act Section 301(g) permit modification requests.

1984 Program

In 1984, the Agency is allocating a total of $297,500 and 4.0 total workyears to this program, of which $197,500 is under the Salaries and Expenses appropriation and $100,000 is for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. Methods for assessing risk of human exposure to chemical mixtures are being revised and published based on scientific workshops and public comments.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $715,400 and 12.6 total workyears for this program, of which $498,400 was under the Salaries and Expenses appropriation and $217,000 was for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. A working draft of the guidelines for evaluating available health data associated with human exposure to complex mixtures of chemicals was developed. Seven mini-criteria (i.e., maximum safe concentrations as indicated by a minimum data set) for preliminary hazard assessments were developed in lieu of full criteria. Updates of existing guidelines and methodology were initiated in 1983.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $2,283,100 supported by 36.9 total workyears for this program, of which $1,858,100 is for Salaries and Expenses and $425,000 is

for Research and Development. The decrease of $244,000 reflects one time funding for the development of biological monitoring techniques. A one position decrease reflects a transfer of one workyear to the centralized quality assurance effort in the Intermedia Decision Unit. Increased funding of $66,800 will support the increased cost of laboratory operation.

Evaluate and Standardize Monitoring and Measurement Methods to Support Water Quality Programs. Biosurvey techniques will be evaluated and standardized for determining use-attainability and wasteload allocations. Program focus will be on taxonomic identification, enzyme activity level monitoring and rapid chronic tests.

Provide Quality Assurance to Support Water Quality Programs. New materials were furnished to enable States and EPA laboratories to check their monitoring procedures for toxicity testing regimes promulgated by EPA. The performance of new test organisms will be documented and compared for quality to existing reference calibrants. The quality assurance program will be maintained for existing biological, chemical and physical tests used in water quality analysis.

1984 Program

In 1984, the Agency is allocating a total of $2,460,300 and 37.9 total workyears to this program, of which $1,791,300 is under the Salaries and Expenses appropriation and $669,000 is for extramural purposes under the Research and Development appropriation.

Evaluate and Standardize Monitoring and Measurement Methods to Support Water Quality Programs. Work is being carried out on adapting freshwater monitoring procedures for use in marine waters, standardizing a procedure for using fish lethality as a way of determining water quality, evaluating freshwater methods used to measure the condition of aquatic ecosystems, and standardizing stream flow measurement methods.

Provide Quality Assurance to Support Water Quality Program. The quality assurance program continues to furnish calibration materials for States and to standardize toxicity tests for the permitting process. EPA is evaluating a rapid and low-cost (five day) subacute toxicity test to replace an existing life cycle test (100 days).

1984 Explanation of Changes from the Amendment

The net decrease of -$102,300 results from the following actions:

-Reprogrammings. (-$102,300) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$96,300 to the Salaries and Expenses appropriation and a decrease of -$6,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,581,000 and 51.7 total workyears for this program, of which $2,313,000 was under the Salaries and Expenses appropriation and $268,000 was for extramural purposes under the Research and Development appropriation.

Evaluate and Standardize Monitoring and Measurement Methods to Support Water Quality Programs. 366 acute toxicity tests using aquatic organisms and an enzyme indicator were completed and used to support water quality permits. Acute toxicity tests for iron and steel wastes were conducted. Laboratory precision tests were completed with fathead minnows using cadmium as the toxicant. The reliability of acute toxicity tests which use an aquatic organism was evaluated for four toxicant reference materials.

Provide Quality Assurance to Support Water Quality Programs. Performance evaluations were provided to over 600 participating laboratories. A short term embryo-larvel test for effluent biomonitoring was evaluated. Calibration materials were provided to ensure acceptable data quality, with a major effort on providing biological test specimens.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $443,600 supported by 6.1 total workyears for this program, all of which is for Salaries and Expenses. This reflects a decrease of $200,000 in the Research and Development appropriation and an increase of $22,900 in the Salaries and Expenses appropriation. This decrease reflects the continuing shift of health research to the Drinking Water health effects research program to support the consolidation of water-related health effect issues under the direction of the Drinking Water Office, and the increase reflects increased support for laboratory operations.

Develop the Data to Support Water Quality Standards and Permits. The Agency has identified specific sites where waterborne toxic pollutants, particularly complex effluents, are of particular concern. ORD will develop techniques for use in evaluating site-specific human health problems caused by complex effluents. Several new tests will be evaluated and field tested, and the most useful tests will be described in a manual.

1984 Program

In 1984, the Agency is allocating a total of $620,700 and 6.1 total workyears to this program, of which $420,700 is under the Salaries and Expenses appropriation and $200,000 is for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. Development of short-term toxicological tests for human health effects is continuing. Research to determine the effects of particle size on the incidence of swimming-associated gastroenteritis is being completed.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,064,600 and 17.7 total workyears for this program, of which $864,600 was under the Salaries and Expenses appropriation and $200,000 was for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. Research studies on the general toxicity and immunotoxicity of napthalene in surface waters has been completed. Studies on the subchronic toxicity of halomethane have been published.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $237,500 supported by 4.1 total workyears for this program, all of which is for Salaries and Expenses. This is an increase of $12,500 in the Salaries and Expenses appropriation, reflecting the increased cost of laboratory expenses.

Develop the Scientific Data to Support an Environmentally Sound Ocean Disposal Program. ORD will develop methods to determine physical properties of sludge relevant to engineering aspects of ocean disposal and will provide assessments on alternate sludge treatment technologies in order to determine the least risk. ORD will also evaluate the reliability of existing treatment technology to meet effluent limitations.

1984 Program

In 1984, the Agency is allocating a total of $225,000 and 4.1 total workyears to this program, all of which is under the Salaries and Expenses appropriation.

Develop Scientific Data to Support an Environmentally Sound Ocean Disposal Program. Information on the effect of various sludge treatment options on particle size and density characteristics is being developed for use in transport and fate models to help predict sludge movement in the ocean.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $97,400 and 2.3 total workyears to this program, all of which was under the Salaries and Expenses appropriation.

Develop Scientific Data to Support an Environmentally Sound Ocean Disposal Program. Pilot scale treatment units were fabricated and installed to conduct studies on less-than-secondary treatment processes to determine the effect of treatment levels on pollutant uptake by marine organisms.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $9,356,400 supported by 179.5 total workyears for this program, of which $7,796,400 is for Salaries and Expenses and $1,560,000 is for Research and Development. This is an increase of $1,359,900 in the Salaries and Expenses appropriation and a decrease of $947,500 in the Research and Development appropriation. The increase reflects an additional $525,000 for environmental research in cooperation with the People's Republic of China and a shift of resources to support the increased cost of laboratory operations. The decrease in Research and Development reflects this shift and a decreased effort in the ocean disposal program as a result of completion of the bulk of research in support of waste evaluation protocols.

Develop the Data to Support Water Quality Standards and Permits. ORD will provide field tested methods that States can use to derive water quality criteria which take into account local environmental conditions in both freshwater and

marine environments. Use-attainability research will continue to develop and test assessment procedures for determining the biological integrity of freshwater eco-given site. Wasteload allocation research will continue to develop, upgrade, and test an array of models that States can use for setting permit conditions for toxic as well as conventional pollutants. EPA will continue to operate the Center for Water Quality Modeling which will provide manuals, computer tapes, and other assistance on various models to States and EPA client offices. Increasing effort will be given to development of wasteload allocation procedures based on the net toxicity of a complex effluent. An expanded research effort will focus on integrating pollutant-specific toxicity testing procedures for complex effluents for use in water quality permitting.

The Agency will participate in a joint research program with the People's Republic of China (PRC) in three areas of mutual interest. They are: (1) effects of pollution on freshwater organisms, (2) pollution of soil and groundwater, and (3) modeling of water pollution fate and transport.

Develop the Scientific Data to Support an Environmentally Sound Ocean Disposal Program. Ocean dumping research, coordinated with the National Oceanic Atmospheric Administration (NOAA) and the Corps of Engineers, will develop and revise short-term physical, chemical, and biological screening procedures for characterizing the toxicity, persistence, and bioaccumulation potential of wastes to be dumped in the ocean. Also, hazard assessment protocols will be developed to permit better evaluation of ocean dumping impacts. Procedures will be developed and validated for biomonitoring dumpsites for chronic long-term effects. EPA will develop, revise, and field validate procedures to evaluate acute and chronic toxicity and bioaccumulation potential of contaminants in sediments for use in the CWA, Section 404 dredged material disposal and ocean dumping permit programs. To improve the technical basis for regulation of outfall discharges, research will develop information used in the protection of biological resources and develop predictive a methodology for relating waste discharage practices to temporal and spatial exposure conditions. Technical assistance will be given to the Office of Water, Regions, and others concerned with 301(h) waivers to the mandatory secondary treatment requirement for the discharge of municipal wastes through ocean outfalls.

1984 Program

In 1984, the Agency is allocating a total of $8,944,00 and 182.9 total work-years to this program, of which $6,436,500 is under the Salaries and Expenses appropriation and $2,507,500 is for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. EPA is completing the development of protocols for determining the nature and impact of pollutants on aquatic ecosystems under different environmental conditions. Methods for analyzing biologial conditions of water bodies are being developed for application in use-attainability assessments. The risk to organisms from intermittent exposure to pollutants is being studied. Newly developed site-specific criteria guidelines are being field evaluated and refined in conjunction with developing more precise wasteload allocation models. Models used in determining National Pollution Discharge Elimination System (NPDES) permit discharge limits for contaminants of concern are being developed and field evaluated.

Develop Scientific Data to Support an Environmentally Sound Ocean Disposal Program. Research will develop techniques and data for evaluating the impacts of alternative ocean disposal strategies. For ocean-dumped material, research emphasis is on refining measurements of ecological impacts, validating predictive methods, development of a hazard assessment protocol, and improving techniques for monitoring long-term biological impacts at dumpsites. This effort is being coordinated with the NOAA and the Corps of Engineers.

1984 Explanation of Changes from the Amendment

The net decrease of -$146,900 results from the following action:

-Reprogramming. (-$146,900) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$146,900 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $7,718,400 and 157.8 total work-years for this program, of which $6,193,500 was under the Salaries and Expenses appropriation and $1,524,900 was for extramural purposes under the Research and Development appropriation.

Develop the Data to Support Water Quality Standards and Permits. The development of protocols for determining the nature of chemical pollutants and their impact on aquatic ecosystems under different environmental conditions continued. Bioassessment methods for determining biological conditions of water bodies were developed and tested to facilitate establishment of use-attainability assessment procedures. Revised aquatic criteria for ammonia and chlorine were prepared. Several mathematical models that have been developed for identifying water quality limited stream segments and for making wasteload allocation of most conventional pollutants were field validated.

Develop Scientific Data to Support an Environmentally Sound Ocean Disposal Program. Development of techniques for measuring the impacts of ocean disposed materials on marine organisms was continued. Techniques for estimating the impact of dredged material dumped in the ocean were refined and field validated. Biological techniques for monitoring long-term impacts on dumpsites were developed and validated. This effort was coordinated with the NOAA and the Corps of Engineers.

GREAT LAKES RESEARCH

1985 Program Request

The Agency requests a total of $2,510,700 supported by 8.0 total workyears for this program, of which $1,010,700 is for Salaries and Expenses and $1,500,000 is for Research and Development. This is an increase of $10,700 in the Salaries and Expenses appropriation. The Research and Development appropriation request is the same amount as 1984. The increase in the Salaries and Expenses appropriation reflects the increased cost of laboratory operations.

Implement Great Lakes Study. The Great Lakes Research Program will provide the U.S./Canada Water Quality Board and EPA Office of Water with technical support under the U.S./Canada Water Quality Agreement. Intensive field studies will be conducted to evaluate current methodologies for development of site-specific water quality criteria and assessments of use-attainability using existing fish population dynamics models and bioassay, biomonitoring, and bioavailability procedures. The extent of fish and sediment contamination by polychlorinated and other synthetic organic compounds will be emphasized.

1984 Program

In 1984, the Agency is allocating a total of $2,500,000 and 8.0 total work-years to this program, of which $1,000,000 is under the Salaries and Expenses appropriation and $1,500,000 is for extramural purposes under the Research and Development appropriation.

Implement Great Lakes Study. Research is continuing to identify and evaluate sources of pollutants found in the Great Lakes. Mathematical models and other predictive techniques will be developed and field validated for use in understanding the transport, accumulation, loss, recycling, and impact of toxic pollutants in large lake ecosystems. In addition, technical assistance will be provided to the International Joint Commission, Program Offices and Regional Offices.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,499,000 and 7.3 total workyears for this program, of which $999,200 was under the Salaries and Expenses appropriation and $1,499,800 was for extramural purposes under the Research and Development appropriation.

Implement Great Lakes Study. Research in site-specific water quality criteria, eutrophication, and ecological assessment was conducted and technical support provided to the International Joint Commission and U.S./Canada Water Quality Board for the Great Lakes. An intensive field study of a watershed of the Great Lakes was conducted to determine exposure, dose and effects on environmental populations by evaluating exposure potential, exposure experience, critical dose, and observed effects based on biological epidemiology.

WATER QUALITY

Municipal Wastewater

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Scientific Assessment							
Salaries & Expenses		$83.7	$83.7	$83.7		$96.4	$12.7
TOTAL		$83.7	$83.7	$83.7		$96.4	$12.7
Health Effects							
Salaries & Expenses	$742.1	$1,006.9	$1,006.9	$1,006.9		$964.8	-$42.1
Research & Development	$1,231.2	$1,062.9	$1,062.9	$1,062.9		$746.3	-$316.6
TOTAL	$1,973.3	$2,069.8	$2,069.8	$2,069.8		$1,711.1	-$358.7
Environmental Engineering & Technology							
Salaries & Expenses	$4,183.5	$1,324.3	$1,529.2	$1,681.4		$1,792.9	$111.5
Research & Development	$4,759.3	$1,784.2	$4,014.2	$4,014.2		$5,246.1	$1,231.9
TOTAL	$8,942.8	$3,108.5	$5,543.4	$5,695.6		$7,039.0	$1,343.4
TOTAL:							
Salaries & Expenses	$4,925.6	$2,414.9	$2,619.8	$2,772.0		$2,854.1	$82.1
Research & Development	$5,990.5	$2,847.1	$5,077.1	$5,077.1		$5,992.4	$915.3
Municipal Wastewater TOTAL	$10,916.1	$5,262.0	$7,696.9	$7,849.1		$8,846.5	$997.4

WATER QUALITY

Municipal Wastewater

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Scientific Assessment		1.0	1.0	1.0		1.0	
Health Effects	13.7	14.3	14.3	14.3		14.3	
Environmental Engineering & Technology	77.7	24.2	31.7	31.7		31.7	
TOTAL PERMANENT WORKYEARS	91.4	39.5	47.0	47.0		47.0	
TOTAL WORKYEARS							
Scientific Assessment		2.0	2.0	2.0		2.0	
Health Effects	21.1	21.7	21.7	21.7		21.7	
Environmental Engineering & Technology	90.3	27.1	34.6	34.6		34.6	
TOTAL WORKYEARS	111.4	50.8	58.3	58.3		58.3	

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Evaluate Innovative and Alternative Technologies			
- Assessment reports of emerging treatment technology processes (Env. Tech.)	9/84	9/84	9/85
- Conduct post-construction evaluation of I/A projects and publish reports for feedback to States, municipalities and consultants (Env. Tech.)	9/83	9/84	9/85
- Process design manual on wastewater disinfection (Env. Tech.)	9/84	9/84	
- Process design manual for wastewater stabilization ponds (Env. Tech.)	6/83		
- Handbook for cost effective treatment and disposal of sewage (Env. Tech.)	9/83		
- Evaluation of sewer rehabilitation techniques (Env. Tech.)		9/84	
- Report on health assessment of airborne exposure to wastewater pathogens (Health Effects)	6/86	6/86	6/86
Evaluate Sludge Management Methods			
- Design manual for the land application of sludge (Env. Tech.)	9/83		
- Design guidelines for sludge treatment processes (Env. Tech.)	6/84	6/84	
- Provide health appraisal report on sludge application (Health Effects)	7/85	7/85	7/85
- Assess human health hazard/risk assessment methodology and guidelines (Sci. Assess.)	6/85	6/85	6/85
Provide for Compliance Achievement and Upgrading of Municipal Wastewater Treatment Plants			
- Reports on design methods to correct poor design practices, and improve cost and energy savings (Env. Tech.)	6/84	6/84	9/85

Municipal Wastewater

Budget Request

The Agency requests a total of $8,846,500 supported by 58.3 total workyears for 1985, an increase of $997,400 with no increase in total workyears from 1984. Included in this total is $2,854,100 for Salaries and Expenses and $5,992,400 for Research and Development, with increases of $82,100 and $915,300 respectively. The increase provides for new engineering research efforts in toxic pollutants, compliance, and support to water quality standards.

Program Description

The purpose of the Municipal Wastewater Research Program is to provide the technical information and engineering assistance needed by EPA and municipalities for the development of regulations and guidance in the disposal of sludge, in the control of pollution from municipal treatment plants and to bring treatment plants into compliance with National Pollutant Discharge Elimination System (NPDES) permits.

The following objectives support these goals:

Objective 1. Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. This activity provides technical support, information dissemination, post-construction evaluations of completed projects, and engineering assessments of emerging technologies required to accelerate and encourage use of Innovative and Alternative technology in the Construction Grants program by the States and municipalities.

Objective 2. Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. This research provides the scientific assessment, engineering, health effects, and monitoring information needed for the effective treatment, conversion, use and disposal of sludges. This research is needed for the development of regulations and guidance in order to comply with the mandates of both the Clean Water Act and the Resource Conservation and Recovery Act.

Objective 3. Provide for Compliance Achievement and Upgrading of Municipal Wastewater Treatment Facilities. This activity provides the municipal sector with both the information to correct treatment plant deficiencies and upgrade existing plant capacities to achieve compliance with NPDES permits at minimal costs.

Objective 4. Evaluate Wastewater Toxics Treatability of Various Municipal Treatment Processes. This research provides the information needed for developing regulations and guidance to control toxic pollutants and minimize water quality impacts through effective use of municipal treatment processes, and management options which seek to minimize pretreatment where possible.

Objective 5. Provide Water Quality Planning and Regulation Support for the Water Quality Standards and Permit Process. This research provides protocols to States to perform a systems analysis approach for evaluating various options for achieving rational water quality goals at minimal cost.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $96,400 supported by 2.0 total workyears for this program, all of which is for Salaries and Expenses, an increase of $12,700 over 1984. This reflects the need for additional resources to complete a methodology for conducting health hazard and risk assessment evaluations of sludge disposal options.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for Management of Municipal Sludge. Efforts will finalize risk assessment guidelines for determining criteria for contaminant levels in sludge, begun in 1984. The potential health risks associated with the sludge disposal option of land spreading will be assessed for five contaminants.

1984 Program

In 1984, the Agency is allocating a total of $83,700 and 2.0 total workyears to this program, all of which is under the Salaries and Expenses appropriation.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for Management of Municipal Sludge. EPA sludge management policy needs to be supported by multi-media exposure and health risk assessments capable of showing that risks will be minimized under that policy for 1984. Research is initiating the development of risk assessment guidelines for determining criteria for contaminant levels in sludge.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency did not obligate resources for this program.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $1,711,100 supported by 21.7 total workyears for this program of which $964,800 is for Salaries and Expenses and $746,300 is for Research and Development. This reflects a decrease of $42,100 and $316,600 respectively. The decrease results from completion of research in health aspects of land treatment in municipal wastewater. The epidemiological studies in Lubbock, Texas, and Israel will be nearing completion. Available data is adequate for present Agency regulatory priority needs.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. This research, which provides data and appraisal documents on the health aspects of land treatment of wastewater, will be drawing to a close. Emphasis will be on pathogens, organic chemicals, nitrates and sodium. Scientific information is needed to assess the effects on human health resulting from the exposure to biological and chemical pollutants contained in wastewater. This research will assist State and local officials to develop practices which are relatively free from risks to human health.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. Research will focus primarily on identifying the presence of adverse human health-related organic chemicals in sludge and assessing their potential mutagenic and carcinogenic toxic effects. Research will provide definitive data on the fate of human pathogens present in domestic sludges, specifically viruses and parasites which possess resistence to inactivation. Field studies will be conducted under various climatic conditions to determine the die-off of parasites and viruses. Animals will be evaluated as potential human surrogates to study pathogen infectivity. Microbial data are necessary to form the basis for regulations and guidelines for land application of sludge.

1984 Program

In 1984, the Agency is allocating a total of $2,069,800 and 21.7 total work-years to this program, of which $1,006,900 is for the Salaries and Expenses appropriation and $1,062,900 is for extramural purposes under the Research and Development appropriation.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. Current research activities nearing completion in the land treatment health program include: epidemiological studies in Lubbock, Texas, and Israel, studies on movement of pollutants through the air and soil, and studies on the uptake of pollutants by plants. Research will provide data which will determine if pathogens have been reduced to a safe infectivity level for wastewater applied to land.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. Research is focused on determining the transport and fate of toxic pollutants resulting from land application of sludge. The focus is on pathogens, heavy metals, and organic chemicals that may be transmitted from sludge. Methods will be adapted and validated to develop data which can be used in quantifying the degree of human risk associated with land treatment of sludge. An appraisal document to support anticipated regulations is being prepared as well as the completion of cooperative epidemiological studies of farm families utilizing sewage sludge for agricultural purposes.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,973,300 and 21.1 total workyears for this program of which $742,100 was under the Salaries and Expenses appropriation and $1,231,200 was for extramural purposes under the Research and Development appropriation.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. Research reports were completed on disinfection, infective doses of waterborne pathogens, particular virus species in water pollution testing, wastewater aerosols emitted in sewage treatment, and organic contaminants in wastewater.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. Research reports were completed on the evaluation of mutagenicity of sewage sludge, human biological risks associated with the composting of wastewater sludge, hazardous trace amounts of selenium in sludge, the effects of cadmium on the kidneys, cadmium concentrations in the urine and its relationship to blood antibodies, the inactivation of viruses in sludge, and the identification and significance of viruses in sewage.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $7,039,000 supported by 34.6 total workyears for this program, of which $1,792,900 is for Salaries and Expenses and $5,246,100 is for Research and Development, representing increases of $111,500 and $1,231,900 respectively. The increases reflect new efforts in the areas of compliance achievement, toxics treatability, and water quality planning and regulation support.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. Activities in this area support the Construction Grant I/A program by providing technical assistance in reviewing project plans, recommending innovative technologies, and providing planning, engineering and analytical assistance to the Regions and States. Information about promising new treatment processes developed by the industrial and university sectors will be evaluated. Post-construction evaluations of operational I/A projects will be conducted in 1985 producing needed information on design, energy use, and the operation and maintenance costs.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. Evaluations will be conducted on pilot and large scale combinations of multi-stage anaerobic digestion and wet air oxidation to determine the mass and volume reducing capabilities of the system. Evaluations of promising conversion methods such as mechanical composting and conversion of sludge to liquid or gaseous fuel will be completed. Sampling of digested and undigested sludges from several plants will be carried out to supplement existing data on concentrations of pathogens bacteria, viruses, and indicator organisms. This information will be used to judge the effectiveness of new low-cost treatment methods which meet RCRA regulation requirements. Also, the effects of selected sludge treatment processes on the concentration and availability of toxic organics and metals will be evaluated. The leachability of toxics and nutrients from incinerator sludge ash will be evaluated to determine whether the residue will have a significant negative impact on a landfill.

Provide for Compliance Achievement and Upgrading of Municipal Wastewater Treatment Facilities. Expanded resources will fund a series of short reports on solving operational and design problems, reducing costs, and increasing compliance. Research will also focus on two methods for upgrading existing overloaded plants through the integration of a high biomass reactor and improved aeration technology Design and cost information will be provided to the municipal sector to potentially decrease capital investments by 20 to 40 percent and lower energy consumption by 50 percent.

Evaluate Wastewater Toxics Treatability of Various Municipal Treatment Processes. Increases in this area will support a new program for determining toxics removal efficiencies and reliability of various treatment processes to enhance toxicity removal in municipal plants. This work is in direct support of the Office of Water in developing regulations and guidance to control toxic pollutants by establishing "rational permits" and minimizing pretreatment.

Provide Water Quality Planning and Regulation Support for the Water Quality Standards and Permit Process. The engineering data base necessary for States to assess control options and water quality impacts in order to issue realistic discharge permits is incomplete. This may result in the selection of costly treatment alternatives. Additional resources will provide for analytical methods research and support on engineering data base to be used by States in their planning process to achieve rational, less costly water quality goals. Implementing this systems analysis approach should result in more equitable wasteload allocations, ensure reasonable margins of safety in stream loadings, eliminate over-design of treatment plants and produce lower life-cycle costs.

1984 Program

In 1984, the Agency is allocating a total of $5,695,600 and 34.6 total workyears to this program, of which $1,681,400 is under the Salaries and Expenses appropriation and $4,014,200 is for extramural purposes under the Research and Development appropriation.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. Pre-construction reviews are continually being carried out for the Regions and States to determine projects that qualify for I/A funding. Post-construction evaluations of operational I/A projects are being initiated and will be used to accelerate the transfer of operational and cost data on successful I/A technologies to the municipal sector. Information dissemination is achieved through a centralized clearinghouse operated in direct support to the Construction Grants program and through a series of regional seminars.

Evaluate and Assess Improved Treatment, Utilization and Disposal Methods for the Management of Municipal Sludge. Research in this program is being conducted in two major areas: the treatment and the disposal of sludge. In the treatment area, emphasis will focus on innovative stabilization and digestion processes such as high solids retention reactors, and multi-stage digestion processes that have the potential for destruction of greater quantities of sludge and reducing costs. Research in the disposal area will include those projects that show promise for minimizing environmental impacts from land application of sludge and focus on characterizing the mechanisms which control the uptake and the transformation of toxic organics and pathogenic organisms in sludge amended soils.

Provide for Compliance Achievement and Upgrading of Municipal Wastewater Treatment Facilities. For 1984, efforts will be continued in assisting local communities in improving the operational reliability, compliance rate, and cost effectiveness of treatment plants by identifying and eliminating chronic design problems. A new effort will begin in evaluating new technologies for upgrading overloaded treatment plants, at minimal capital costs.

1984 Explanation of Changes from the Amendment

The net increase of +$152,200 results from the following action:

-Reprogramming. (+$152,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$152,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $8,942,800 and 90.3 total workyears for this program, of which $4,183,500 was under the Salaries and Expenses appropriation and $4,759,300 was for extramural purposes under the Research and Development appropriation.

Evaluate and Assess Innovative and Alternative (I/A) Technologies to Improve the Efficiency, Reliability and Effectiveness of Municipal Wastewater Treatment Systems. To date, approximately 200 detailed engineering reviews of facility plans and designs of innovative technologies have been carried out for the Regions and the States in support of the Construction Grants program. Ten assessment reports of emerging innovative technologies were completed. Post-construction evaluations of operational I/A projects were initiated and included technologies such as ultra-violet disinfection, biological phosphorus removal and land treatment of municipal wastewater (overland flow).

WATER QUALITY

Industrial Wastewater

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$2,045.4	$1,052.0	$1,052.0	$1,052.0		$1,079.0	$27.0
Research & Development	$1,275.2	$436.9	$436.9	$416.9		$436.9	$20.0
TOTAL	$3,320.6	$1,488.9	$1,488.9	$1,468.9		$1,515.9	$47.0
Health Effects							
Salaries & Expenses	$15.6						
Research & Development	$155.0						
TOTAL	$170.6						
Environmental Engineering & Technology							
Salaries & Expenses	$868.7			$113.0		$195.6	$82.6
Research & Development	$1,356.2					$757.0	$757.0
TOTAL	$2,224.9			$113.0		$952.6	$839.6
Environmental Processes & Effects							
Salaries & Expenses	$289.8	$311.7	$311.7	$311.7		$319.3	$7.6
TOTAL	$289.8	$311.7	$311.7	$311.7		$319.3	$7.6
TOTAL:							
Salaries & Expenses	$3,219.5	$1,363.7	$1,363.7	$1,476.7		$1,593.9	$117.2
Research & Development	$2,786.4	$436.9	$436.9	$416.9		$1,193.9	$777.0
Industrial Wastewater TOTAL	$6,005.9	$1,800.6	$1,800.6	$1,893.6		$2,787.8	$894.2

WATER QUALITY

Industrial Wastewater

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Monitoring Systems & Quality Assurance	27.3	12.3	12.3	12.3		12.3	
Health Effects	.6						
Environmental Engineering & Technology	13.4			3.0		4.0	1.0
Environmental Processes & Effects	5.0	3.8	3.8	3.8		3.8	
TOTAL PERMANENT WORKYEARS	46.3	16.1	16.1	19.1		20.1	1.0
TOTAL WORKYEARS							
Monitoring Systems & Quality Assurance	39.2	18.8	18.8	18.8		18.8	
Health Effects	.6						
Environmental Engineering & Technology	17.6			3.0		4.0	1.0
Environmental Processes & Effects	5.1	5.7	5.7	5.7		5.7	
TOTAL WORKYEARS	62.5	24.5	24.5	27.5		28.5	1.0

Industrial Wastewater

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Provide Quality Assurance and Monitoring			
- Prepare annual QA Discharge Monitoring Report in support of NPDES (Monitoring)	9/83	9/84	9/85
- Develop quality control samples for GC/MS and other analytical series (Monitoring)	9/83	9/84	9/85
Develop/Validate Measurement Systems			
- Correct deficiencies in the approved 600 Series Methods for analysis of the organic priority pollutants (Monitoring)		9/84	9/85
- Review applications/recommend approval for 1-3 general and 90-100 specific equivalent test procedures (Monitoring)	9/83	9/84	9/85
Develop and Evaluate Scientific/ Technical Tools			
- Methods manual for asbestos in wastewater (Env. Processes)	6/84	6/85	6/85
- Final report on independent testing and application of Master Analytical Scheme (MAS) (Env. Processes)		12/84	12/84
- Project report on organic compounds identified in Effluent Guidelines Division (EGD) samples by Liquid Chromatography/Mass Spectrometry (LC/MS) (Env. Processes)		2/86	2/86
- Toxicity reduction manual for organic chemicals industry (Env. Engineering)		9/83	4/81
- Field evaluation of a prototype membrane process for electroplating wastewater treatment (Env. Engineering)		9/84	9/85

Industrial Wastewater

Budget Request

The Agency requests a total of $2,787,800 supported by 28.5 total workyears for 1985, an increase of $894,200 and 1.0 total workyear from 1984. Included in this total is $1,593,900 for Salaries and Expenses and $1,193,900 for Research and Development, with increases of $117,200 and $777,000 respectively. The increase reflects engineering research for developing a protocol manual to be used by permitting officials to evaluate the industry's toxicity reduction procedures.

Program Description

The Clean Water Act requires that industrial wastewater discharges be regulated by technology based, water quality based and toxicity based regulations. This program provides the research support areas of control technology, quality assurance, monitoring systems, and industrial wastewater characterization. This support assures that regulation of industrial wastewater discharges is based upon sound science, and is cost-effectively implemented within the state-of-the-art. The program will place special emphasis on the reduction of toxicity of industrial discharges for National Pollutant Discharge Elimination System (NPDES) permittees.

Objective 1. Provide Quality Assurance and Monitoring Support for Industrial Wastewater and National Pollutant Discharge Elimination System (NPDES) Activities. This activity develops the quality assurance tools and support programs to document the quality of all measurements related to industrial wastewater discharges, for compliance with technology based regulations, and for toxicity reductions required by water quality based regulations.

Objective 2. Develop and Validate Measurement Systems for Industrial Wastewater Dischargers and NPDES Support. Cost-effective analytical methods which are required by section 304(h) of the Clean Water Act (CWA) are developed and verified. Approved methods are corrected for deficiencies to assure their applicability to industrial wastewater monitoring for compliance with the technology based regulations or for toxicity reductions required by the water quality based regulations.

Objective 3. Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. This research addresses the need for a method to conduct site specific toxicity reduction evaluations (TREs) to be used by permitting authorities to issue discharge permits to industry. This research addresses the need for a more complete data base to enable permitting authorities to issue Best Professional Judgment (BPJ) discharge permits based on toxicity reduction concepts so that industry can meet water quality based standards in the most cost-effective manner possible. Separation, characterization and measurement of organic and inorganic chemical species from selected industrial effluents will be made.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $1,515,900 supported by 18.8 total workyears for this program, an increase of $47,000. Included in this total is $1,079,000 for Salaries and Expenses, and $436,900 for Research and Development, an increase of $27,000 and $20,000 respectively. This reflects a level of effort which is

essentially unchanged from 1984. This increase supports the NPDES program by providing quick-term research support for analytical methods for priority organic pollutants for use in the field.

Provide Quality Assurance and Monitoring Support for Industrial Wastewater and National Pollutant Discharge Elimination System (NPDES) Activities. During the year a voluntary performance evaluation study will be conducted on a representative subset of the NPDES enforcement laboratories to evaluate their analytical proficiency and to identify analytical problems. The Discharge Monitoring Report-Quality Assurance (DMRQA) Support Program will be continued. It is a special analytical evaluation study on 26 regulated parameters aimed at evaluating the quality of self-monitoring DMRQA data submitted to the States and to EPA by the 8000 major dischargers within the NPDES. The expected accomplishments are a statistical evaluation report on the analytical proficiency of the NPDES laboratories and individual debriefing reports to each of the participating laboratories indicating their performance relative to their peer laboratories.

Develop and Validate Measurement Systems for Industrial Wastewater Discharges and NPDES Support. Chemical interferents will be identified in the discharges of those industrial categories where the gas chromotograph/mass spectrograph (GC/MS) methods prove to be deficient. The correct test procedures will undergo regulatory review and be amended to the analytical guidelines. The equivalency program, which is intended to encourage analytical methods development by the private sector, will be continued. Methods approved for nationwide use will be incorporated by reference into the appropriate regulations.

1984 Program

In 1984 the Agency is allocating a total of $1,468,900 and 18.8 total workyears to this program, of which $1,052,000 is under the Salaries and Expenses appropriation and $416,900 is for extramural purposes under the Research and Development appropriation.

Provide Quality Assurance and Monitoring Support for Industrial Wastewater and National Pollutant Discharge Elimination System (NPDES) Activities. The National NPDES Standards Repository will be maintained, and where appropriate, standards will be made traceable to National Bureau of Standards (NBS) reference materials. Continued quality assurance audit support will be given to the NPDES Discharge Monitoring Report monitoring network to maintain the reliability of the data and document its precision and accuracy.

Develop and Validate Measurement Systems for Industrial Wastewater Discharge and NPDES Support. Component elements of the NPDES priority organic pollutant test procedures approved in 1983 under the provisions of section 304(h) of the Clean Water Act will be re-evaluated for deficiencies and modified to make them more generally applicable to all wastewaters. Test procedures will be assessed for applicability to the analysis of priority pollutants in sludges, hazardous wastes, brackish and marine waters, and sediments and dredge spoils.

1984 Explanation of Changes from the Amendment

The net decrease of -$20,000 results from the following action:

-Reprogramming. (-$20,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$20,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,320,600 and 39.2 total workyears for this program, of which $2,045,400 was under Salaries and Expenses appropriation and 1,275,200 was for extramural purposes under the Research and Development appropriation.

Provide Quality Assurance and Monitoring Support for Industrial Wastewater and National Pollutant Discharge Elimination System (NPDES) Activities. Performance evaluation standards were prepared and verified for EPA regional and State enforcement laboratories and for some of EPA's contract laboratories for proficiency in industrial wastewater analysis. The annual audit report of the NPDES Discharge Monitoring Report monitoring network for 1983 was completed and samples were prepared and validated in preparation for the 1984 audit.

Develop and Validate Measurement Systems for Industrial Wastewater Discharges and NPDES Support. The gas chromatographic (GC), high pressure liquid chromatographic (HPLC), and GC/MS test procedures for the analysis of organic priority pollutants were validated by multilaboratory tests. Final reports of these tests will be available early in 1984. Application of these test procedures to matrixes other than treated wastewaters has been demonstrated, with some modification to analysis of the priority pollutants in sludges.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $952,600 supported by 4.0 total workyears for the program, an increase of $839,600 and 1 total workyear. The total includes $195,600 for Salaries and Expenses and $757,000 for Research and Development, reflecting an increase of $82,600 and $757,000 respectively. The increase in resources will be used to improve the Agency's ability to conduct toxicity reduction evaluations (TREs) and to evaluate cost-effective control alternatives.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. Increases provide for a data base to enable permitting authorities to issue Best Professional Judgment (BPJ) discharge permits for industry to meet water quality based standards in the most cost-effective manner possible. These efforts will focus on complex, highly toxic wastewaters such as dye and pigment manufacturing, aluminum smelters, and organic chemicals production. Manuals, for permitting authorities, will be produced for conducting site specific toxicity reduction evaluations and to issue discharge permits to industry, based on toxicity as a major parameter, particularly in the case of multiple industrial contributions.

1984 Program

In 1984, the Agency is allocating a total of $113,000 and 3.0 total workyears to this program, all of which is under the Salaries and Expenses appropriation.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. Evaluations of pollution control technologies for primary aluminum processing and foundry wastewaters are being conducted. Cost-effective treatment alternatives will be determined and made available for regional offices and State permitting officials to issue BPJ discharge permits.

Toxicity reduction evaluations for organic chemical industry are being conducted. The results from these evaluations will be made available to permitting authorities for issuing toxicity based discharge permits, especially in the area of multiple industrial contributions.

1984 Explanation of Changes from the Amendment

The net increase of +$113,000 results from the following actions:

-Reprogrammings. (+$113,000) Several reprogrammings were made to this activity which were not reportable under Congressional reprogramming limitations. These changes resulted in a net increase of +$113,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,224,900 and 17.6 total workyears for this program, of which $868,700 was under the Salaries and Expenses appropriation, and $1,356,200 was for extramural purposes under the Research and Development Appropriation.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. Eight treatment technologies for the metal finishing industry have been identified which may justify the changes in NPDES permit limitations. Two of these technologies, Bouyant Media Filtration and Zerpol Zero Discharge, will be further studied to determine their effects on the permit limitations. The Treatability Manual which provides available cost-versus-performance data for frequently used industrial waste treatment technologies has been updated and made available for utilization by regional offices and State permitting officials. Efficient, low-cost treatment technologies for toxic metals and organic pollutants have been evaluated for the organic chemical industry.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $319,300 supported by 5.7 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $7,600.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. In 1985 this program will support the Effluent Guidelines Division (EGD) in maintaining the GC/MS tape library and to further identify those chemicals still unidentified that recur frequently in industrial effluents. Separation and measurement of organic and inorganic chemical species from selected industrial effluents will be made. Nonvolatile organics in suspended matter and sediments will be emphasized.

1984 Program

In 1984, the Agency is allocating a total of $311,700 and 5.7 total workyears to this program, all of which is under the Salaries and Expenses appropriation.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. Reliable information on the composition of complex industrial effluents is being developed to identify potential problem areas and to set priorities in taking environmental protection measures. The information is also useful in preventing new problems before they emerge into crisis situations. In 1984 this information on chemical composition of effluents is being developed by scanning the information generated by GC/MS under the effluent guidelines program. Verification is accomplished through specialized analytical efforts. Characterizations are being conducted of selected industrial effluents with respect to pollutants not presently identifiable or measurable but which are found to recur frequently.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $289,800 and 5.1 total workyears for this program, all of which was under the Salaries and Expenses appropriation.

Develop and Evaluate Scientific and Technical Tools to Support Permitting and Enforcement Activities. In 1983, accomplishments included the preparation of a manual for comprehensive analysis of volatiles in soils, sediments, and sludges; and a report based on Effluent Guideline computer tapes which list frequently recurring compounds in industrial effluents that have been identified to date, using special techniques that are not identifiable through spectral matching.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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WATER QUALITY

Water Quality and Grants Program Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Water Quality Management								
Salaries & Expenses		$9,572.9	$8,284.6	$3,376.4	$3,211.7		$3,447.3	$235.6
Abatement Control and Compliance		$370.0	$180.0	$2,180.0	$2,180.0		$180.0	-$2,000.0
	TOTAL	$9,942.9	$8,464.6	$5,556.4	$5,391.7		$3,627.3	-$1,764.4
Great Lakes Program								
Salaries & Expenses		$1,248.9	$800.0	$800.0	$800.0		$841.1	$41.1
Abatement Control and Compliance		$3,511.3	$2,897.3	$3,897.3	$3,897.3		$1,687.2	-$2,210.1
	TOTAL	$4,760.2	$3,697.3	$4,697.3	$4,697.3		$2,528.3	-$2,169.0
Chesapeake Bay Program								
Salaries & Expenses		$216.9		$250.0	$250.0		$750.0	$500.0
Abatement Control and Compliance		$896.0		$4,000.0	$4,000.0		$9,250.0	$5,250.0
	TOTAL	$1,112.9		$4,250.0	$4,250.0		$10,000.0	$5,750.0
TOTAL:								
Salaries & Expenses		$11,038.7	$9,084.6	$4,426.4	$4,261.7		$5,038.4	$776.7
Abatement Control and Compliance		$4,777.3	$3,077.3	$10,077.3	$10,077.3		$11,117.2	$1,039.9
Water Quality Management	TOTAL	$15,816.0	$12,161.9	$14,503.7	$14,339.0		$16,155.6	$1,816.6

WATER QUALITY

Water Quality and Grants Program Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Water Quality Management	196.4	170.4	57.7	57.7		60.6	2.9
Great Lakes Program	15.9	10.8	10.8	10.8		13.4	2.6
Chesapeake Bay Program	2.9		4.6	4.6		4.6	
TOTAL PERMANENT WORKYEARS	215.2	181.2	73.1	73.1		78.6	5.5
TOTAL WORKYEARS							
Water Quality Management	234.4	212.4	75.6	75.6		76.6	1.0
Great Lakes Program	20.1	15.0	15.0	15.0		15.0	
Chesapeake Bay Program	3.8		5.0	5.0		5.0	
TOTAL WORKYEARS	258.3	227.4	95.6	95.6		96.6	1.0

Water Quality and Grants Program Management

Budget Request

The Agency requests a total of $16,155,600 supported by 96.6 total workyears for this subactivity, of which $5,038,400 will be for the Salaries and Expenses appropriation and $11,117,200 will be for the Abatement, Control and Compliance appropriation. This represents an increase of $776,700 in the Salaries and Expenses appropriation and an increase of $1,039,900 in the Abatement, Control and Compliance appropriation.

Program Description

This area provides for the management of State financial assistance programs and other local programs for water pollution control. For Agency budgetary purposes, these activities are divided into three program elements:

Water Quality Management -- This program, which supports both Headquarters and Regional staff, includes grants management; oversight and technical assistance activities involved in the implementation of Federal, State, and local water quality management; and State financial assistance under Sections 106, 205(g) (nonconstruction grants management), 205(j), 208, and 303 of the Clean Water Act.

Great Lakes Program -- This program provides assistance in implementing U.S. programs in support of the U.S. - Canada Great Lakes Water Quality Agreement. A major focus of the program is the measurement of ambient conditions in the Great Lakes in order to determine compliance with the objectives of the Agreement. The monitoring portions of the program measure water quality trends and the effectiveness of remedial responses to emerging pollution problems.

Chesapeake Bay Program -- As a result of the Cheasapeake Bay Water Quality Study, the Agency is committing significant resources to restore Bay water quality. The Agency is assisting the Bay States and the District of Columbia in implementing control activities to control nutrient and toxic effects in the Bay. In addition to maintaining the Bay Liaison Office in Annapolis, the Agency will provide cost-sharing grant assistance to the States for implementing nutrient and toxic controls. The Agency conducts detailed monitoring and modeling studies to assist in the clean-up effort.

WATER QUALITY MANAGEMENT

1985 Program Request

The Agency requests a total of $3,627,300 supported by 76.6 total workyears for this activity, including $3,447,300 under the Salaries and Expenses appropriation and $180,000 under the Abatement, Control and Compliance appropriation. This represents an increase of one workyear and $235,600 in Salaries and Expenses and a decrease of $2,000,000 in the Abatement, Control and Compliance appropriation. The workyear increase is for completing and implementing the recommendations of a study on coordinated use of water quality grant funds by the States; the increase in Salaries and Expenses represents Agency adjustments to align personnel funding with anticipated needs. The $2,000,000 decrease in Abatement, Control and Compliance reflects the completion of the Congressionally requested study on nonpoint sources. The Agency believes that funds available under Sections 106 and 205(j), together with existing State management programs, adequately address the Agency's priority concerns.

State Program Coordination -- EPA will continue working with the States to coordinate water quality program objectives, outputs, and Federal and State funding mechanisms. EPA and State program managers will negotiate annual program priorities and accomplishment commitments; Agency personnel will provide feedback and assistance based on the results of annual evaluations. These efforts are intended to ensure that Federal and State objectives, priorities, and funds are meeting priority point and nonpoint source control management needs through the most cost-effective approaches. The Federal program will emphasize results-oriented oversight of activities and funds in support of priority water quality or public health objectives.

Revised Program Regulations -- During 1985, EPA will implement simplified water quality management regulations and guidance covering Section 205(j) eligibilities, program management under the Continuing Planning Process, and water quality plan updates. EPA will continue to focus water planning activities on ensuring that the States update Water Quality Management plans and effectively carry out plan consistency reviews.

Grants Management -- Grants totaling $54,200,000 are being requested for award under Section 106 of the Clean Water Act to support State and Interstate water pollution control programs. EPA will work with the States to target the majority of available funds, including funds available under 205(g), to reduce permit backlogs, issue Best Available Technology permits, and support municipal and industrial compliance activities, including high priority water quality monitoring. Recommendations from the 1984 study concerning improved coordination of the use of Sections 106 and 205(j) funds will be implemented if appropriate.

The Agency expects to award $24,447,320 to the States in 1985 for activities under Section 205(j). Highest funding priorities are the development of priority nonpoint source control and groundwater management programs and needed updates of State water quality management plans. EPA will continue its efforts to ensure that State processes for developing Section 205(j) workplans focus on effective approaches to solving water quality problems and involve appropriate local, regional, and interstate agencies closest to priority problems.

1984 Program

In 1984, the Agency is allocating a total of $5,391,700 supported by 75.6 total workyears to this program, of which $3,211,700 is for Salaries and Expenses and $2,180,000 is for extramural purposes under the Abatement, Control and Compliance appropriation.

EPA is continuing to focus on coordinating Federal and State water quality priorities and programs. Annual program and funding priority guidance will be issued for Region and State use. EPA will negotiate with the States coordinated use of Sections 106, 205(j), and non-construction grant 205(g) funds for priority areas. A study of the 1982 and 1983 use of Sections 106 and 205(j) funds is also being initiated.

A simplified final Water Quality Management (WQM) regulation will be published along with implementation guidance. EPA will also continue work with States in updating their Continuing Planning Processes. The primary WQM objectives in 1984 are to improve State decision-making for pollution control on priority water bodies.

In 1984 the Agency is issuing a Report to Congress on nonpoint source control needs and costs, publishing a national nonpoint source control policy and strategy, and issuing the final report on the Nationwide Urban Runoff Program. Using Congressional add-on funds and Section 205(j) funds, the Agency is continuing to assist States in developing implementation strategies for controlling priority nonpoint source problems. Technical methodologies for determining instream effects of nonpoint source and identifying local priority nonpoint source problems, based on the National Urban Runoff Program report, will be issued to assist States, local

government, and other Federal agencies. The Agency is also continuing coordination efforts with the Departments of Agriculture and Interior to promote increased information transfer and technical assistance to the Nation's farmers concerning water quality impacts of farming practices and land management efforts for meeting overall water resource objectives.

Funds totaling $54,200,000 will be awarded under Section 106 of the Clean Water Act to support State and Interstate water pollution control programs. Increased funding for permits and enforcement activities, including necessary water quality monitoring, will have highest priority under Section 106 in 1984.

The Agency expects to obligate $38,472,077 (including $14,024,757 obligated from funds appropriated in 1983) to the States in 1984 for activities under Section 205(j). Priority activities for Section 205(j) funding are development of priority nonpoint source control and ground-water management programs, and needed updating of State water quality standards and management plans. States are expected to continue coordination with appropriate local agencies in establishing funding priorities and allocation of funds.

1984 Explanation of Changes from the Amendment

The net decrease of -$164,700 results from the following actions:

-Reprogrammings. (-$164,700) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$3,900 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$160,800, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $9,942,900 supported by 234.4 total workyears for this program activity, of which $9,572,900 was under the Salaries and Expenses appropriation and $370,000 was for extramural purposes under the Abatement, Control and Compliance appropriation.

EPA published draft water quality management regulations which give States maximum latitude in managing environmental programs while retaining appropriate oversight responsibilities. The Agency also worked with the States, encouraging them to strengthen their State plans and planning processes, and ensured that States maintained effective procedures for ensuring consistency of proposed permits and construction grants with approved State plans.

EPA worked with the U.S. Department of Agricultural (USDA) Rural Clean Water Program to develop Best Management Practices for pest control and salinity problems. The Agency also continued work with the USDA and North Carolina State University in monitoring selected cost-sharing projects to determine the most cost-effective agricultural BMPs. The EPA-Forest Service interagency agreement was renewed to continue work on silviculture nonpoint source control implementation and a training program conducted for foresters and forest land owners.

The Agency issued its annual funding guidance on priorities for use of Sections 106, 205(j), and non-construction grants management 205(g) funds, reviewed work programs submitted in grant applications, and negotiated use of the funds. A total of $54,144,900 in Section 106 grants was awarded to State and interstate water pollution control agencies. A total of $34,349,839 under Section 205(j) for water quality management planning was obligated by the States.

In 1983, this program also included resources to monitor and overview construction grants activities delegated to the States and Corps of Engineers. In 1984 and 1985 these resources are included under the Municipal Waste Treatment Construction program element. With these resources, the construction grants program issued and implemented streamlined Section 205(g) regulations establishing more flexible policies and procedures for delegating and improving oversight of the program's administration. A baseline study was completed identifying EPA functions, activities, and resources needed for managing a fully delegated program.

Additionally during 1983, EPA worked with the Corps of Engineers to assure sound management of projects through the construction cycle and to provide assurance that opportunities for waste, fraud, and mismanagement were minimized. In accordance with negotiated and approved workplans, the Corps conducted preconstruction reviews, managed construction activites including interim and final inspections, maintained on-site presence at large, complex projects, and provided increased support in completing and closing out projects.

GREAT LAKES PROGRAM

1985 Program Request

The Agency is requesting a total of $2,528,300 supported by 15.0 total workyears for this program in 1985, of which $841,100 is for the Salaries and Expenses appropriation and $1,687,200 for extramural purposes under the Abatement, Control and Compliance appropriation. This represents an increase of $41,100 in the Salaries and Expenses appropriation and a decrease of $2,210,100 in the Abatement, Control and Compliance appropriation from 1984. The increase results from an Agency adjustment to reflect personnel costs. The decrease is due to the completion of Section 108(a) demonstration grants, a reduction in resources required for the Atmospheric Deposition Network, and a reduction in resources required for special studies such as the connecting channels study, for which work will continue in 1985 using extramural funds obligated in 1984.

The Great Lakes National Program Office will continue to support the activities of the International Joint Commission. It will respond to information requests and will provide technical assistance to Headquarters and the State Department on official Canadian requests and notes concerning U.S. Great Lakes policies. Staff support to the Water Quality Board and its committees will continue to ensure that U.S. views and policies are adequately represented.

The program in 1985 will work on the Great Lakes monitoring plan as required by Annex 11 of the Great Lakes Water Quality Agreement. Surveys of the Lakes will be conducted in cooperation with State and Canadian agencies to determine the annual variability of ambient phosphorus concentrations and the levels and trends in metals and conventional pollutant parameters. A Great Lakes surveillance program to detect toxic substances in Great Lakes fish and sediments will be conducted in several tributaries and harbors. The results will be analyzed and reported to the States for regulatory follow-up.

The results of the monitoring, including water, fish, and sediment data, will provide the information necessary to assess compliance with Agreement objectives, to evaluate effectiveness of control programs, and to identify emerging problems.

1984 Program

In 1984, the Agency is allocating $4,697,300 supported by 15.0 workyears to this program, of which $800,000 is for the Salaries and Expenses appropriation and $3,897,300 is for extramural purposes under the Abatement, Control and Compliance appropriation.

The major focus of the program continues to be directed toward meeting the U.S. commitments under the Agreement including the Supplement to Annex 3, Phosphorus, which was signed by the two countries on October 16, 1983.

Activities sponsored by the Commission to implement the Agreement are supported by the United States and Canada. Annual water quality surveys are being conducted on Lakes Michigan, Huron, and Erie. Fish, sediment and air sampling will continue to determine levels and trends of nutrients and toxicants affecting Great Lakes water quality and to identify new substances which may pose a direct threat to public health. Joint State, local, and other Federal agency efforts will continue to develop plans for further phosphorus reductions in the Lower Lakes. EPA and the States will continue the development of Actions Plans to address remaining pollution problems in the 18 most significantly degraded areas of the Lakes.

In 1984, a sampling network and strategy to monitor the trophic status of the connecting channels will be designed and a study initiated. As part of this study, a special investigation of the Detroit River will be initiated to address the major public concerns related to contaminated fish and sediment.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $4,760,200 supported by 20.1 total workyears for this program, of which $1,248,900 was for the Salaries and Expenses appropriation and $3,511,300 was for the Abatement, Control and Compliance appropriation.

In 1983, the National Program Office continued its lead role in coordinating and implementing U.S. programs in fulfillment of the Agreement. Specific activities conducted in 1983 to ascertain ambient conditions included fish flesh analyses from nearshore and open water locations; sediment surveys of suspected toxic hot spots in tributary mouths; atmospheric deposition collections at 41 stations; and mathematical modeling to determine transport, fate, and maximum allowable loading of pollutants. Other accomplishments included a major ground-water contamination investigation in the Niagara River Frontier in cooperation with New York and other Federal offices as part of the Niagara Frontier Agenda.

The National Program Office also continued funding cooperative 108(a) grant programs with State and local entities in 31 counties in Indiana, Michigan, Ohio, and New York to demonstrate voluntary best management practices to further reduce phosphorus loadings, particularly to Lakes Erie and Ontario.

Additional accomplishments included participation on six standing committees and three new committees of the International Joint Commission. This provided major program evaluations and new monitoring strategies to assess the effectiveness of U.S. and Canadian control programs.

CHESAPEAKE BAY PROGRAM

1985 Program Request

The Agency requests $10,000,000 supported by 5.0 total workyears for 1985, an increase of $5,750,000 from 1984. Included in this total is $750,000 for the Salaries and Expenses appropriation and $9,250,000 for extramural purposes under the Abatement, Control and Compliance appropriation, with increases of $500,000

and $5,250,000, respectively. The increases represent an Agency initiative to work with the States to implement control actions to restore Bay water quality. The increase to Salaries and Expenses will maintain the program's data base. The increase to Abatement, Control and Compliance funds cost-sharing grants for State control activities as well as an increased emphasis on the Agency's own work in modeling and monitoring.

The Agency is undertaking this initiative as an outgrowth of an Agreement established December 9, 1983 by the Administrator and the Governors of Maryland, Pennsylvania, Virginia, the Mayor of the District of Columbia, and the Chairman of the Chesapeake Bay Commission. That agreement formally supports two Committees: an Implementation Committee, consisting of senior staff, and an Executive Committee made up of the Governors, the District Mayor, and the Administrator.

Supporting those committees is the Chesapeake Bay Liaison Office in Annapolis, Maryland, which will be staffed by a technical director and experts in monitoring and modeling. Additional technical and program support will be provided through Region III's water program office.

The Agency will supply funds for matching grants to focus State point and nonpoint source control efforts on critical sub-basins. These grants will be targeted at reducing the loadings of nutrients and toxics. The grants will supplement and enhance State efforts in establishing control programs. In addition, public participation projects will receive grant awards. The efforts of National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), the Corps of Engineers, and the U.S. Department of Agriculture will be coordinated through the Liaison Office.

Other activities of the Liaison Office will include complementing the tributary monitoring activities of the States by monitoring the Bay's mainstem; refining the water quality models to assess the impact of alternative control options; and maintaining the program's computer center, which stores the program's extensive data base.

1984 Program

In 1984 the Agency is allocating $4,250,000 supported by 5.0 total workyears to this program, of which $250,000 is for the Salaries and Expenses appropriation and $4,000,000 is for the Abatement, Control and Compliance appropriation.

During 1984 the Agency completed and published the final reports of the research program and is continuing to emphasize the Liaison Office's role in coordinating the Bay cleanup effort. The program issued two final reports discussing research findings: "Chesapeake Bay: A Framework for Action" and "Chesapeake Bay: Findings and Recommendations". The Agency also co-sponsored, and played an important role in, the Chesapeake Bay Conference held in December 1983. The Agency signed the Chesapeake Bay Agreement with the Bay States as an outcome of the Conference.

The Liaison Office is providing oversight of the development of the July 1, 1984 implementation plans called for in the "Framework for Action" report. These include plans for nutrient control, toxic control, and monitoring.

The program continues to maintain the data base and retrieve information for use by the States and EPA.

The Liaison Office is also monitoring ambient samples at the Bay's mainstem stations and conducting sediment and biological samples at selected stations. In addition, the tributary monitoring efforts of the States, NOAA, and USGS are coordinated through this Office. A water quality model task force was convened to review available models, and make recommendations and initiate the development of a model to more accurately reflect Bay conditions and dynamics.

The program continues to support the Resource Users Management Team, a monthly newsletter, and citizen participation at Management Committee meetings. Public input on Bay Program findings and recommendations were also made known through the Bay Conference.

The Agency is working with the States to provide financial support through matching grants to address areas of concern such as nonpoint source control, toxic control, and monitoring.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

During 1983 the Agency obligated $1,112,900 supported by 3.8 total workyears, of which $216,900 was for the Salaries and Expenses appropriation and $896,000 was for the Abatement, Control and Compliance appropriation.

In 1983, the Chesapeake Bay Program completed the research phase of the program. Key documents were published and others were readied for printing. The prime activity of the Program in 1983 was to shift focus from research to implementation. Extensive work went into producing the second and third of the Bay Program Reports, "Chesapeake Bay: A Profile of Environmental Change" and "Chesapeake Bay: A Framework for Action." The program's findings were carefully scrutinized by the Management Committee, EPA, the States, and citizen groups. As a result of these findings, a framework was developed, presenting a series of alternative control plans for controlling nutrient and toxic loadings from point and nonpoint sources. This framework served as the focal point for discussions at the Governors' Conference and will also serve as the basis of the July 1, 1984 plans. These plans, defining actions, roles, and responsibilities, will be the blueprint for all future control actions.

WATER QUALITY

Effluent Standards & Guidelines

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Effluent Standards and Guidelines								
Salaries and Expenses		$5,189.0	$4,220.7	$4,617.6	$4,617.6		$4,077.3	-$540.3
Abatement Control and Compliance		$10,607.4	$5,407.1	$11,937.1	$11,937.1		$5,407.1	-$6,530.0
	TOTAL	$15,796.4	$9,627.8	$16,554.7	$16,554.7		$9,484.4	-$7,070.3
TOTAL:								
Salaries & Expenses		$5,189.0	$4,220.7	$4,617.6	$4,617.6		$4,077.3	-$540.3
Abatement Control and Compliance		$10,607.4	$5,407.1	$11,937.1	$11,937.1		$5,407.1	-$6,530.0
Effluent Standards & Guidelines	TOTAL	$15,796.4	$9,627.8	$16,554.7	$16,554.7		$9,484.4	-$7,070.3
PERMANENT WORKYEARS								
Effluent Standards & Guidelines		80.5	60.0	70.9	70.9		72.3	1.4
TOTAL PERMANENT WORKYEARS		80.5	60.0	70.9	70.9		72.3	1.4
TOTAL WORKYEARS								
Effluent Standards & Guidelines		95.8	82.9	94.9	94.9		78.9	-16.0
TOTAL WORKYEARS		95.8	82.9	94.9	94.9		78.9	-16.0

Effluent Standards and Guidelines

Budget Request

The Agency requests $9,484,400 supported by 78.9 total workyears for 1985, a decrease of $7,070,300 and 16.0 permanent workyears from 1984. Included in this total is $4,077,300 for Salaries and Expenses and $5,407,100 for Abatement, Control and Compliance, with decreases of $540,300 and $6,530,000, respectively.

Program Description

Effluent Standards Guidelines -- This subactivity includes establishing effluent limitations for industries discharging directly to waterways and indirectly through publicly owned treatment works (POTWs). Effluent standards and guidelines are promulgated under the authority of Sections 301, 304, 306, 307, and 501 of the Clean Water Act.

The Clean Water Act established a comprehensive program to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." This program is a part of EPA's effort to implement this legislative mandate through the issuance of effluent limitations, pretreatment standards, and new source performance standards for industrial point source dischargers. Through this program, the Agency establishes a number of different kinds of effluent standards and guidelines which are summarized below.

Best Available Technology Economically Achievable (BAT) limitations generally represent the best existing performance in the industrial category or subcategory. The Act establishes BAT as the principal national means of controlling the direct discharge of toxics and nonconventional pollutants into navigable waters.

Best Conventional Pollutant Control Technology (BCT) limitations are based on the "best conventional pollutant control technology" for discharges of conventional pollutants from existing sources. Conventional pollutants include biochemical oxygen demand, total suspended solids, fecal coliform, acidity (pH), and oil and grease. BCT is not an additional limitation, but replaces BAT for the conventional pollutants.

New Source Performance Standards (NSPS) are based on the best available demonstrated technology. New plants have the opportunity to install the best and most efficient production processes and wastewater treatment technologies without the retrofit problems experienced by existing plants.

Pretreatment Standards for Existing Sources (PSES) are designed to prevent the discharge of polluants which pass through, interfere with, or are otherwise incompatible with the POTW's treatment process or chosen sludge-disposal method. The similar regulation for new plants is Pretreatment Standards for New Sources (PSNS).

In developing each regulation, the Agency examines raw materials, industrial processes, water usage, wastewater characteristics, and treatment technologies in use or potentially applicable. The requirement for economic achievability has led the Agency to conduct extensive studies of the financial and economic achievability of regulatory options. These options are examined separately to determine the potential for plant closures as well as such factors as impact on production levels, return on investment, employment, industry size and concentration, foreign trade, regional economics, and the economics of related industries.

As a result of the 1976 Settlement Agreement between the NRDC and EPA and subsequent revisions to the Act, the Act now requires the achievement by July 1, 1984 of effluent limitations requiring application of BCT for conventional pollutants and classes of pollutants which Congress declared toxic under Section 307(a) of the 1972 Act. Likewise, NSPS and pretreatment standards were redirected toward toxic pollutant controls. In 1982, the Agency established a schedule for guideline proposals and promulgation with the Court and is meeting the schedule with a few exceptions, so that all guidelines will be promulgated by 1985.

EFFLUENT STANDARDS AND GUIDELINES

1985 Program Request

The Agency requests a total of $9,484,400 supported by 78.9 total workyears for this program, of which $4,077,300 will be for the Salaries and Expenses appropriation and $5,407,100 will be for the Abatement, Control and Compliance appropriation. This is a decrease of 16.0 workyears and $540,300 for Salaries and Expenses and $6,530,000 for the Abatement, Control and Compliance appropriation. The decrease reflects the Agency's progress in developing effluent standards and guidelines.

The program will provide engineering, economic, and statistical support to post-promulgation negotiation, litigation, remand/repair, and petition review efforts. These efforts are intended to defend the integrity of the guidelines. The Agency reviews petitions filed by outside groups with the courts and attempts to resolve issues out of court. Some are successfully resolved; others are litigated, which may require the Agency to respond to court remands. The program will also provide engineering, economic, and statistical support to Regional and State permit writers and to industry (e.g., small businesses) through planned permit workshops and small business oriented workshops. It is also expected that support will be provided in the review of "fundamentally different factors" (FDF) variance requests.

The program will promulgate effluent standards and guidelines for the remaining four industries under the NRDC Settlement Agreement pursuant to revised court schedules. Regulations or guidance will also be developed in several "reserved subcategories" of previously regulated industries. These "reserved subcategories" were not initially regulated because difficult engineering decisions required of the Agency would have seriously delayed meeting the Settlement Agreement's revised court schedules. Nonetheless, these issues must be resolved either through regulation, guidance, or permitting assistance as several of these subcategories can have a significant impact on final plant effluent discharges.

Industries not covered by the Settlement Agreement will be investigated to determine the need for industry-wide guidance or regulation. Industries to be investigated will include stripper gas wells, food industries, phosphates manufacturing, ferroalloy manufacturing, synthetic fuels, coal slurry pipelines, hazardous waste treatment facilities, solvent reclaimers, transportation sources, and hospitals. These industries have the potential for unregulated discharges of toxic chemicals to waterways or POTWs. Guidance documents will be produced for four industries excluded from national regulation under paragraph 8 of the modified Settlement Agreement. In addition, effluent standards and guidelines for offshore oil and gas drilling platforms, required pursuant to another Court Agreement, will be promulgated.

A review program will be undertaken to fulfill the Agency's commitments to review/revise effluent guidelines. Among those factors which bring about review are changing process lines, significantly modified wastestreams, issues related to the applicability of wastewater treatment technologies, and the current economic status of the industries. In some cases, extensive data acquisition may be necessary to update "old" data bases from the mid-1970s which are no longer representative of the industry. In other cases, less extensive data acquisition efforts will be undertaken.

Environmental assessments will be prepared for Settlement Agreement and Non-Settlement Agreement industrial facilities to support regulatory and guidance development activities. Computer files will be expanded and refined to assist the Agency in projecting where use impairments may occur post-BAT. Risk assessments will be conducted for several pollutants.

1984 Program

In 1984, the Agency is allocating a total of $16,554,700 supported by 94.9 total workyears for this program, including $4,617,600 for the Salaries and Expenses appropriation and $11,937,100 for the Abatement, Control and Compliance appropriation. The 1984 allocation includes $6,926,900, supported by 12.0 total workyears, appropriated as a result of the President's amended budget request, which provided for acceleration of the program during 1984. Extramural funds are being used for engineering investigation, sampling support, and support for litigation and remand work.

In 1984, the program has promulgated regulations for two categories; will propose three Settlement Agreement and other standards and guidelines (including oil and gas covered under a separate Settlement Agreement); and anticipates promulgating five more guidelines. Intensive standards and guidelines development work is underway in the offshore oil and gas production, nonferrous metals (phase II), nonferrous metals forming, plastics molding and forming, pesticides, and organic chemicals and plastics and synthetic fibers industrial categories.

The program expects to review 21 petitions concerning regulations that were promulgated in 1983 and 1984. Post-promulgation activities are underway in three industries and negotiated agreements are being attempted. Remand/repair work is expected in other industrial categories. Permit workshops are being conducted in the Regions on rules promulgated in mid- to late-calendar year 1983 and in 1984. Detailed FDF variances and FDF-type analyses are expected for several facility groupings, notably steam electric generating facilities and pulp and paper mills. The program is assisting Regional permit authorities in reviewing applications submitted pursuant to Section 301(m) of the Act, which provides two pulp and paper mills in California with the opportunity to obtain waivers from BPT/BCT and Section 403 effluent limitations.

Environmental assessments are completed for Phase I and some Phase II industries, and, in particular, for paragraph 8 decisions, which exclude some industrial categories and subcategories from national regulation. Information will be added to the Reach File for use in national and Regional assessments, such as determining areas which may need post-BAT controls. Detailed risk assessments will be conducted for paragraph 4(c) toxic pollutants.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $15,796,400 supported by 95.8 total workyears for this program, of which $5,189,000 was for the Salaries and Expenses appropriation and $10,607,400 was for the Abatement, Control and Compliance appropriation.

The program published proposed regulations establishing national effluent limitations and standards for the 13 following industries: Aluminum Forming; Battery Manufacturing; Coil Coating (Phase II) (Canmaking); Copper Forming; Electrical and Electronic Components (Phase II); Foundries (Metal Molding and Casting); Inorganic

Chemicals (Phase II); Nonferrous Metals (Phase I); Organic Chemicals and Plastics and Synthetic Fibers; Pesticides Manufacturing; Pesticides Manufacturing (Analytical Methods); Pharmaceuticals Manufacturing; and Pulp, Paper, and Paperboard (PCB limitations). The Agency also proposed revisions to the BCT costing methodology.

The program also promulgated regulations establishing national effluent limitations and standards for the following eleven industries: Aluminum Forming; Coil Coating (Phase I); Copper Forming; Electrical and Electronic Components (Phase I); Leather Tanning and Finishing; Metal Finishing; Ore Mining; Pharmaceutical Manufacturing; Porcelain Enameling; Pulp, Paper, and Paperboard; and Steam-Electric Generating Plants.

In a series of 14 workshops for EPA Regional and State permit writers, the Agency provided assistance in analyzing and interpreting information on the treatability of toxic compounds, conventional pollutant cost tests, control of toxic pollutants not covered by national regulation, controls for facilities that include manufacturing processes not covered by national effluent limitations and standards, and the bases and uses of the categorical standards.

Eleven of the BAT/PSES/NSPS/PSNS regulations issued under the Consent Decree have been involved in litigation. Petitions against two categories were voluntarily withdrawn and negotiated settlements have been reached for three categories. The Steam Electric case was voluntarily dismissed based upon the Agency's agreeing to provide guidance to all EPA Regions and the Timber petition was dismissed after EPA amended the NSPS applicability. Negotiations involving industry and NRDC are currently underway for Petroleum Refining and negotiations between industry and the Agency are continuing for Leather Tanning. More recently, petitions have been filed to review regulations for two categories (Copper Forming and Metal Finishing). By and large the petitions for review have raised technical issues posed by the regulations.

The BPT Electroplating pretreatment standards originally issued under Paragraph 13 of the Consent Decree were also challenged in the Third Circuit. On September 20, 1983, the Court upheld these standards in their entirety. The Ford Motor Company and General Motors are still pursuing a challenge to EPA's denial of a petition to amend the compliance deadline for integrated facilities.

WATER QUALITY

Grants Assistance Program

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Clean Lakes Program								
Abatement Control and Compliance		$3,000.0		$5,000.0	$5,000.0		$2,500.0	-$2,500.0
	TOTAL	$3,000.0		$5,000.0	$5,000.0		$2,500.0	-$2,500.0
Control Agency Resource Supplementation (Section 106)								
Abatement Control and Compliance		$54,144.9	$24,000.0	$54,200.0	$54,200.0		$54,200.0	
	TOTAL	$54,144.9	$24,000.0	$54,200.0	$54,200.0		$54,200.0	
Training Grants (Section 104)								
Abatement Control and Compliance		$195.0		$200.0	$200.0			-$200.0
	TOTAL	$195.0		$200.0	$200.0			-$200.0
TOTAL:								
Abatement Control and Compliance		$57,339.9	$24,000.0	$59,400.0	$59,400.0		$56,700.0	-$2,700.0
Grants Assistance Programs	TOTAL	$57,339.9	$24,000.0	$59,400.0	$59,400.0		$56,700.0	-$2,700.0

Grants Assistance Programs

Budget Request

The Agency requests a total of $56,700,000 for grants under the Abatement, Control and Compliance appropriation, a decrease of $2,700,000 from 1984.

Program Description

Clean Lakes Program -- Section 314 of the Clean Water Act sets forth the principal administrative and technical requirements for developing a national program to enhance the quality of freshwater lakes. The Clean Lakes regulation in February 1980 established an operational program of financial and technical assistance to the States to assist them in implementing methods and procedures to protect and restore the quality of their publicly owned fresh water lakes.

Control Agency Resource Supplementation (Section 106) -- Section 106 grants supplement State resources for water pollution control programs. They are negotiated annually with 50 States, 7 Territories, and 6 Interstate compact agencies. Funds are directed to cover a wide range of water quality programs, including permit issuance, enforcement, monitoring, construction grants management, water quality planning and standards, wasteload allocations, nonpoint source control program management, pretreatment, oil and hazardous materials spill response, and other priority programs.

States also receive financial assistance for water quality program activities under Sections 205(g) and 205(j) of the Clean Water Act as reserves from their annual Construction Grants allotment under the Construction Grants appropriation. Primary funding is provided under Section 205(g) for construction grants management in delegated States and under Section 205(j) for water quality planning and standards activities.

Training Grants (Section 104) -- Training assistance is provided to institutions of higher education and other public or private agencies and institutions to meet professional manpower needs.

CLEAN LAKES PROGRAM

1985 Program Request

In 1985, the Agency requests $2,500,000 for grants under the Abatement, Control and Compliance appropriation for the Clean Lakes Program, a decrease of $2,500,000 from 1984. The decrease reflects the completion of Federal funding of several lake restoration projects. In 1985, the Agency will continue to provide technical and financial assistance to the States for lake restoration projects. Consistent with Congressional intent, the funds provided will be used to complete existing projects which need additional Federal assistance to restore the water quality of freshwater lakes.

1984 Program

The Agency is allocating $5,000,000 in the Abatement, Control and Compliance appropriation for grants to complete existing implementation projects. The funds provided will be used according to the intent of Congress so as to complete existing lake restoration projects. The Agency expects to award approximately 25 grants for improving conditions in publicly owned freshwater lakes.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, $3,000,000 was obligated from the Abatement, Control and Compliance appropriation under the Clean Lakes Program to help complete 16 existing implementation projects. The funds provided were awarded according to the Congressional criteria that only existing Clean Lakes projects would be eligible for funding.

CONTROL AGENCY RESOURCE SUPPLEMENTATION (SECTION 106)

1985 Program Request

In 1985, the Agency requests a total of $54,200,000 for Section 106 grants under the Abatement, Control and Compliance appropriation. This represents the same level as in 1984.

State program priority activities funded under Section 106 will continue to emphasize primarily National Pollutant Discharge Elimination System (NPDES) permitting, enforcement, and associated source and ambient monitoring. Delegated construction grants management related activities will be funded under Section 205(g). Water quality management planning including water quality standards reviews, waste-load analyses, and program management for nonpoint source control and ground water will be funded primarily under Section 205(j).

Assistance to the States in 1985 will emphasize issuance of industrial permits for Best Available Technology (BAT) and municipal permits. Grants will continue to stress issuing or reissuing major NPDES permits, reducing backlogs, improving municipal compliance, and monitoring and standard setting to support permit activities. Over 900 major discharger permits will be issued or reissued by the States and 4,200 compliance inspections will be conducted. States will prepare over 200 intensive surveys to support permits and standards decisions.

1984 Program

In 1984, the Agency is allocating $54,200,000 for Section 106 grants under the Abatement, Control and Compliance appropriation.

State activities primarily funded under Section 106 will include National Pollutant Discharge Elimination System permitting, ambient and source monitoring of toxics and conventional pollutants, enforcement, and State programs administration. Delegated construction grants management related activities will be funded under Section 205(g). Water quality standards reviews, planning and associated monitoring, and development programs for nonpoint source control and ground-water management will be funded primarily under Section 205(j).

States will focus on reducing their NPDES permit backlogs, especially issuance and reissuance of BAT permits, by targeting 106 grant dollars to this area. Enforcement efforts also will be strengthened, with continued emphasis on municipal facilities compliance. States will continue to use Section 106 funds for monitoring essential to permits issuance and enforcement. States with critical nonpoint source problems will use Section 106 funds to initiate control programs.

During 1984, three more State NPDES programs will be approved, bringing the total to 38; the other States will continue to assist EPA in many aspects of permits issuance. In addition, several States will be developing NPDES program modifications to assume pretreatment, Federal facility, and general permitting responsibilities. Approximately 600 major discharger BAT permits, including toxics controls

will be issued or reissued by the States. Nearly 4,300 compliance inspections will be conducted, and the States will take increasing responsibility in compliance activities. States will develop analytical capabilities to support increased emphasis on water quality based permitting, toxics control, and requests for variances, as well as strengthen their abilities to perform conventional pollutant wasteload analyses for major permits. An estimated 19 States will use Section 106 grant funds to manage nonpoint source control activities.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, $54,144,900 was obligated for Section 106 grants under the Abatement, Control and Compliance appropriation. State activities funded under Section 106 included National Pollutant Discharge Elimination System (NPDES) permitting, ambient and source monitoring of toxics and conventional pollutants, enforcement, oil and hazardous materials spill response, nondelegated construction grants program activities, water quality standards reviews, nonpoint source control programs management, water quality planning, training, and State programs administration.

The States increased emphasis on NPDES permitting, especially major permit reissuance and BAT permits. Thirty five States had approved NPDES programs, an increase of three in 1983. States issued and reissued more than 6,500 permits, including 300 major permits. Enforcement efforts were also increased. National reorientation of EPA water programs which emphasized a water quality based approach was reflected in 1983 State workplans for water quality standards reviews which incorporated use attainability and site specific criteria considerations. Overall monitoring costs were reduced by more effective focusing of resources on priority program needs. Section 106 support to nondelegated construction grants program activities was decreased significantly because of increased construction grant delegation.

Approximately 300 major discharger permits were issued or reissued by the States, including permits for BAT and toxics; over 4,000 compliance inspections were conducted. State NPDES programs were modified to include pretreatment programs, and Federal facilities permitting, bringing to 15 the total number of States with full assumption. Thirty three States were operating biological monitoring programs during 1983; essentially all States had developed capabilities to perform conventional pollutant wasteload analyses for major permits. Fifteen States used Section 106 grants to manage nonpoint source control activities.

TRAINING GRANTS (SECTION 104)

1985 Program Request

No funds are requested for these grants in 1985. The Agency believes that sufficient interest and opportunities exist for people to enter environmental professions without Federal support.

1984 Program

A Congressional add-on of $200,000 in Abatement, Control and Compliance is being used to support environmental fellowships at 27 universities.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $195,000 under the Abatement, Control and Compliance appropriation for training grants. These funds were used to support 63 environmental fellowships at 27 universities.

WATER QUALITY

Water Quality Strategies Implementation

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Dredge and Fill								
Salaries & Expenses		$2,169.9	$2,303.3	$2,379.6	$2,192.1		$2,539.3	$347.2
Abatement Control and Compliance		$481.1	$344.9	$344.9	$344.9		$240.9	-$104.0
	TOTAL	$2,651.0	$2,648.2	$2,724.5	$2,537.0		$2,780.2	$243.2
Ocean Disposal Permits								
Salaries & Expenses		$1,374.2	$1,793.2	$1,655.0	$1,627.5		$1,729.1	$101.6
Abatement Control and Compliance		$2,343.2	$2,203.2	$2,203.2	$2,203.2		$2,438.2	$235.0
	TOTAL	$3,717.4	$3,996.4	$3,858.2	$3,830.7		$4,167.3	$336.6
Environmental Emergency Response & Prevention								
Salaries & Expenses		$2,340.0	$2,939.6	$2,896.7	$2,839.5		$3,027.0	$187.5
Abatement Control and Compliance		$1,593.0	$1,832.0	$1,940.0	$1,940.0		$1,840.0	-$100.0
	TOTAL	$3,933.0	$4,771.6	$4,836.7	$4,779.5		$4,867.0	$87.5
Standards & Regulations								
Salaries & Expenses		$2,570.0	$3,853.9	$3,586.5	$3,540.5		$4,280.1	$739.6
Abatement Control and Compliance		$339.2	$865.3	$865.3	$865.3		$2,865.3	$2,000.0
	TOTAL	$2,909.2	$4,719.2	$4,451.8	$4,405.8		$7,145.4	$2,739.6
TOTAL:								
Salaries & Expenses		$8,454.1	$10,890.0	$10,517.8	$10,199.6		$11,575.5	$1,375.9
Abatement Control and Compliance		$4,756.5	$5,245.4	$5,353.4	$5,353.4		$7,384.4	$2,031.0
Water Quality Strategies Implementation	TOTAL	$13,210.6	$16,135.4	$15,871.2	$15,553.0		$18,959.9	$3,406.9

WATER QUALITY

Water Quality Strategies Implementation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Dredge and Fill	54.7	52.3	56.0	56.0		60.8	4.8
Ocean Disposal Permits	28.8	31.4	31.4	31.4		35.4	4.0
Environmental Emergency Response & Prevention	52.6	62.6	62.6	62.6		62.6	
Standards & Regulations	56.0	75.9	75.9	75.9		89.7	13.8
TOTAL PERMANENT WORKYEARS	192.1	222.2	225.9	225.9		248.5	22.6
TOTAL WORKYEARS							
Dredge and Fill	58.6	54.7	58.8	58.8		63.8	5.0
Ocean Disposal Permits	34.0	39.5	39.5	39.5		39.5	
Environmental Emergency Response & Prevention	58.0	68.1	68.1	68.1		68.1	
Standards & Regulations	67.3	90.1	90.1	90.1		99.2	9.1
TOTAL WORKYEARS	217.9	252.4	256.5	256.5		270.6	14.1

Water Quality Strategies Implementation

Budget Request

The Agency requests $18,959,900 supported by 270.6 total workyears for 1985, an increase of $3,406,900 and 14.1 total workyears from 1984. This request includes $11,575,500 for the Salaries and Expenses appropriation and $7,384,400 for extramural purposes under the Abatement, Control and Compliance appropriation.

Program Description

Dredge and Fill -- In 1985, the focus of the Section 404 Program will be on identifying the most significant problems in wetlands and other aquatic systems and on improving the scientific and administrative methods for dealing with those problems. Headquarters will develop guidance and revise regulations and procedures to ensure sound, effective, and consistent methods to identify and address the most significant environmental problems. The Regions will review and comment on permit applications; elevate permits, when necessary, to higher levels of management; and establish jurisdictional boundaries to ensure a strong, efficient, and consistent program. Regions will also strengthen efforts to transfer the Section 404 Program to interested and qualified States.

Ocean Disposal Permits -- The ocean disposal program includes the regulation of ocean disposal by outfalls and dumping and incineration at sea, designation of disposal sites, development of ocean disposal policies, and participation in interagency programs that deal with the development and protection of ocean resources. The Agency's ocean disposal programs are authorized by the Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 and the Clean Water Act, as amended, and are consistent with the mandatory provisions of the current Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter, known as the London Dumping Convention.

To carry out ocean disposal permitting functions, the Administrator of EPA is authorized to regulate the disposition of all materials except dredged material, which is regulated by the Corps of Engineers. MPRSA prohibits the transportation and dumping in ocean water of chemical, biological, and radiological warfare agents and high level radioactive materials. EPA has statutory responsibility for designating all ocean dumping sites, including those for dredged material.

Environmental Emergency Response and Prevention -- The objective of this program is to protect public welfare, property owners, and the environment from the hazards associated with accidental releases of oil and other petroleum products to navigable waters of the United States, as mandated by Section 311 of the Clean Water Act. The Agency shares responsibility for this program with the United States Coast Guard, which addresses those incidents in coastal areas and the Great Lakes.

Standards and Regulations -- This program includes development and publication of water quality criteria and standards regulations, and related guidance pursuant to Sections 303, 304(a), 307(a) and 405 of the Clean Water Act. EPA publishes guidance on criteria for water quality, based on the latest scientific knowledge on the kind and extent of all identifiable effects of conventional and toxic pollutants on human health and aquatic life. Criteria documents are also provided for sediment and sludge. Protocols are developed to provide scientific and technical guidance to States on methods for developing criteria which reflect site-specific conditions. EPA provides assistance to the States in applying these protocols. Assistance in the development and review of State water quality standards is provided to ensure that attainable uses and appropriate criteria are established. This program also includes Clean Lakes grants management.

DREDGE AND FILL

1985 Budget Request

The Agency requests a total of $2,780,200 supported by 63.8 total workyears for this program, of which $2,539,300 is for the Salaries and Expenses appropriation and $240,900 is for the Abatement, Control and Compliance appropriation. This represents an increase of $347,200 supported by 5.0 workyears in the Salaries and Expenses appropriation and a decrease of $104,000 in the Abatement, Control and Compliance appropriation. The increase in Salaries and Expenses funds five additional workyears and an Agency adjustment for personnel costs. The decrease in Abatement, Control and Compliance reflects reduced support for State program development grants.

The major focus of the Headquarters program will be to develop a system for identifying the most significant problems involving wetlands and other aquatic areas, and to improve scientific and administrative methods of addressing them. The Regions will resolve over 500 problem permits and will initiate action to address the most significant environmental problems (for example, the loss of bottomland hardwood wetlands). Through increased guidance and assistance, as well as continued management of program development grants, the Regions will also strengthen efforts to transfer the Section 404 Program to the States and ensure general permits are environmentally sound.

1984 Program

In 1984, the Agency is allocating a total of $2,537,000 supported by 58.8 total workyears to this program, of which $2,192,100 is for the Salaries and Expenses appropriation and $344,900 is for the Abatement, Control and Compliance appropriation. In 1984, Headquarters will develop a national Section 404 Program Strategy, revise the Section 404 State Program regulations, and develop stronger and more effective Memoranda of Agreement with other Federal agencies. Regions will resolve approximately 450 problems on over 9,000 Section 404 permits reviewed, ensure general permits are soundly developed, continue to work with States on Section 404 program assumption, and exercise authorities to prevent unacceptable discharges of dredged and fill material.

1984 Explanation of Changes from the Amendment

The net decrease of -$187,500 results from the following action:

-Reprogramming. (-$187,500) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$187,500, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,651,000 supported by 58.6 total workyears for this program, of which $2,169,900 was for the Salaries and Expenses appropriation and $481,100 was for the Abatement, Control and Compliance appropriation. The major emphasis in Headquarters was evaluating the environmental effectiveness of alternative methods of achieving regulatory reform of the Section 404 Program. Regional efforts focused on resolving 450 problems on 10,000 dredge and fill permits reviewed, ensuring environmentally sound general permits, and managing grants for State program development.

OCEAN DISPOSAL PERMITS

1985 Program Request

In 1985 the Agency requests $4,167,300 supported by 39.5 total workyears for this program, of which $1,729,100 is for the Salaries and Expenses appropriation and $2,438,200 is for the Abatement, Control and Compliance appropriation. This is an increase of $101,600 for Salaries and Expenses and $235,000 for Abatement, Control and Compliance. The increase is for conducting field surveys and developing additional environmental assessments of dredged material disposal sites for designation.

In 1985, the program will promulgate the revisions to the ocean dumping regulation and criteria which will provide for balancing the environmental effects of ocean disposal methods while meeting specific environmental criteria contained in the statute. Regulations will be promulgated for the control and monitoring of incineration-at-sea activities.

The Agency will review, process, and issue special permits for ocean disposal. This activity will include evaluating and characterizing waste samples on a case-by-case basis. EPA will review dredged material disposal permits and evaluate requests by the Corps of Engineers for waivers.

In the area of site designation and monitoring, the program will conduct approximately nine surveys of interim and existing ocean disposal sites for site designation purposes to determine the environmental impacts of dumping. All remaining environmental impact statements covered by the National Wildlife Federation (NWF) Consent Decree will be completed. Approximately 10 environmental assessments will be issued for dredged material disposal sites. Ocean disposal sites for dredged material will be designated. Additional site management will be provided to review and evaluate the Corps of Engineers' monitoring reports on dredged material disposal sites. A final decision will be made on the continuation of the 12-mile site for sewage sludge disposal.

Work will continue on examining scientific parameters for the site selection and designation process and assessment of permittee wastes. The Agency will examine and field test predictive indices developed cooperation with the National Oceanic and Atmospheric Administration which measure environmental impacts to determine the more relevant and applicable indices in regard to ocean dumping. These indices will be refined for use in site designation and monitoring activities.

The Agency will continue to survey and monitor existing ocean incineration sites, and will process additional applications for incineration-at-sea research permits. Regulations for incineration at sea will be published in final form. An environmental impact statement will be issued for a Pacific incineration site for site designation purposes.

Finally, the program will issue guidance documents to provide a scientific basis for assessing unreasonable degradation. The program will also issue an Annual Report to Congress pursuant to Marine Protection, Research and Sanctuaries Act.

1984 Program

In 1984, the Agency is allocating $3,830,700 supported by 39.5 total workyears, of which $1,627,500 is for the Salaries and Expenses appropriation and $2,203,200 is for the Abatement, Control and Compliance appropriation. The majority of the extramural resources are for site surveys, development of environmental assessments, and site designation.

EPA is proposing revisions to the ocean dumping regulations to implement the 1981 Court decision which ruled that the Agency must consider the comparative risks of land- versus ocean-based disposal before precluding the use of the ocean as a disposal medium.

EPA is reviewing, processing, and issuing special permits for ocean disposal. This includes evaluating and characterizing waste samples provided by facilities applying for permits. The waste characteristics are being examined for suitability for ocean disposal at existing sites on a case-by-case basis. The Agency is reviewing dredged material disposal permits and evaluating requests by the Corps of Engineers for waivers.

In the first quarter of 1984, the Agency has conducted eight monitoring surveys of existing and interim designated ocean disposal sites. EPA expects to conduct up to 17 monitoring surveys throughout the remainder of 1984. Samples will be collected and analyzed to determine and monitor the environmental impacts of waste disposal at the designated ocean sites. Environmental Impact Statements are being issued on ocean disposal sites as required under the NWF Consent Decree. Additional site designation work will begin on interim designated dredged material disposal sites not covered under the Consent Decree.

The Agency is preparing a technical evaluation on the application and interpretation of bioaccumulation predictive assessment techniques and update the bioassay procedures reflecting new scientific and site-specific information.

The Agency expects to propose regulations for incineration at sea and will review and respond to public comments on the proposal. A final determination will be made on research permit applications for incineration of liquid chemical wastes at sea. EPA will begin the preparation of an environmental impact statement of a Pacific incineration site for site designation. Field surveys will continue to be conducted on existing and potential incineration sites to monitor areas to verify predictive models and assess the potential of long-term impacts of incineration at sea.

The Agency will issue program guidance to provide a scientific basis for assessing unreasonable degradation. The Agency will also issue guidance to assist Regions in designation and management of interim ocean disposal sites. The Agency will issue the Annual Report to Congress pursuant to MPRSA.

1984 Explanation of Changes from the Amendment

The net decrease of -$27,500 results from the following action:

-Reprogramming. (-$27,500) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$27,500, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, this program obligated $3,717,400 supported by 34.0 total workyears. Of this amount, $1,374,200 was for the Salaries and Expenses appropriation and $2,343,200 for the Abatement, Control and Compliance appropriation. This included support for surveys and ocean disposal sites, the development of court-ordered environmental assessments, and site designation.

The Agency reviewed, processed, and issued 11 special permit applications for ocean disposal and reviewed 80 Corps of Engineers dredged material disposal permits for environmental considerations pursuant to MPRSA. During 1983, the Agency worked with the National Oceanic and Atmospheric Administration (NOAA) and the Regions to collect and analyze data related to ocean dumping, for use in designating suitable sites, and for monitoring existing sites. EPA initiated revisions of the ocean dumping regulation in response to the 1981 Court decision.

EPA produced 4 draft and 7 final environmental impact statements for dredged material disposal sites as required by the Consent Decree. The Agency designated two ocean disposal sites: the Tampa dredged material disposal site and the New York Cellar Dirt Site.

The Agency initiated work on developing incineration-at-sea regulations. The EPA made a tentative determination to issue permits for the incineration of liquid chemical wastes at sea and held a public hearing. A field study was conducted on the proposed incineration site in the North Atlantic and a public hearing was held. EPA conducted monitoring studies and evaluated results of a second trial burn of PCBs in the Gulf of Mexico.

ENVIRONMENTAL EMERGENCY RESPONSE AND PREVENTION

1985 Program Request

The Agency requests a total of $4,867,000 supported by 68.1 total workyears for this program, of which $3,027,000 will be for the Salaries and Expenses appropriation and $1,840,000 will be for the Abatement, Control and Compliance appropriation. This reflects an increase of $187,500 and a decrease of $100,000 respectively. The increase in the Salaries and Expenses appropriation is based on additional support costs during 1985. The decrease in the Abatement, Control and Compliance appropriation reflects the completion of training activities funded in 1984. This training represented a one year effort and will not be required in 1985.

The Agency has a 24-hour-a-day capability to respond to notifications of accidental spills or threat of releases. Federal removal is directed at major incidents where the responsible party is unidentifiable, refuses to clean up, or is incapable of providing timely and adequate removal and where the States and local authorities lack the necessary expertise, equipment, or funding.

Spill notifications will be processed to determine what, if any, response is required. The Federal government will direct response operations at 120 major spills and will monitor on-scene at 400 removals conducted by responsible parties or State and local authorities to ensure adequate response.

Federal regulations require the implementation of a Spill Prevention, Control, and Countermeasure (SPCC) plan at oil storage facilities and transfer points that could reasonably be expected to spill a significant amount of oil into the waters of the United States. Regional staff, with assistance from contractor personnel, conduct compliance inspections at selected non-transportation-related (NTR) facilities included in the SPCC program, in an effort to reduce the frequency and volume of releases that occur. An estimated 2,000 SPCC inspections will be conducted at NTR facilities.

The Agency also maintains an Environmental Response Team (ERT) to provide Regional and State personnel with response training and on-site technical and operational assistance at complex emergency incidents. The ERT is staffed by personnel with a high degree of expertise in the areas of spill control and removal, spill sampling and analysis techniques, and damage assessments.

Regional response capability is augmented through the Technical Assistance Team (TAT) contract. This contract provides contractor workyears to assist Regional staff and the ERT in responding to Clean Water Act Section 311 spills and environmental emergencies.

1984 Program

In 1984, the Agency is allocating a total of $4,779,500 supported by 68.1 total workyears to this program, of which $2,839,500 is for the Salaries and Expenses appropriation and $1,940,000 is for extramural purposes under the Abatement, Control and Compliance appropriation.

Headquarters will ensure overall management of the program and the Regions will be responsible for managing response actions. The oil component of the ERT will provide special engineering and technical advice at any unusually large or complex spills. Regional personnel will be available on a 24-hour basis to respond to the estimated 7,000 notifications received by the National Response Center of accidental releases of oil and other petroleum products. The Agency will respond on-scene at 400 removals undertaken by responsible parties or State and local authorities and will direct removals at 120 major oil incidents. An estimated 2,000 SPCC inspections will be conducted at NTR facilities.

1984 Explanation of Changes from the Amendment

The net decrease of -$57,200 results from the following actions:

-Reprogrammings. (-$57,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$80,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$137,200, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,933,00 supported by 58.0 total workyears for this program, of which $2,340,000 was for the Salaries and Expenses appropriation and $1,593,000 was for extramural purposes under the Abatement, Control and Compliance appropriation. The Agency directed removals at 120 major oil spills, responded on-scene at 400 non-Federally funded incidents, and conducted over 1,700 SPCC inspections at NTR facilities. In addition, Regional offices received and screened over 7,000 notifications of oil spill releases.

STANDARDS AND REGULATIONS

1985 Program Request

In 1985, the Agency requests a total of $7,145,400 supported by 99.2 total workyears. This amount will include $4,280,100 for the Salaries and Expenses appropriation and $2,865,300 for the Abatement, Control and Compliance appropriation, an increase of $739,600 and $2,000,000, respectively. The increase reflects the Agency's emphasis on the development of sediment criteria, estuarine criteria, aquatic toxicity criteria, and sludge criteria.

Water quality standards are the basis for establishing pollution abatement efforts needed to maintain and enhance the ambient condition of the Nation's waters. In 1985, the Agency will work with the States to implement the recently promulgated standards regulation. A special emphasis will be made to work with the States in adopting toxic criteria and to upgrade water body uses to fishable and swimmable standards. The Agency will implement the final rule on water quality standards and will field-test guidance to reflect the development of new or refined procedures for setting water quality standards.

These procedures cover the analyses of environmental factors affecting the designated use of water bodies. The Agency will adapt, test, and validate additional protocols to develop site-specific criteria for water bodies, and will assist the States in the use of these protocols. EPA will also review State-initiated revisions to current water quality standards and assist the States in resolving inconsistent or incompatible water quality standards on interstate and international waters.

The Agency will accelerate the development of marine and estuarine criteria using, to the extent possible, data available from freshwater studies. The Agency will also move to implement the recommendations of the Sludge Task Force by developing sludge criteria for several pollutants. EPA will develop and field test technical guidance to derive site-specific criteria and standards for estuaries and marine waters. Assistance will be provided to the States to modify and adapt freshwater protocols for use on marine waters.

Based on the options for sediment criteria development completed in 1984, a scientific methodology will be developed, peer reviewed, and tested. Criteria documents will be issued for toxic pollutants in sediments. The Agency will also continue to examine and improve the scientific basis of the toxicity criteria issued under Section 304(a) of the Clean Water Act, and develop specific criteria to be used as a basis for modifying the Section 307(a) toxic pollutant list.

Field tests will be conducted on different types of wetlands using the environmental criteria and improved toxicological testing procedures. A procedures manual specific to a particular ecosystem will be developed to assist the States and permit applicants. Guidance will be developed to assist Regional Offices and States in resolving controversial jurisdictional Section 404 issues such as bottomland hardwood wetlands and tundra.

The Agency will continue to provide overall management of the Clean Lakes projects and assist States and local agencies in overseeing lake restoration project funding.

1984 Program

In 1984, the Agency is allocating a total of $4,405,800 supported by 90.1 total workyears for this program, including $3,540,500 for the Salaries and Expenses appropriation and $865,300 for the Abatement, Control and Compliance appropriation. Major accomplishments planned for 1984 include additional field testing on the use of guidance on setting water quality standards, assistance to the States in applying water body surveys and assessments, field validation of site-specific criteria procedures, and development of water quality criteria for estuaries, marine waters, and sediments.

The Agency promulgated a revised water quality standards regulation on November 8, 1983, to reaffirm EPA's commitment to using water quality standards as a basis of achieving the goals of the Clean Water Act. The revised rule places a much greater emphasis on the inclusion of criteria for toxic pollutants in State standards and maintains a strong antidegradation policy for protection of high quality water, existing instream uses, and waters constituting outstanding national resources. The final rule also sets the "fishable and swimmable" goals of the Act as the basis for all standards decisions and provides a mandatory policy for upgrading all water bodies to that use classification where attainable.

Program objectives include assisting the Regions in reviewing State-adopted standards, with an emphasis on the adoption of criteria for toxic pollutants and in resolving questions of inconsistent or incompatible water quality standards on interstate and international waters. Workshops will be held to provide technical assistance to the States in conducting use attainability analyses and developing

site-specific criteria. The Agency is continuing to work to develop criteria for making recommendations on the toxicity of various pollutants on aquatic organisms, and continues to improve the scientific basis of the criteria guidance. EPA will work to develop marine criteria, particularly for dissolved oxygen, ammonia, and other selected pollutants. EPA will propose appropriate revisions to the Section 404(b)(1) dredge and fill guidelines to comply with instructions from the Presidential Task Force on Regulatory Relief.

The Agency continues to provide management of the Clean Lakes program, reviewing and approving grant applications for the completion of existing lake restoration projects, and maintains overview of existing Clean Lakes projects.

1984 Explanation of Changes from the Amendment

The net decrease of -$46,000 results from the following actions:

-Reprogrammings. (-$46,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$10,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$56,000, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $2,909,200 supported by 67.3 total workyears. Of this amount $2,570,000 was for the Salaries and Expenses appropriation and $339,200 was for the Abatement, Control and Compliance appropriation.

A proposed water quality standards regulation was published and subjected to a series of 11 public meetings involving over 1,000 people; in addition, over 1,400 written comments were analyzed and answered. The proposal was re-drafted several times to accommodate public comments and in response to concerns raised by several members of Congress. The guidance necessary to implement the regulation was issued in draft and also subjected to public review and comment. The guidance includes material on 11 subjects. The procedures for conducting use attainability analysis were tested in nine States and summary reports issued. Site-specific criteria development protocols were tested at 19 sites in 15 States and summary reports prepared. Revised criteria were prepared for several pollutants including ammonia, chlorine, and seven metals. The program assisted in the review of 23 State-adopted standards and participated in three International Joint Commission meetings with respect to criteria and standards, particularly on ammonia.

The Agency, in conjunction with the Department of the Army, considered revisions to the Section 404(b)(1) Guidelines in response to the recommendations of the Presidential Task Force on Regulatory Relief. The Agency coordinated referrals pursuant to the Section 404(q) Memorandum of Agreement between Army and EPA. The Agency also worked with the Army and the Regional Offices towards resolution of major Clean Water Act jurisdictional issues.

WATER QUALITY

Water Quality Monitoring & Analysis

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Water Quality Monitoring & Analysis							
Salaries & Expenses	$7,847.7	$7,896.3	$9,167.8	$8,741.9		$9,090.5	$348.6
Abatement Control and Compliance	$487.5	$595.1	$5,230.3	$5,171.2		$5,140.1	-$31.1
TOTAL	$8,335.2	$8,491.4	$14,398.1	$13,913.1		$14,230.6	$317.5
TOTAL:							
Salaries & Expenses	$7,847.7	$7,896.3	$9,167.8	$8,741.9		$9,090.5	$348.6
Abatement Control and Compliance	$487.5	$595.1	$5,230.3	$5,171.2		$5,140.1	-$31.1
Water Quality Monitoring & Analysis TOTAL	$8,335.2	$8,491.4	$14,398.1	$13,913.1		$14,230.6	$317.5
PERMANENT WORKYEARS							
Water Quality Monitoring & Analysis	145.1	134.3	156.1	156.1		163.2	7.1
TOTAL PERMANENT WORKYEARS	145.1	134.3	156.1	156.1		163.2	7.1
TOTAL WORKYEARS							
Water Quality Monitoring & Analysis	185.6	173.9	198.4	198.4		198.4	
TOTAL WORKYEARS	185.6	173.9	198.4	198.4		198.4	

Water Quality Monitoring and Analysis

Budget Request

The Agency requests $14,230,600 supported by 198.4 total workyears for 1985, an increase of $317,500 from 1984. This request includes $9,090,500 for the Salaries and Expenses appropriation and $5,140,100 for extramural purposes under the Abatement, Control and Compliance appropriation, including an increase of $348,600 and a decrease of $31,100, respectively.

Program Description

Water Quality Monitoring and Analysis -- This program supports Headquarters and Regional development of strategies, systems, and procedures used for water quality monitoring and analysis, including biological, chemical, and physical evaluations of water quality. Water quality monitoring is necessary for assessing water quality status and trends, identifying water quality problems and their causes, and determining cost-effective controls required to meet local water quality objectives. Water quality sampling and analysis for these purposes are primarily State activities, supported by EPA. Throughout, the program emphasizes the effective use of local, State and Federal resources for collecting, analyzing, and interpreting monitoring data.

WATER QUALITY MONITORING AND ANALYSIS

1985 Program Request

In 1985, the Agency requests a total of $14,230,600 supported by 198.4 total workyears for this program, of which $9,090,500 is for the Salaries and Expenses appropriation and $5,140,100 is for the Abatement, Control and Compliance appropriation. This is an increase of $348,600 in Salaries and Expenses and a decrease of $31,100 in Abatement, Control and Compliance. The increase in Salaries and Expenses reflects increased personnel costs, a need to purchase additional laboratory equipment for the analysis of organic chemicals, such as dioxin, and for biomonitoring. The decrease reflects a net reduction due to completion of the majority of the field sampling for dioxin under the National Dioxin Study, offset by an increase for development of biomonitoring guidance and field analytical activities.

In an effort to control the discharge of toxic pollutants, the program will conduct an intensive effort to provide technical guidance and assistance on biomonitoring. This will include the revision of existing and development of new technical guidance on the application of bioassay tests for calculating in-stream effects of design conditions. It will also include extending these methodologies to estuarine/marine waters. Technical guidance on total maximum daily loads (TMDLs) and wasteload allocations (WLAs) will be prepared to address the more complex toxic pollutants, bioaccumulation factors, and selected innovative modeling approaches.

The program will provide consultation and technical analysis assistance to States for monitoring programs, for WLAs/TMDLs, and for direct field sampling and laboratory analysis assistance for toxic pollutant samples. The program will continue to review State WLAs/TMDLs, with special emphasis on areas where control decisions are forthcoming. In the area of biomonitoring, the program will provide guidance and assistance to States in the use of biomonitoring techniques as well as directly assessing the chronic and acute toxicity of discharges permitted under the National Pollutant Discharge Elimination System (NPDES). This will improve State and EPA capabilities to control toxic discharges by locating and measuring the effects of pollution on aquatic life.

The program will complete the development of a monitoring program strategy, and begin working with States to implement it. This effort, which begins in 1984, is designed to improve EPA's ability to assess water quality at the national level and to improve State and EPA ability to collect the data needed to establish water pollution controls and evaluate program effects.

The 1984 Section 305(b) report, based on improved environmental indicators, will be prepared and sent to Congress in the first quarter of 1985. The program will also issue guidance for the 1986 State reports. Further assessment of the magnitude and impact of important pollution sources will take place. In addition, the program will continue to assess the environmental benefits of regulatory actions, as well as coordinate and evaluate EPA and State programs, and operate and enhance the water quality information systems.

The program will implement the second year of the National Dioxin Study. This effort includes sampling a representative number of hydrologic units to assess dioxin build-up in bed sediments and native fish. It also includes intensive surveys at a sample of manufacturing and pesticide use sites. Work will be carried out primarily through EPA offices and contractor laboratories. Statistical support will be provided throughout this effort. The program will also begin an evaluation of exposure and risk from selected persistent and bioaccumulative pollutants other than dioxins.

The program will continue to implement quality assurance (QA) efforts. This includes overseeing State QA implementation as outlined in requirements for EPA grants and participating in interlaboratory tests and audits, as well as reviews of QA procedures. The States will also be provided with technical assistance as necessary to ameliorate QA problems with new sampling and analyses techniques.

1984 Program

In 1984, the Agency is allocating a total of $13,913,100 supported by 198.4 total workyears for this program, of which $8,741,900 is for the Salaries and Expenses appropriation and $5,171,200 is for the Abatement, Control and Compliance appropriation.

The Agency is initiating a major effort to promote the use of biomonitoring and technical guidance on TMDLs/WLAs as part of an integrated approach to control the discharge of toxic pollutants. The Agency will be pilot testing technical approaches, and collecting data to verify the validity of the approaches for controlling actual in-stream consequences of the discharge of toxicity in effluents. Interim technical guidance will be developed and issued. Regional Offices will establish a base capability for performing biomonitoring, including conducting bioassays and biological field surveys.

The program is continuing its development of technical guidance documents to support the water quality-based approach (developed in concert with EPA Regional Offices, other Federal agencies, States, and industry and environmental groups). These documents include improved screening techniques for States to follow in setting priorities, biomonitoring technical guidance, step-by-step user guidance for TMDLs and WLA models, and quality assurance.

The program will complete a joint State/EPA project to develop improved reporting of State and national water quality status and trends. A joint State/EPA report to the Congress will describe the extent to which streams, rivers, lakes, and estuaries supported their designated uses in 1972 and 1982. The techniques developed will be incorporated into future biennial Section 305(b) reports to the Congress.

The program will initiate development of a monitoring program strategy through the Agency's Monitoring Task Force of EPA and State representatives.

The program is carring out the first year of the National Dioxin Study. Activities include development of site sampling plans, and initiation of collection and analysis of field samples.

1984 Explanation of Changes from the Amendment

The net decrease of -$485,000 results from the following actions:

-Reprogrammings. (-$485,000) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$125,000 to the Salaries and Expenses appropriation and a net decrease of -$59,100 to the Abatement, Control and Compliance appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$550,900, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $8,335,200 supported by 185.6 total workyears for this program, of which $7,847,700 was for the Salaries and Expenses appropriation and $487,500 was for the Abatement, Control and Compliance appropriation.

In 1983, the program completed the initial Aquatic Life Survey, the first systematic assessment of biological conditions in the nation's waters. This survey, along with the initiation of a joint State/EPA project to develop improved reporting of water quality status and trends, will result in an improvement of the Agency's ability to provide national assessments. The program pilot tested a standardized reporting format in 10 States, and received final report submissions from 49 States and 7 interstate and territorial agencies. The program also issued guidance to the States for preparing 1984 Section 305(b) reports to the Congress.

The program also developed the Agency's Dioxin Strategy (issued in December 1983). This multi-media strategy is based on a preliminary assessment of sources and environmental pathways, and includes a seven-tiered analytical approach. This program element provides resources for the National Dioxin Study that covers tiers 3-7. (The first two tiers are covered under the Superfund program.) Tiers 1-6 focus on sites where dioxin is likely to occur in pesticides formulation or use, disposal, and air emissions while Tier 7 is an analysis of background or control conditions.

In addition, the program issued technical guidance for conducting TMDLs/WLAs, focusing on conventional pollutants, and on techniques for applying model results in NPDES permits.

WATER QUALITY

Municipal Source Control

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)					
Municipal Waste Treatment Facility Construction								
Salaries & Expenses		$16,662.6	$15,296.9	$20,989.6	$20,924.0		$21,850.1	$926.1
Abatement Control and Compliance		$24,717.0	$2,054.4	$20,679.4	$20,679.4		$19,519.1	-$1,160.3
	TOTAL	$41,379.6	$17,351.3	$41,669.0	$41,603.4		$41,369.2	-$234.2
Corps Of Engineers								
Abatement Control and Compliance			$16,000.0					
	TOTAL		$16,000.0					
Waste Treatment Operations & Maintenance								
Salaries & Expenses		$1,262.2	$1,363.9	$1,450.5	$1,448.1		$1,536.4	$88.3
	TOTAL	$1,262.2	$1,363.9	$1,450.5	$1,448.1		$1,536.4	$88.3
TOTAL:								
Salaries & Expenses		$17,924.8	$16,660.8	$22,440.1	$22,372.1		$23,386.5	$1,014.4
Abatement Control and Compliance		$24,717.0	$18,054.4	$20,679.4	$20,679.4		$19,519.1	-$1,160.3
Municipal Source Control	TOTAL	$42,641.8	$34,715.2	$43,119.5	$43,051.5		$42,905.6	$145.9

WATER QUALITY

Municipal Source Control

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Municipal Waste Treatment Facility Construction	378.7	323.3	446.6	446.6		456.2	9.6
Waste Treatment Operations & Maintenance	26.6	35.4	33.9	33.9		34.5	.6
TOTAL PERMANENT WORKYEARS	405.3	358.7	480.5	480.5		490.7	10.2
TOTAL WORKYEARS							
Municipal Waste Treatment Facility Construction	448.4	395.0	543.3	543.3		543.3	
Waste Treatment Operations & Maintenance	27.1	36.0	34.5	34.5		34.5	
TOTAL WORKYEARS	475.5	431.0	577.8	577.8		577.8	

Municipal Source Control

Budget Request

The Agency requests a total of $42,905,600 supported by 577.8 total workyears for this subactivity, of which $23,386,500 will be under the Salaries and Expenses appropriation and $19,519,100 will be under the Abatement, Control and Compliance appropriation. This is an increase of $1,014,400 in Salaries and Expenses, representing Agency adjustments to align personnel funding with anticipated needs and a net decrease of $1,160,300 in Abatement, Control and Compliance, representing elimination of funds for operator training grants partially offset by an increase in funding for an interagency agreement with the U.S. Army Corps of Engineers.

Program Description

This subactivity provides resources at Headquarters and in the Regions for management of the Construction Grants program. For budgetary purposes, resources devoted to managing the Construction Grants Program are divided into the following components:

Municipal Waste Treatment Facility Construction -- This program includes most of the day-to-day in-house management activities associated with the Construction Grants program in Headquarters and the Regional Offices. Beginning in 1984 it also includes construction grant management resources previously budgeted in the Water Quality and Grants Management subactivity and resources associated with managing an interagency agreement with the Corps of Engineers previously budgeted as a separate program element. Through this agreement, the Corps provides a range of construction management and training activities.

Corps of Engineers -- This program covers a range of construction management and related activities assigned to the Corps of Engineers under an interagency agreement to assure the technical and fiscal integrity of wastewater treatment project construction. It includes only the Abatement, Control and Compliance resources supporting the agreement. These resources are combined with resources in the Municipal Waste Treatment Facility Construction program beginning in 1984.

Waste Treatment Operations and Maintenance -- This program involves development of State programs to ensure that Publicly Owned Wastewater Treatment Works (POTWs) meet effluent requirements. It also provides construction grants program support in implementing the Agency's National Municipal Policy.

MUNICIPAL WASTE TREATMENT FACILITY CONSTRUCTION

1985 Program Request

In 1985, the Agency requests $41,369,200 supported by 543.3 total workyears this program, including $21,850,100 under the Salaries and Expenses appropriation and $19,519,100 under the Abatement, Control and Compliance appropriation. The $926,100 increase in Salaries and Expenses represents Agency adjustments to align personnel costs with anticipated needs. The net decrease of $1,160,300 in Abatement, Control and Compliance represents elimination of the 1984 Congressional add-on for operator training grants and an increase in new obligational authority for the interagency agreement with the Corps of Engineers. The Agency is not requesting 1985 funds for operator training, as States are conducting effective on-site training programs using 1982-1984 Congressional add-on funds and are responsible for developing self-sufficient State programs for ensuring improved

operations and maintenance and continuing compliance. Corps expenditures in 1984 will total $21,476,400 including $16,000,000 in 1984 funds and $5,476,400 from prior year funds; all available Corps funds will be depleted by the end of 1984, resulting in no carryover into 1985 so that the requested $17,300,000 represents total Corps expenditures for the year. This decrease of $4,176,400 in Corps funding from 1984 reflects a reduced need for the Corps as the number of active projects decreases and the States assume more responsibility for managing their programs.

With a proposed 1985 construction grants appropriation of $2,400,000,000, EPA expects to award 650 grants resulting in 4,711 active projects at year's end. Approximately 1,060 projects are expected to complete construction during the year.

We expect 51 States (including Puerto Rico) to have signed delegation agreements by the end of 1985. Of this total, 38 States will be fully delegated (including assistance provided by the Corps of Engineers), an increase of 6 over 1984. The Agency expects this level of delegation to continue essentially unchanged for the near future. In 1985, States will provide 2,086 workyears or 68 percent of the total program management staffing, the Corps of Engineers 13 percent, and EPA 19 percent.

With the resources in this program element, EPA will act primarily as overall program manager with the States and the Corps performing most of the day-to-day project management activities. EPA will continue to exercise remaining nondelegated project management-related responsibilities in the States and territories.

EPA will work closely with the States to ensure orderly implementation of statutory changes coming into effect in 1985. The 1984 Needs Survey will present for the first time water quality and use improvements for each of 314 sub-basins in meeting treatment needs. EPA will continue to work with States in refining funding priority systems and lists and in documenting water quality improvements resulting from the construction grants program. EPA will also continue assisting States in assuring grantee financial and management capability, preventing problem projects, and identifying means to reduce costs of construction, operations, and maintenance.

EPA will expand efforts to provide State and grantee assistance in selecting appropriate conventional, secondary, advanced, alternative, or innovative technologies; publish and actively disseminate materials on latest technological findings, including sludge management; and expand design feedback efforts to help ensure that engineers, States, and municipalities select the most appropriate, cost-effective technologies. Program staff, in conjunction with other Agency programs, will draft sludge management regulations including the minimum requirements for a State sludge management program and provide technical guidance for State and local officials on municipal sludge management. With Congressional consent, Headquarters will delegate to qualified Regions and States the review of all proposed Advanced Treatment (AT) projects, while maintaining necessary national oversight. EPA will also assist States and grantees with implementing the secondary treatment regulation which was revised in 1984.

The Corps of Engineers will continue to help EPA and the States ensure project construction integrity; prevent project waste, fraud, or mismanagement; and train program personnel. The $17,300,000 funding level will purchase 408 workyears of effort and provide 13 percent of the total construction grants program staff. The Corps will continue its traditional pre-construction and construction management activities including conducting 996 biddability and constructability reviews prior to construction award, performing monthly interim inspections on 1,248 projects, conducting final inspections on approximately 695 projects, managing 65 percent of active projects under construction, and maintaining on-site presence at large complex projects. Additionally, the Corps will assist EPA in implementing recent initiatives to ensure construction integrity. The Corps will help conduct Program Management Conferences with all new grantees to provide detailed guidance on grant and construction management techniques, and will conduct Construction Management Evaluations jointly with EPA and the States to assess construction quality and identify potential problems on selected projects.

The Administration is expected to propose to Congress in 1985 its recommendations on the future of the construction grants program, including appropriate Federal and non-Federal roles. In accordance with the Agency's oversight policy staff will continue working with the States in refining oversight systems and approaches which recognize Federal and State roles and responsibilities while maintaining Federal accountability for national goals. EPA and State program managers will determine annual program priorities, negotiate commitments, and monitor annual accomplishments. Agency personnel will provide feedback and assistance based upon annual evaluations. These efforts will provide essential links to ensure that Federal and State objectives, program priorities, and funds are meeting national program objectives through the most cost-effective approaches.

1984 Program

In 1984, the Agency is allocating $41,603,400 supported by 543.3 total workyears for this program, including $20,924,000 under the Salaries and Expenses appropriation and $20,679,400 under the Abatement, Control and Compliance appropriation.

With a 1984 construction grants appropriation of $2,430,000,000 EPA expects to award 726 construction grants resulting in 6,328 active projects at year's end. Approximately 885 projects are expected to complete construction during the year.

We expect 32 of the 50 delegated States to assume full responsibility for managing the program, an increase of 3 over 1983. States are expected to commit 2,083 workyears or 65 percent of the total construction grants management staffing in 1984. The Corps of Engineers will provide 17 percent of the total and EPA the remaining 18 percent.

In accordance with the 1981 Amendments, States are to have in 1984 water quality based priority systems and lists which serve as the basis of funding decisions. EPA will continue working with States in refining and revising these lists and systems and developing measures for evaluating their water quality effectiveness.

EPA will also work with States in implementing the financial and management capability policy, issuing guidance, conducting ten workshops on how to perform a financial capability analysis, identifying potential problem projects for corrective action, and helping States and grantees plan for and establish sound operations and maintenance, user charge, and financial management systems.

EPA is placing increased emphasis on ensuring that States, grantees, and consultants are provided continuing information and support concerning selection of appropriate secondary, advanced, innovative/alternative (I/A), and traditional technologies. A program will be initiated to ensure that information on successful/unsuccessful technologies is made known. Guidance will be issued on delegating I/A responsibilities to the States. An Advanced Treatment effectiveness evaluation will be completed leading to technological and policy recommendations. The Agency's AT policy will be published providing for a consistent national approach in reviewing AT projects; an AT Technical Handbook will also be published summarizing the findings of Headquarters AT reviews since 1979 and providing a framework for conducting such reviews. EPA will promulgate the final Construction Grants program regulation and issue a revised regulation expanding the secondary treatment definition. EPA will also issue final guidance on, review applications received, and obligate 1983 and 1984 Congressional add-on funds for Marine Combined Sewer Overflow projects.

Regions will review 167 AT projects, referring those with over $3 million in incremental costs to Headquarters for final review and approval. EPA will develop guidelines for future delegation of all AT project review to Regions or States which demonstrate the knowledge and capability to conduct such reviews.

In 1984, 885 projects will be physically completed and 865 closed out. With assistance from the Corps of Engineers, a program of Program Management Conferences will be initiated with all new grantees to ensure adequate record keeping, grant management, and construction management practices; emphasis will be placed on completing or terminating Step 1 and 2 grants (planning and design--rendered ineligible for direct grant funding under the 1981 Amendments) and initiating construction expeditiously; the Agency's Construction Management Evaluation program will be expanded; and efforts will be made to reduce the volume of claims. The Corps will also perform 1,270 biddability and constructability reviews, manage 58% of active projects under construction, perform interim inspections on 1,229 projects, conduct 610 final inspections, and maintain on-site presence at large complex projects.

A major study will be completed examining alternative approaches for Federal and non-Federal financial involvement in municipal wastewater treatment which may lead to legislative proposals for Title II reauthorization. Additionally, with the $2,625,000 Congressional add-on for operator training the Agency will continue to make grants to States and other organizations for on-site assistance to operators in noncomplying small facilities.

1984 Explanation of Changes from the Amendment

The net decrease of -$65,600 results from the following actions:

-Reprogrammings. (-$65,600) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$40,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$25,600, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

Obligations for management of the Construction Grants program in 1983 totaled $41,379,600 and 448.4 total workyears, of which $16,662,600 was for Salaries and Expenses and $24,717,000 was for extramural activities under the Abatement, Control and Compliance appropriation.

EPA awarded 809 step 3 (construction) and step 2+3 awards and obligated $3,193,777,000 (net) under the construction grants program, resulting in a total of 8,085 active projects at year end. Approximately 1,125 step 3 and step 2+3 projects completed construction during the year, and by year's end a total of approximately 3,550 P.L. 92-500 treatment plants were completed and on-line.

During 1983, four additional States accepted initial Section 205(g) delegation, bringing to 50 the total number of delegated jurisdictions--49 States and Puerto Rico. With support from the Corps of Engineers, 29 States are considered fully delegated, an increase of 9 over 1982.

EPA provided assistance to States in targeting funds to meet highest priority water quality and public health needs; ensuring that projects are technologically appropriate and within the financial capability of the communities served; completing and closing out projects expeditiously; meeting obligation and outlay projections; and managing delegated activities. EPA is also ensured that appropriate Advanced Treatment funding decisions were made, maintained involvement in projects with overriding Federal interest, and exercised nondelegated project management responsibilities.

In response to the 1981 Amendments, EPA provided guidance to States in revising their priority systems to ensure water quality based funding decisions. The 1982 Needs Survey was published documenting the impact of the 1981 Amendments, including an addendum which estimated costs for controlling marine CSO discharges. The Agency completed a national financial capability policy requiring applicants to demonstrate financial and management capability to construct, operate and maintain proposed treatment works prior to receiving a construction grant.

The Agency continued to encourage use of innovative and alternative treatment technologies. Through 1983, awards totaling $295 million have been made to 1,400 facilities for innovative and alternative technology implementation. 178 of these have been completed and are operational. Information on promising technologies was published to help consulting engineers, grantees, and reviewing agencies.

EPA Headquarters continued to review proposed AT projects with incremental costs above $3 million. Including the 13 projects acted upon in 1983, these reviews have saved $834 million in construction costs plus substantial annual operations and maintenance cost savings. Additionally, EPA conducted 30 detailed reviews of proposed new phased/segmented projects to ensure appropriate funding decisions.

Early in 1983, the Agency published streamlined final Section 301(h) regulations in response to the 1981 Amendments along with advisory monitoring and technical support documents. A total of 137 new waiver requests were received by December 29, 1982 in response to the amended deadline, thus producing a total of 207 waiver requests. During the year the Agency made 40 tentative and 12 final decisions. Decisions to date have resulted in cost savings of $848 million due to projected reduced treatment costs.

During 1983, 1,125 projects completed construction and 942 projects were closed out. EPA published Standard Operating Procedures for the Corps to follow in performing interim construction inspections and guidance on expanded use of Construction Management Evaluations (CMEs) for all new projects. The Corps of Engineers also assisted EPA and States in the prevention of waste, fraud, and mismanagement through on-site presence at all large facilities, preconstruction conferences with new grantees, more frequent interim inspections, and responses to allegations or evidence of problems identified to the program.

Consolidated program guidance was updated to be published with the final construction grants regulation. The Agency published a final regulation on delegated State management which streamlined program requirements and defined further EPA and State responsibilities related to oversight, evaluation, and planning.

In response to Congressional directives to focus training funds on alleviating noncompliance problems in Federally funded municipal plants, EPA awarded $2,425,000 from the 1983 Congressional add-on to fund States for on-site operator training programs, primarily for small facillities. These funds provided assistance to 380 facilities in 35 States. The remaining $200,000 was used to conduct a national program evaluation and to provide State data for use in a mandatory report to Congress.

CORPS OF ENGINEERS

1985 Program Request

Resources for this program are now shown in the Municipal Waste Treatment Facility Construction program element under which the Agency is requesting a total of $17,300,000 for the Corps, an increase of $1,300,000 over 1984.

1984 Program

Beginning in 1984, resources for this program are in the Municipal Waste Treatment Facility Construction program element. In 1984, $16,000,000 is being allocated for the Corps.

1983 Accomplishments

The $20,187,400 obligated under Abatement, Control, and Compliance for the interagency agreement purchased 544 workyears of support to EPA and States in ensuring technical and fiscal integrity of construction projects.

The Corps performed 1,265 biddability and constructability reviews to assure that designs were technically adequate prior to construction contract award, managed 62 percent of active projects under construction, performed interim inspections on 1,340 projects, and performed 748 final inspections. Continuing on-site presence also was maintained at large, complex projects to minimize potential for waste, fraud, and mismanagement. The Corps provided significant support to State and EPA efforts to eliminate backlogs through handling change orders, making payments, resolving project deficiencies, and assisting States with other related needs.

WASTE TREATMENT OPERATIONS AND MAINTENANCE

1985 Program Request

In 1985, the Agency requests $1,536,400 supported by 34.5 total workyears under the Salaries and Expenses appropriation. This represents a level program. The $88,300 increase in Salaries and Expenses represents Agency adjustments to align personnel funding with anticipated needs.

The impact of the performance certification requirements contained in the 1981 Amendments will begin to be felt significantly in 1985. EPA will work with States in implementing procedures for engineering firms to supervise first year plant operation and personnel training. Supporting implementation of the National Municipal Compliance Policy, operations and maintenance staff will also evaluate municipal compliance plans submitted for current and proposed facilities, provide assistance in development of composite correction plans, and provide technical support to formal and informal enforcement actions by Agency and delegated State enforcement staff. Additionally, EPA will manage remaining active State operator training grants, provide on-site assistance and operations and maintenance training to operators in noncomplying plants, monitor and evaluate State operator training programs, and prepare a followup Report to Congress including a multi-year plan for ensuring effective, self-sufficient State training programs.

1984 Program

In 1984 the Agency is allocating $1,448,100 supported by 34.5 total workyears for this activity under the Salaries and Expenses appropriation.

Implementing provisions of the 1981 Amendments, EPA will issue guidance for implementing grantee certification of plant performance following the first year of operation including recommended corrective actions. EPA will also assist States and grantees in performing plant diagnostic inspections to identify potential problems related to operations and maintenance. Additionally, program staff will manage $9 million of 1982, 1983, and 1984 grants (funded under the Municipal Waste Treatment Facility Construction program) added by Congress to provide on-site training for resolving operations and maintenance problems that prevent plant compliance in small communities and will evaluate State programs. EPA will also submit to Congress an initial report on the use and impact of operator training funds in remedying compliance problems and a preliminary action plan for ensuring effective, self-sufficient State operator training programs.

1984 Explanation of Changes from the Amendment

The net decrease of -$2,400 results from the following actions:

-Reprogrammings. (-$2,400) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The Salaries and Expenses reprogramming above, totaling -$2,400, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $1,262,200 supported by 27.1 total workyears under the Salaries and Expenses appropriation. EPA began preparing for the new performance certification requirements mandated in the 1981 Amendments by clarifying responsibilities between EPA and State agencies in their implementation and by developing program guidance. EPA also assisted States and grantees in developing and maintaining effective operations and maintenance programs; assisted in the development of the Agency's National Municipal Compliance strategy to ensure improved performance and compliance by municipal facilities; and managed operator training grants in 35 States to support on-site training designed to improve small facility compliance.

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WATER QUALITY

Water Quality Enforcement

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Water Quality Enforcement								
Salaries & Expenses		$13,412.0	$13,383.8	$13,558.9	$13,181.6		$14,368.2	$1,186.6
Abatement Control and Compliance		$252.1	$203.6	$199.1	$204.6		$1,347.4	$1,142.8
	TOTAL	$13,664.1	$13,587.4	$13,758.0	$13,386.2		$15,715.6	$2,329.4
TOTAL:								
Salaries & Expenses		$13,412.0	$13,383.8	$13,558.9	$13,181.6		$14,368.2	$1,186.6
Abatement Control and Compliance		$252.1	$203.6	$199.1	$204.6		$1,347.4	$1,142.8
Water Quality Enforcement	TOTAL	$13,664.1	$13,587.4	$13,758.0	$13,386.2		$15,715.6	$2,329.4
PERMANENT WORKYEARS								
Water Quality Enforcement		329.0	313.2	313.2	313.2		334.8	21.6
TOTAL PERMANENT WORKYEARS		329.0	313.2	313.2	313.2		334.8	21.6
TOTAL WORKYEARS								
Water Quality Enforcement		366.8	352.9	352.8	352.8		370.8	18.0
TOTAL WORKYEARS		366.8	352.9	352.8	352.8		370.8	18.0

Water Quality Enforcement

Budget Request

The Agency requests a total of $15,715,600 and 370.8 total workyears for 1985, an increase of $2,329,400 and 18.0 workyears from 1984. Included in the total is $14,368,200 for Salaries and Expenses and $1,347,400 for Abatement, Control and Compliance, an increase of $1,186,600 and of $1,142,800 respectively. The program includes both Headquarters and Regional resources.

Program Description

Water Quality Enforcement -- The National Pollutant Discharge Elimination System (NPDES) Enforcement Program monitors compliance, initiates administrative enforcement actions, and provides technical support for enforcement litigation against violators of NPDES permit conditions. This subactivity covers compliance monitoring, inspections, compliance strategy development, administrative enforcement remedies and technical support for judicial enforcement actions.

Major functions of this program include identification of noncompliers, initiation of informal actions to secure compliance, and negotiation leading to administrative enforcement actions. Where informal negotiations and administrative enforcement actions do not achieve compliance, cases will be forwarded for judicial action.

In addition to the NPDES portion of the Water Quality Enforcement Program, administrative and technical support is provided for the issuance of administrative enforcement actions against violations of the Spill Prevention Control and Countermeasure Plan requirements. Referrals are made to the U.S. Coast Guard for civil penalty assessment for oil and hazardous substance spill violations (Section 311(b)(6)(A)) in waters where EPA has jurisdiction, and inspection support is provided for enforcement against illegal dredge and fill activities (Section 404).

WATER QUALITY ENFORCEMENT

1985 Program Request

The Agency requests a total of $15,715,600 supported by 370.8 total workyears for this program, of which $14,368,200 will be for the Salaries and Expenses appropriation and $1,347,400 will be for the Abatement, Control and Compliance appropriation. This is an increase of $1,186,600 and $1,142,800, respectively. The increase of 18.0 workyears and $1,186,600 in the Salaries and Expenses appropriation for this activity from 1984 to 1985 is for additional resources to support the municipal compliance and pretreatment enforcement initiatives of the program. The increase of $1,142,800 in Abatement, Control and Compliance will provide technical support for municipal and pretreatment compliance activities.

Two major initiatives will be emphasized in 1985. One initiative will focus on continued implementation of the National Municipal Policy (NMP) to ensure that POTWs not in compliance with CWA requirements have developed and are implementing plans to comply with all applicable requirements of the Act. EPA will continue to develop compliance schedules (in non-NPDES States) for noncomplying POTWs that receive EPA funds for needed construction; major noncomplying POTWs that will not receive construction grant support; one-half of the minor noncomplying POTWs that will not receive construction grant support; major noncomplying constructed POTWs; and one-half of the minor, noncomplying, constructed POTWs.

The second initiative will be to take appropriate enforcement measures to assure implementation of the national pretreatment compliance strategy. EPA intends to ensure implementation of the program in cities where neither the State nor the city has an approved pretreatment program and will enforce pretreatment requirements in cities which have failed to implement approved pretreatment programs.

Along with these two initiatives, EPA will continue its basic program with vigorous compliance monitoring, enforcement of EPA-issued permits, and support of approved State programs. These efforts will focus on ensuring compliance by major industrial permitees, Federally funded POTWs, and other permitees where noncompliance threatens public health or water quality objectives. EPA will continue to rely upon increased use of less resource-intensive Compliance Evaluation Inspections (CEIs) to obtain maximum coverage with available resources. Total inspections will decrease slightly (5 percent) to approximately 1,951.

The issuance of administrative orders and notices of violation will increase with priority emphasis on municipal compliance and pretreatment enforcement as discussed above.

Support for non-NPDES enforcement will include inspections to verify compliance with Section 404 dredge or fill requirements and to determine jurisdiction under Section 404, penalty assessments for spills of oil and hazardous materials, and SPCC enforcement.

1984 Program

The Agency is allocating a total of $13,386,200 supported by 352.8 total workyears to this program, of which $13,181,600 is for Salaries and Expenses and $204,600 is for the Abatement, Control and Compliance appropriation. During 1984, the program continues to emphasize achieving an improved rate of municipal and industrial compliance while working to promote cooperation among Headquarters, Regional Offices, and State agencies. In 1984 the National Municipal Policy will be finalized and Regions and States will submit Municipal Strategies. Initial AO actions will be taken by Regions and States against completed plants violating their limits as specified in State strategies.

The compliance program is encouraging the development of greater State technical expertise and will encourage States to assume more of the compliance monitoring activities. A revised strategy for the compliance inspection program is being developed. A neutral inspection scheme, to satisfy the judicial requirement for objective random selection of candidates for compliance inspections, has been implemented. An estimated 2,052 compliance inspections will be conducted by EPA. Quality assurance will continue to be emphasized as an important part of the program.

Approximately 695 administrative orders and notices of violations will be issued for violations of NPDES requirements. Non-NPDES administrative enforcement activities are expected to result in approximately 452 actions under the Spill Prevention, Control, and Countermeasures program, 770 oil and hazardous substances spill referrals to the U.S. Coast Guard, and 93 dredge and fill compliance inspections.

Support will be provided to help NPDES States develop their enforcement management systems and maintain their data systems. The Permits Compliance ADP System (PCS), used by both States and Regions, will be maintained and upgraded. Increased State direct use of PCS and link-up between existing States systems and PCS will be encouraged.

1984 Explanation of Changes from the Amendment

The net decrease of -$371,800 results from the following actions:

-Reprogrammings. (-$371,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$5,500 to the Abatement, Control and Compliance appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$377,300, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983 the Agency obligated a total of $13,664,100 supported by 366.8 total workyears for this program, including $13,412,000 for the Salaries and Expenses appropriation and $252,100 for the Abatement, Control and Compliance appropriation.

Contract resources were used to meet ADP information needs, provide technical and legal case support, and conduct monitoring and inspection training. During 1983, the activities supporting enforcement actions in emergency situations involving substantial threats to public health and safety received the highest program priority.

The national permit compliance rate for publicly owned treatment works (POTWs) in 1983 was 88 percent for major municipal dischargers on final effluent limits. The national permit compliance rate for industrial and other nonmunicipal dischargers in 1983 was 91 percent for major permits.

Regional Offices conducted approximately 1,994 compliance inspections and issued 50 Notices of Violations and 781 Administrative Orders. In States without approved NPDES programs, EPA reviewed major dischargers' self-monitoring reports. Technical support was provided for the development of 44 civil cases which were referred to Headquarters for review.

Enforcement of Section 311 oil and hazardous substance spill requirements consisted of 516 referrals to the U.S Coast Guard for assessment of civil penalties and 207 administrative actions for violations of Spill Prevention Control and Countermeasure plan requirements.

Enforcement of Section 404 provisions focused on identifying illegal discharges of dredge and fill material. Three administrative actions were taken.

WATER QUALITY

Water Quality Permit Issuance

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
PROGRAM								
Permit Issuance								
Salaries & Expenses		$7,612.2	$8,659.1	$10,743.8	$10,482.9		$12,629.5	$2,146.6
Abatement Control and Compliance		$4,174.2	$4,741.1	$4,686.3	$4,686.3		$4,161.3	-$525.0
	TOTAL	$11,786.4	$13,400.2	$15,430.1	$15,169.2		$16,790.8	$1,621.6
TOTAL:								
Salaries & Expenses		$7,612.2	$8,659.1	$10,743.8	$10,482.9		$12,629.5	$2,146.6
Abatement Control and Compliance		$4,174.2	$4,741.1	$4,686.3	$4,686.3		$4,161.3	-$525.0
Water Quality Permit Issuance	TOTAL	$11,786.4	$13,400.2	$15,430.1	$15,169.2		$16,790.8	$1,621.6
PERMANENT WORKYEARS								
Permit Issuance		176.0	187.5	250.7	250.7		288.6	37.9
TOTAL PERMANENT WORKYEARS		176.0	187.5	250.7	250.7		288.6	37.9
TOTAL WORKYEARS								
Permit Issuance		207.7	233.1	302.4	302.4		340.9	38.5
TOTAL WORKYEARS		207.7	233.1	302.4	302.4		340.9	38.5

Water Quality Permit Issuance

Budget Request

The Agency requests a total of $16,790,800 supported by 340.9 total workyears for 1985. This represents an increase of $1,621,600 and 38.5 workyears from 1984. Included in the request is $12,629,500 for Salaries and Expenses and $4,161,300 for Abatement, Control and Compliance, representing an increase of $2,146,600 and a decrease of $525,000, respectively. This program includes both Headquarters and Regional resources.

Program Description

Water Quality Permit Issuance -- The National Pollutant Discharge Elimination System (NPDES) permit program is a comprehensive legislative mandate in the Clean Water Act (CWA) to reduce or eliminate point source pollution from industrial, municipal, commercial, and agricultural dischargers. The Act prohibits the discharge of pollutants into all waters of the United States unless a permit is issued by EPA or an EPA-approved State program. A primary function of the permit program is the encouragement of State assumption of responsibility for the NPDES program. At present, 35 States and one Territory have approved NPDES programs.

Controlling discharges of priority pollutants including toxics is the major emphasis of the NPDES permit program. Direct discharges of these pollutants into navigable waters are controlled by the inclusion of Best Available Technology (BAT) limitations into industrial permits. Indirect discharges of priority pollutants, i.e., industrial discharges to Publicly Owned Treatment Works (POTWs), are controlled through the pretreatment program. Municipalities have primary responsibility for enforcing national pretreatment requirements. EPA and the 19 approved States with authority for pretreatment are responsible for assuring POTW pretreatment program development and implementation.

Another important function of the NPDES program is to provide technical support for evidentiary hearings held on the terms and conditions of permits and to review requests for several types of variances from permit effluent limitations. EPA must also evaluate requests for extension of BAT compliance deadlines where innovative pollution control technologies are to be demonstrated. EPA conducts non-adversarial panel hearings for municipalities which have requested marine discharge modifications under Section 301(h) of the CWA. Non-adversarial panel hearings are also used to resolve appeals to conditions in NPDES permits issued the first time for a facility, as well as in decisions on variances requested by direct dischargers.

WATER QUALITY PERMIT ISSUANCE

1985 Program Request

The Agency requests a total of $16,790,800 supported by 340.9 total workyears for this program, of which $12,629,500 will be for the Salaries and Expenses appropriation and $4,161,300 will be for the Abatement, Control and Compliance appropriation. The increase from 1984 of $2,146,600 in Salaries and Expenses is primarily for the costs of an additional 38.5 workyears. These additional workyears are necessary for EPA to eliminate its major permit backlog by the end of 1985, to support implementation of pretreatment programs, and to assist delegated States in reducing their permit backlogs. The decrease of $525,000 in Abatement, Control

and Compliance includes $200,000 due to a reduced need for pretreatment technical support for POTW program approvals and $325,000 in funds for tentative Section 301(h) waiver determinations because of lower costs for each waiver review action.

In order to meet the goal of eliminating the backlog of major permits to be issued by the Agency by the end of 1985, priority will be given to issuance of major industrial permits. The water quality-based permitting initiative begun in 1984 will continue, emphasizing permit issuance in water quality impacted areas; priority will also be given to issuing permits for which best available technology guidelines have been promulgated. Emphasis will also be given to issuance of major municipal permits. During 1985, 450 major industrial and 300 major municipal permits will be issued.

During 1985, increased emphasis will be given to modifying permits to incorporate appropriate revisions to discharge limitations or other permit conditions. For example, permits will be modified as appropriate to reflect results of biomonitoring data collection concerning toxicity.

Continued emphasis will be given to developing and issuing general permits, including outer continental shelf general permits (for discharges from drilling rigs). Wherever possible, general permits will be issued to categories of facilities in order to reduce the backlog of expired permits and to ensure control of pollutants from facilities which might otherwise remain unpermitted.

In 1985, there will be many requests for fundamentally different factor (FDF), Section 301(g) water quality, and Section 301(c) economic variances. Additionally, EPA expects requests for extensions of BAT compliance deadlines where innovative pollution control technologies are to be demonstrated. Evaluation and review of such variance and deadline extension requests will continue.

EPA will continue to review Section 301(h) marine discharge waiver requests from POTWs. This Regional responsibility is technically complex and the sole responsibility of EPA, even in approved NPDES States. Contractor support ($1.7 million) is provided for technical reviews of Section 301(h) applications and followup monitoring after waiver decisions are made.

During 1985, requests for evidentiary hearings are expected to be granted on about 25 percent of the major industrial permits issued. These granted requests will be in addition to the requests that will carry over from 1984. An estimated 114 granted requests will be resolved in 1985; 108 will be resolved through negotiation and six will require formal adjudicatory hearings. EPA experts in specific industrial categories will assist in resolution of evidentiary hearing requests.

Emphasis will continue to be placed on assisting in the development and formal approval of new State NPDES programs and necessary program modifications for assumption of pretreatment and Federal facilities responsibilities. It is estimated that during 1985 two States will receive full NPDES authority and 10 NPDES States will receive program modification approval for pretreatment and/or Federal facilities permitting. To a limited extent, EPA will be working with NPDES States to assist in reducing the NPDES State permit backlog. Requests by NPDES States for permit assistance are expected to increase as they focus on the more difficult, high priority second round permits.

EPA will continue to review and approve local POTW pretreatment programs during 1985 in States lacking approved pretreatment authority. It is assumed that all 1,700 POTWs required to develop a pretreatment program, including some 700 POTWs in approved pretreatment States, will have approved programs by the end of 1985. EPA must also evaulate POTWs' requests to grant removal credits to indirect dischargers' requests for categorical standard determinations and FDF variances. In

addition, indirect dischargers are required to submit baseline monitoring reports within six months from promulgation of categorical pretreatment standards. Baseline monitoring reports provide the indirect dischargers' assessment of compliance with the standards and, where necessary, a schedule for the facility to achieve compliance with the standards. These reports will be reviewed by EPA, States, or POTWs, depending on which is the primary pretreatment authority.

Promulgation of NPDES and pretreatment regulation revisions proposed in 1984 and responding to new litigation challenges will be a major regulatory focus in 1985. In addition, work on NPDES permit application forms will continue, including final forms for new sources, existing industrial facilities, nonprocess industrial dischargers, and POTWs.

In 1985, national NPDES program overview activities will include quality review of selected permits, mid-year Regional and State program evaluations, review of Memoranda of Understanding, review and assistance in correcting legally deficient State programs, assistance in the development and review of State permitting strategies for industrial and municipal facilities, and evaluations of approved POTW and State pretreatment programs.

1984 Program

In 1984, the Agency is allocating a total of $15,169,200 supported by 302.4 total workyears to the Permits Issuance program, of which $10,482,900 is for the Salaries and Expenses appropriation and $4,686,300 is for the Abatement, Control and Compliance appropriation.

In 1984, emphasis will continue to be placed on issuing "second round" major industrial permits in water use impaired areas and where BAT guidelines have been promulgated. Approximately 385 major industrial permits will be issued by EPA in non-approved States. Modifying major industrial permits to reflect biomonitoring results will also be a priority in 1984. A new water quality-based permitting initiative will begin in 1984 with the issuance of an Agency policy and a technical support document. Emphasis will continue to be given to issuing general permits, including outer continental shelf general permits.

During 1984, added emphasis will be given to reducing the backlog of expired municipal permits and to modifying municipal permits to reflect Section 301(h) waivers and revisions to secondary treatment standards. Priority lists will be developed for municipal permits to be issued during 1984. The Agency will issue 201 major municipal permits.

As effluent guidelines are promulgated, the number of requests from industries for FDF, Section 301(c) and Section 301(g) variances will increase. Evaluation and review of such variances will continue into 1985 and beyond.

During 1984, requests for evidentiary hearings will be granted on about 30 percent of the major industrial permits issued. These granted requests will be in addition to the granted requests that will carry over from 1983. An estimated 136 granted requests will be resolved in 1984; 130 will be resolved through negotiation and six will require formal adjudicatory hearings.

During 1984, two States will receive full NPDES authority and eight NPDES States will receive program modification approval for Federal facilities permitting and/or pretreatment. EPA will be working with NPDES States which request EPA assistance in developing permits, especially where effluent limitations guidelines are not available.

During 1984 the Regions will assist POTWs in the development of local pretreatment programs. Approximately 1,700 POTWs are required to develop pretreatment programs, of which 1,100 are in States not now approved to administer the pretreatment program. About 170 of the 1,100 programs were approved by EPA in 1983, and

another 300 to 400 should be approved by EPA during 1984. In addition, EPA will initiate program reviews at POTWs with approved programs to assure satisfactory implementation of pretreatment programs. EPA will begin to review requests for removal credits, review industrial baseline monitoring reports, and make categorical determinations for industrial users.

During 1984, emphasis will be given to approval or denial of Section 301(h) marine discharge waivers consistent with the large increase in applications following the December 1981 CWA amendments. EPA will evaluate 20 applications for marine discharge waivers during 1984.

In 1984, EPA will promulgate final rules concluding rulemaking initiated by the settlement of NPDES issues with industry litigants. An NPDES regulatory reform package has also been drafted and should be proposed in 1984. During 1984, EPA is continuing work on the development of new, shorter NPDES application forms and the revision of existing forms based on litigation. The removal credits portion of the pretreament regulations will be promulgated in 1984.

1984 Explanation of Changes from the Amendment

The net decrease of -$260,900 results from the following actions:

-Reprogrammings. (-$260,900) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$65,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$195,900, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $11,786,400 supported by 207.7 total workyears for this program, including $7,612,200 for the Salaries and Expenses appropriation, and $4,174,200 for the Abatement, Control, and Compliance appropriation.

In 1983, EPA issued a total of 506 major and 1,694 minor permits. Of these 2,200 permits, 1,738 were industrial (381 majors), and 462 were municipal (125 majors). Other activities included promoting and approving State NPDES program assumption and program modification approvals, assisting in the development and approval of local pretreatment programs, and regulatory reform.

In 1983, emphasis was placed on the issuance of major industrial permits based on the "second round" industrial permit strategy. In addition, a new water quality-based permitting initiative began with the drafting of an Agency policy and a technical support document. Five field studies were conducted on complex, multiple discharge sites, and training seminars were held for EPA and the States.

Currently, 35 States and one Territory have approved NPDES programs and are issuing permits. One State was approved for full program administration during 1983. In addition, four previously approved NPDES States received pretreatment authority, and two received Federal facility authorization. This brings the total to 19 approved States with pretreatment authority and 25 approved States with Federal facility permitting authority.

In 1983, the Regions and the States increased their emphasis on issuing general permits. Six final general permits issued in 1983 authorize discharges from 3,000 facilities, eighteen proposed general permits cover 3,500 facilities, and 15 draft permits will cover an additional 21,000 facilities. The first general permit issued covering a particular category of discharge is used as a "model" for similar general permits issued in other geographical areas.

In 1983, EPA increased its pretreatment program activity. Pretreatment litigation was settled and categorical standards were promulgated. Local pretreatment programs were reviewed and 170 POTW pretreatment programs were approved by EPA by the end of 1983. Finally, over 1,000 additional Regional and State POTWs submitted initial portions of their programs for review.

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DRINKING WATER

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$21,786.5	$24,554.5	$24,816.9	$24,140.2		$26,431.8	$2,291.6
Abatement Control and Compliance	$39,620.6	$29,893.4	$40,145.4	$40,165.4		$39,495.4	-$670.0
Research & Development	$14,104.5	$11,908.0	$14,408.0	$14,408.0		$13,347.3	-$1,060.7
TOTAL, Drinking Water	$75,511.6	$66,355.9	$79,370.3	$78,713.6		$79,274.5	$560.9
PERMANENT WORKYEARS	446.6	465.1	472.9	472.9		508.0	35.1
TOTAL WORKYEARS	522.8	560.8	568.5	568.5		591.5	23.0
OUTLAYS	$85,040.0	$73,568.0	$79,935.9	$80,012.1		$81,028.2	$1,016.1
AUTHORIZATION LEVELS	Authorization for the Safe Drinking Water Act expired September 30, 1982. Reauthorization pending.						

OVERVIEW AND STRATEGY

The Safe Drinking Water Act of 1974 (SDWA) charged EPA with the responsibility of ensuring that the Nation's water supplies are free from contamination which may pose a risk to human health. In carrying out this mandate, EPA is required to set standards for contaminants and to assure compliance among public water systems. The Agency is also required to protect underground sources of drinking water from contamination due to underground injection practices. Although EPA is required to establish minimum national requirements for these programs, the Act clearly intended that the States (and Territories) would assume primary enforcement responsibility, primacy, for implementing these programs. In the event a State does not choose to accept primacy, and on Indian Lands for which the States do not have civil jurisdiction, EPA must implement and enforce the regulatory requirements directly.

Over the past years, the Agency worked closely with the States in promoting primary enforcement responsibility for the Public Water Systems Supervision (PWS) program. This effort resulted in delegations to 51 States and Territories. One additional State, South Dakota, has achieved primacy in 1984. The Regional Offices are continuing to work closely with Pennsylvania and Indiana in anticipation of program delegations in 1985.

The Underground Injection Control (UIC) program is designed to protect underground sources of drinking water from contamination by unsafe injection practices. The Agency's priority has been to delegate the UIC program to the States. Early in 1983, the Agency began to develop a rulemaking package to establish programs for States which have made clear their lack of interest in primacy. Under a consent decree stemming from a lawsuit by the National Wildlife Federation, these regulations are to be promulgated by the end of March 1984. In addition, a second rulemaking package to cover additional direct implementation States is to be proposed by May 1984 and promulgated by October 1984. Therefore, by the beginning of 1985, all jurisdictions (with the exception of certain Indian lands) will have operational UIC programs.

REVISE CURRENT HEALTH PROTECTION STANDARDS

The Public Water Systems Supervision program is currently operating under the National Interim Primary Drinking Water Regulations. Generally, these regulations codified the historical health standards that reflect the prevailing norms of treatment technology. The SDWA required EPA to revise these interim regulations based upon a determination made by the National Academy of Sciences (NAS) or some other independent scientific group. These revisions were to establish numbers which express health goals and identify the level at which "no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety." These levels are called "recommended maximum contaminant levels" or RMCLs. In order to make an accurate assessment of the health risk, EPA must assemble and analyze all the available toxicological data and establish the level of approximate human exposure from drinking water. The latter requires EPA to conduct surveys of drinking water quality to establish a profile of contaminant occurrence nationwide.

From this information EPA is required to establish RMCLs after formal notice of proposed rulemaking and public review. An enforceable maximum contaminant level, or MCL, is derived from the health goal (the RMCL value) taking into account the feasibility and cost of treatment by the water supply. If it is not feasible to measure a contaminant at the utility level, EPA can consider setting treatment requirements to reduce the level of the undesirable contaminants. The enforceable regulation is established in the framework of a Regulatory Impact Analysis, where the benefits in terms of the level of risk reduction are analyzed in relation to

the financial burden imposed. To make the ultimate regulatory decision, EPA must assemble and consider data on the performance and cost of both treatment and monitoring technology. Because the task is complex, EPA is developing the Revised National Primary Drinking Water Regulations (NPDWR) in four phases.

Phase I of the Revised NPDWR addresses presently unregulated volatile organic contaminants which occur widely and often at high concentrations. The Agency published the Advance Notice of Proposed Rulemaking (ANPRM) for Phase I in March 1982, and expects to propose RMCLs, the health goals, in early 1984 and to simultaneously promulgate the RMCLs and propose the MCLs, the enforceable standards, in late 1984. Promulgation of final MCLs is scheduled by Fall 1985.

Phase II will address inorganic chemicals, pesticides, and microbiological contaminants, including a reconsideration of the existing standards. The ANPRM for Phase II was published on October 5, 1983, and we anticipate proposal of the Phase II RMCLs in late 1984 followed by proposal and promulgation of the MCLs in late 1985 and mid-1986, respectively. As a separate part of Phase II, the Agency will propose regulations for fluoride (in response to a petition by the State of South Carolina) based upon findings of the Surgeon General.

We are in the early stages of Phase III--revising the regulations for radionuclides, which will cover both natural and man-made radioactivity. The Agency published the ANPRM in October 1983 and anticipates proposal of RMCLs in late 1985.

Phase IV will review the existing trihalomethane regulations and address the broader issues of the respective health risks of alternative disinfectants and additional organic chemical by-products of disinfection. Once the full revision process is complete, the SDWA requires an ongoing assessment of emerging contaminant threats, with a formal review of standing regulations every three years.

To assist States in managing instances of drinking water contamination not covered by existing regulations, the Agency prepares health advisories. These advisories are proving helpful to States in managing serious incidents of groundwater contamination until additional standards become available. Although not enforceable standards, they contain a summary of the best scientific evidence on the relative toxicity of a contaminant, together with any available information on sources, detection and measurement methods, and treatment to neutralize or remove it. Furthermore, they are being used by other environmental programs for evaluation of contaminants found in ground waters in the vicinity of hazardous waste sites.

The Office of Research and Development provides direct input into the regulatory development process by providing current data on the toxicity of chemicals of concern. The program also pursues longer term research to provide a more accurate basis for future regulatory decision making. A major effort will be to develop and apply less costly methods to establish the toxicological potential of contaminants at low dosages and in combinations. Efforts to understand the health effects of disinfectant by-products will be expanded. Research will continue to provide assessments of treatment effectiveness and feasibility to support the development of drinking water regulations.

IMPROVE COMPLIANCE WITH APPLICABLE STANDARDS

Compliance rates with the PWS program requirements have greatly improved since the Agency first compiled annual reports for 1978. However, data indicates that small systems represent the largest percentage of violations. In an effort to correct compliance problems, the Agency and the States developed a series of guidance documents including a compliance policy for public water systems. This policy is aimed at full compliance with MCL and monitoring requirements, which will be achieved by identifying problems, evaluating health risks, realistically developing alternatives, and moving toward compliance. The States or EPA will develop State-specific strategies for bringing systems into compliance, recognizing the differing circumstances among the States. The strategies will rank violations based on public

health threats and set priorities for followup actions to provide for the appropriate enforcement actions based upon the ranking schemes. Finally, the policy provides for data verification to assure that the data being used by the States and EPA is an accurate indicator of the water quality and the program's progress.

The Research and Development program contributes towards this effort by studying and providing data on cost-effective treatment technology for small systems and providing a quality assurance program for laboratory certification. Research will be expanded on the problem of maintaining microbiological water quality in distribution systems after treatment. Research will continue on identifying and solving problems which corrosion may pose to drinking water quality.

MAXIMIZE UIC DELEGATIONS AND IMPLEMENT FEDERAL PROGRAMS

During 1983, the UIC program emphasized primacy delegations to States. At the end of 1983, we had approved UIC programs covering 19 States (12 full and 7 partial) out of a total of 57 States and Territories. This is a slower rate of delegation than was anticipated earlier, due to the need to negotiate necessary changes in State applications. The work done with the States in 1983 is expected to bear fruit in 1984 in the form of a larger number of delegations. By the end of 1984, we expect to have approved a cumulative total of 28 full and 8 partial State programs.

In 1984, the Agency is also preparing to implement the UIC program in those States which have not assumed primacy. We expect to promulgate programs for the first batch of direct implementation States in March and to operate programs in these States during the second half of 1984. In response to a suit by the National Wildlife Federation, the Agency has committed itself to achieve operating UIC programs in all 57 States and Territories by the beginning of 1985. In 1984, the Agency will, therefore, propose direct implementation programs for a second set of States. These programs are to be promulgated in October 1984. While the Agency is proposing and promulgating direct implementation programs to achieve full coverage for the UIC program, it will also continue to review and approve State applications, with the likelihood that several of the States for which direct implementation programs are being prepared will achieve primacy in 1984. At the beginning of 1985, the Agency expects to be responsible for the operation of 21 full and 8 partial programs.

ADDRESS AND RESPOND TO GROUND-WATER PROBLEMS

The drinking water program will focus on two distinct activities in the ground-water protection area. First, the Agency takes an active role in responding to ground-water contamination instances as they may threaten public water supplies. The Regional drinking water programs will (1) provide assistance in responding to an increasing number of contaminated ground-water supplies which serve as source waters of public water systems, (2) assess the magnitude of the problem, and (3) identify alternative remedial measures needed to protect public health. In addition, the Agency will provide advisory services on the health effects of unregulated contaminants to the States and utilities.

Second, the drinking water program will work with other EPA programs to assess the magnitude of the risks posed by contamination from hazardous waste sites and evaluate the drinking water aspects of alternative cleanup proposals.

The Agency will continue to pursue a coordinated ground-water research effort. The objective of this program is to predict and estimate the movement, persistence, and/or transformation of plumes of contaminants in the subsurface environment, and to increase development of new technologies for use in detection, prevention, and remediation. Work will focus on improving the methods to investigate and monitor contamination. In addition, the health research program will provide information on the health effects of contaminants found in ground water for Agency and State use in addressing ground-water pollution. A pilot scale evaluation of *in situ* aquifer restoration methods will be started in order to judge the feasibility and cost-effectiveness of methods developed in laboratory studies.

DRINKING WATER

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Cumulative Number of States with full or partial primary enforcement responsibility for:					
Public Water Systems Supervision.....	51	51	52	54	+2
Underground Injection Control					
- Full primacy.....	12	39*	28	32	+4
- Partial primacy....	7	--	8	7	-1
Sole source aquifer designations.....	--	+5	+3	+3	0
Underground Injection Control permits issued by EPA in nonprimacy States..	--	+295	+162	+300	+138
Laboratory certifications in PWS nonprimacy States.....	120	+125	+120	+65	-55
Revision to National Interim Primary Drinking Water Regulations					
Phase I					
Propose RMCL.....	--	--	2/84	--	--
Propose MCL.....	--	--	--	12/84	--
Promulgate MCL.....	--	--	--	9/85	--
Phase II					
ANPRM.....	9/83	--	--	--	--
Propose RMCL.....	--	--	9/84	--	--
Propose MCL.....	--	--	--	9/85	--
Phase III					
ANPRM.....	9/83	--	--	--	--
Propose RMCL.....	--	--	--	9/85	--
Phase IV					
ANPRM.....	--	--	--	9/85	--

* Number indicates programs, did not distinguish between full or partial programs.

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DRINKING WATER

Drinking Water Research

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
Scientific Assessment							
Salaries & Expenses	$58.5	$193.6	$443.6	$443.6		$417.2	-$26.4
Research & Development	$30.2	$30.5	$105.5	$105.5		$75.0	-$30.5
TOTAL	$88.7	$224.1	$549.1	$549.1		$492.2	-$56.9
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$1,001.4	$1,437.5	$1,437.5	$1,420.2		$1,701.8	$281.6
Research & Development	$718.9	$703.3	$1,028.3	$1,028.3		$884.8	-$143.5
TOTAL	$1,720.3	$2,140.8	$2,465.8	$2,448.5		$2,586.6	$138.1
Health Effects							
Salaries & Expenses	$2,698.6	$3,530.7	$3,630.7	$3,630.7		$3,537.1	-$93.6
Research & Development	$5,741.4	$5,219.1	$5,719.1	$5,719.1		$6,503.4	$784.3
TOTAL	$8,440.0	$8,749.8	$9,349.8	$9,349.8		$10,040.5	$690.7
Environmental Engineering & Technology							
Salaries & Expenses	$2,980.7	$2,722.8	$2,788.9	$2,788.9		$2,950.4	$161.5
Research & Development	$4,184.3	$2,827.4	$3,827.4	$3,827.4		$2,445.9	-$1,381.5
TOTAL	$7,165.0	$5,550.2	$6,616.3	$6,616.3		$5,396.3	-$1,220.0
Environmental Processes & Effects							
Salaries & Expenses	$990.9	$1,107.2	$1,107.2	$1,107.2		$1,170.7	$63.5
Research & Development	$3,429.7	$3,127.7	$3,727.7	$3,727.7		$3,438.2	-$289.5
TOTAL	$4,420.6	$4,234.9	$4,834.9	$4,834.9		$4,608.9	-$226.0

DRINKING WATER

Drinking Water Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$7,730.1	$8,991.8	$9,407.9	$9,390.6		$9,777.2	$386.6
Research & Development	$14,104.5	$11,908.0	$14,408.0	$14,408.0		$13,347.3	-$1,060.7
Drinking Water Research TOTAL	$21,834.6	$20,899.8	$23,815.9	$23,798.6		$23,124.5	-$674.1
PERMANENT WORKYEARS							
Scientific Assessment	1.2	3.0	7.0	7.0		8.0	1.0
Monitoring Systems & Quality Assurance	18.2	22.1	22.1	22.1		27.2	5.1
Health Effects	39.1	49.6	51.4	51.4		53.6	2.2
Environmental Engineering & Technology	55.6	45.1	47.1	47.1		48.1	1.0
Environmental Processes & Effects	19.3	22.3	22.3	22.3		22.3	
TOTAL PERMANENT WORKYEARS	133.4	142.1	149.9	149.9		159.2	9.3

DRINKING WATER

Drinking Water Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	1.9	4.0	9.0	9.0		9.0	
Monitoring Systems & Quality Assurance	21.4	25.1	25.1	25.1		30.1	5.0
Health Effects	56.8	66.5	68.5	68.5		68.5	
Environmental Engineering & Technology	65.4	57.3	59.3	59.3		59.3	
Environmental Processes & Effects	20.5	24.5	24.5	24.5		24.5	
TOTAL WORKYEARS	166.0	177.4	186.4	186.4		191.4	5.0

Drinking Water Research

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Provide Health, Monitoring and Engineering Data			
- Prepare health criteria documents which evaluate and assess the human health impact of exposure to specific constituents found in drinking water (Scientific Assessment)	9/83	9/84	9/85
- Assist in development and review of methods for formulating drinking water standards (Scientific Assessment)	9/83	9/84	9/85
- Develop, produce and distribute quality control and performance evaluation samples for chemical, microbiological and radiochemical analysis (Monitoring)	9/83	9/84	9/85
- Provide report which evaluates the validity of extrapolation models for tumor promotors and initiators (Health)		6/88	6/88
- Prepare report on removal of pesticides from drinking water (Engineering)		2/85	2/85
- Prepare report on treatment techniques for removing nitrates from drinking water (Engineering)		2/85	2/85
- Complete report on small system bacteriological sampling frequency models (Engineering)	9/86	9/86	9/86
- Prepare state-of-knowledge report on the removal of organic materials (Engineering)	2/87	2/87	2/87
Provide Quality Assurance			
- Provide reports on international symposia on the health effects of drinking water disinfectants and disinfection by-products (Health)		9/86	9/88

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Conduct laboratory certification evaluations (Monitoring)	9/83	9/84	9/85
- Provide quality control procedures and guidelines to document data quality and systems performance (Monitoring)	9/83	9/84	9/85
Provide Health and Engineering Information			
- Prepare annual reports summarizing the occurrence, cases and causes of waterborne disease outbreaks by year (Health)	12/84	12/85	9/86
- Report on target organ toxicity of chemicals tested for health advisory development (Health)	9/84	9/86	9/88
- Produce a report on filtration to meet coliform and turbidity MCLs (Engineering)		1/85	1/85
- Provide a report on the cost and effectiveness of trihalomethane control (Engineering)		2/86	2/86
Provide Scientific Data for Protection of Ground Water			
- Establish groundwater research program for locating abandoned wells, fluid movement in injection wells, and develop monitoring equipment (Monitoring)	9/85	9/85	9/85
- Evaluate possible Temik (aldicarb) contamination of Florida's citrus belt ground water (Monitoring)		12/84	
- Report on Influence of Chemical Concentration on Prediction Confidence (Env. Processes)	10/85	10/85	10/85
- Report on laboratory-scale evaluation of aquifer restoration methods (Env. Processes)	9/85	9/85	9/85

Drinking Water Research

Budget Request

The Agency requests a total of $23,124,500 supported by 191.4 total workyears for 1985, a decrease of $674,100 and an increase of 5.0 total workyears from 1984. Included in this total are $9,777,200 for Salaries and Expenses and $13,347,300 for Research and Development, with an increase of $386,600 and a decrease of $1,060,700, respectively. The increase in Salaries and Expenses and workyears will expand quality assurance efforts. The decrease, primarily in engineering, reflects the completion of funding of a cooperative research agreement with the water utility industry.

Program Description

EPA's drinking water research program provides support to the States and to the EPA Office of Drinking Water (ODW) in implementing the Safe Drinking Water Act (SDWA) in the areas of contaminant occurrence related to health effects, analytical methods to monitor contaminants, control technology and the related costs, and pertinent data to support the protection of ground water resources.

Objectives designed to implement this program are:

Objective 1. Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. This research provides information in the areas of scientific assessment, health effects, and treatment technology to support the ODW in developing revised regulations and Health Advisories to control drinking water contaminants under Section 1412 of the SDWA. It also provides analytical procedures for use by the Agency, States, municipalities and system operators to monitor contaminants to assure compliance with maximum contaminant levels pursuant to Section 1401 of the SDWA.

Objective 2. Provide Quality Asssurance Support to Agency and State Drinking Water Laboratories. This activity provides analytical and systems performance procedures for on-site evaluation and certification of drinking water monitoring laboratories and makes possible mandatory quality assurance activities of all laboratories and offices involved with data collection.

Objective 3. Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. Health research assists the States in ascertaining causes of waterborne infectious disease outbreaks and improving reporting of these incidents, as well as determining the hazard to humans from exposure to infectious agents through drinking water. It also provides support for the issuance of Health Advisories by EPA. Engineering technology research is directed toward the compliance and reporting problems of small systems. This work supports technical assistance to States and municipalities as required by Section 1442 of the SDWA.

Objective 4. Provide Scientific Methods and Data for Protection of Ground-Water Resources. This research provides the scientific basis for the protection of underground drinking water sources as required to implement Section 1421 and 1424 of the SDWA.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $492,200 supported by 9 total workyears for this program, of which $417,200 is Salaries and Expenses and $75,000 is for Research and Development. This reflects a decrease of $26,400 for Salaries and Expenses and a decrease of $30,500 for extramural purposes under the Research and Development appropriation. This decrease reflects the completion of funding for research work on Temik contamination in Florida.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. This program will provide assessment expertise and technical assistance in support of drinking water regulations, health advisories, methodology development, and other guidance to States and operators. Such support will include: (1) initiation of 13-15 health assessment/criteria documents which evaluate and assess the human health impact of exposure to specific chemicals designated by the ODW; (2) preparation of criteria documents and Recommended Maximum Contaminant Levels (RMCLs) initiated in 1984; (3) preparation of supporting material for health advisories; (4) evaluation of carcinogenicity data, cancer risk estimates, as well as evaluation of new cancer studies for consistency of scientific interpretation and analysis techniques for use in ODW regulatory activity; and (5) guidance and input relevant to human health assessment methodology.

1984 Program

In 1984, the Agency is allocating a total of $549,100 and 9 total workyears to this program, of which $443,600 is under Salaries and Expenses appropriation and $105,500 is for extramural purposes under the Research and Development appropriation.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Revised primary drinking water regulations must be finalized by 1986. Health assessment documentation for 10 chemicals are being finalized and development initiated for 12 more contaminants. Support is provided for a study of the degree and impact of possible Temik (aldicarb) contamination of drinking water supplies in Florida.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $88,700 and 1.9 total workyears for this program, of which $58,500 was under the Salaries and Expenses appropriation and $30,200 was for extramural purposes under the Research and Development appropriation.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Standards. The initial drafts of health effects documents dealing with silver, 1,1-dichloroethane, and mercury were prepared. After peer review, these documents were released to the public for comment in mid-1983.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $2,586,600 supported by 30.1 total workyears for this program, of which $1,701,800 is for Salaries and Expenses and $884,800 is

for Research and Development. The increase of 5 workyears and $281,600 in the Salaries and Expenses appropriation reflects increased support for conducting the annual laboratory certification and developing analytical methods to monitor contaminants in drinking water. The decrease of $143,500 in Research and Development funds reflects the completion of funding for Temik research.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Research will be directed toward supporting the National Interim Primary Drinking Water Regulations and the Safe Drinking Water Act. The program evaluates methods for measurement of radionuclides, and sampling holding times for microbiological analysis, and develops alternate membrane filter media for analyzing total coliforms.

Provide Quality Assurance Support to Agency and State Drinking Water Laboratories. Quality control procedures and guidelines to document data quality and systems performance, quality assurance support in radionuclides analysis, and overview of Agencywide mandatory quality assurance activities related to drinking water will be provided. Interlaboratory performance evaluation studies and on-site evaluations are conducted annually of principal laboratories and regions required to perform microbiological, chemical and radiochemical analysis of drinking water. Additional resources reflect work to be done in the production, maintenance and distribution of quality control and performance evaluation samples to support laboratory certification.

Provide Scientific Methods and Data for Protection of Ground Water Resources. Work in 1985 will build on research in a number of areas where work has been supported in previous years. Efforts will develop/modify well sampling equipment/instrumentation, and develop a non-contaminating submersible pump for monitoring water supply wells. The use of fiber optics and laser technology to monitor groundwater quality will be evaluated. Studies will be conducted to evaluate the feasibility of using airborne and surface-operated instrumentation to locate abandoned wells and to investigate the feasibility of mapping underground fluid movement from injection wells.

1984 Program

In 1984, the Agency is allocating a total of $2,448,500 and 25.1 total workyears to this program of which $1,420,200 is for the Salaries and Expenses appropriation and $1,028,300 is for extramural purposes under the Research and Development Appropriation.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Activities include the evaluation of methods for measurement of radionuclides, chemicals and microbes, the evaluation of sample holding times for microbiological analysis, and the development of alternate membrane filter media for analyzing total coliforms.

Provide Quality Assurance Support to Agency and State Drinking Water Laboratories. This effort provides quality assurance support in radionuclides, chemical and microbiological analyses, and referral laboratory services. An overview of Agencywide mandatory quality assurance activities of all laboratories and offices involved with data collection for drinking water supplies is provided. The program supports the production and distribution of quality control and performance evaluation samples for chemical and microbiological analysis for water supply laboratory certification. In addition, the program develops and distributes radioactive standards and reference materials for radiochemistry analysis.

Provide Scientific Methods and Data for Protection of Ground Water Resources. The program includes modification of well sampling equipment and publication of a report on non-contaminating pumps. The use of fiber optics and laser technology

to monitor groundwater quality is being evaluated, and a report on the feasibility of using airborne and surface-operated instrumentation to locate abandoned wells is being published. Alternate test procedures for chemistry, microbiology and radio-chemistry are being evaluated. The possible contamination of Florida's citrus belt ground water by Temik contamination is being evaluated.

1984 Explanation of Changes from the Amendment

The net decrease of -$17,300 results from the following action:

-Reprogramming. (-$17,300) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$17,300 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,720,300 and 21.4 total workyears for this program, of which $1,001,400 was under the Salaries and Expenses appropriation and $718,900 was for extramural purposes under the Research and Development appropriation.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. The program provided criteria and procedures for on-site evaluation and certification of laboratories associated with drinking water monitoring and analysis and provided evaluation of alternate test procedures.

Provide Quality Assurance Support to Agency and State Drinking Water Laboratories. The program: 1) produced and disseminated quality control and performance evaluation samples for chemical and microbiological analysis for water supply laboratory certification; 2) developed and distributed radioactive standards and reference materials for radiochemistry analysis; 3) validated studies for chemistry, radiochemistry and microbiology; and 4) conducted laboratory evaluations and intercomparison studies.

Provide Scientific Methods and Data for Protection of Groundwater Resources. This program provided support for a national program which conducted feasibility studies to locate abandoned wells and investigated the feasibility of mapping the underground movement of fluids from injection wells.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $10,040,500 supported by 68.5 total workyears for this program, of which $3,537,100 is for Salaries and Expenses and $6,503,400 is for Research and Development. This reflects a decrease of $93,600 in Salaries and Expenses and an increase of $784,300 in Research and Development. The increase reflects additional support for epidemiology research and work on the health effects of drinking water disinfection by-products. The decrease reflects the transfer of support contracts to the Research and Development appropriation where they are more appropriately funded.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Toxicological research will continue for specific chemical contaminants, for water treatment and for materials capable of leaching from surfaces in contact with potable water. Dose-response data on treatment chemicals and leachates will be developed especially for central nervous system effects, cancer, cardiovascular disease, and reproductive effects.

Additional resources will be devoted to research of drinking water disinfectants and their by-products. Toxicological data will be provided to the ODW to evaluate the health effects of disinfectants used in drinking water treatments. By-products formed by reaction of disinfectants with background organic material will be a major subject of study. These by-products will also be examined toxicologically to determine the specific health effects posed by exposure to such chemicals. Most chemicals occurring in drinking water cannot be identified analytically, therefore, studies will be directed toward examining the extent to which the unidentified fraction (more than 90 percent) of organic chemicals in drinking water pose hazards to human health. The issue of exposure to multiple chemicals of the same general class, or in combination or independently, will be addressed. The interactive effects of characterized chemical mixtures will be investigated.

Epidemiological studies will be planned to help resolve the human health issues facing EPA. Such studies will be initiated, however, only after feasibility of the approach has been demonstrated and suitable study populations have been identified. These studies will primarily be performed in cooperation with other agencies. The quality assurance and exposure assessment aspects of epidemiological studies will be strongly emphasized.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. The drinking water infectious disease burden, both epidemic and endemic, in the U.S. will be determined through disease surveillance and analysis activities and epidemiological study. Technical assistance will be provided to the Center for Disease Control (CDC), States, and municipalities in investigations of waterborne disease outbreaks.

Toxicological data will be provided to ODW to develop guidance for States on the potential health effects related to the exposure of chemicals in drinking water and ground water sources. This data is needed for Health Advisories and to define ground water associated health risks. Dose-response characterizations will be made using both *in vivo* and *in vitro* methods, and sensitive populations will be defined.

1984 Program

In 1984, the Agency is allocating a total of $9,349,800 and 68.5 total work-years to this program of which $3,630,700 is under Salaries and Expenses and $5,719,100 is for extramural purposes under the Research and Development appropriation.

Provide Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. The program currently focuses on: (1) study of the health effects of specific chemicals designated by ODW for regulatory decisions; (2) research on the toxicology of alternate disinfectants and disinfection byproducts to support revisions of the trihalomethane (THM) standard; (3) research to improve and validate methods of extrapolating data to improve risk assessments, with particular emphasis on initiators and promotors of carcinogenesis. A study of the feasibility of conducting drinking water epidemiology research is also being initiated.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. Health research under this objective supports the development of Health Advisories for guidance in emergency contamination episodes or spills. The ODW has developed a series of Health Advisories to provide guidance for exposures that can be tolerated for various time intervals. Chemicals of interest include chlorinated phenols, chlorinated benzenes, and fuel oils.

Health research is aimed toward designing the most cost-effective methods to identify and evaluate outbreaks of waterborne infectious diseases to help States improve their reporting. Assistance is provided to determine the cause of outbreaks and recommend remedial action. This activity is carried out with the CDC. The results from this activity are used not only to identify and stop the transmission of disease from common water sources but also to help contribute to improvements in standards and treatment processes by identifying the magnitude of the waterborne disease problem. Improved investigation and reporting methods are being published in 1984, based on the results of specific projects undertaken in three states.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $8,440,000 and 56.8 total workyears for this program, of which $2,698,600 was under the Salaries and Expenses appropriation and $5,741,400 was for extramural purposes under the Research and Development appropriation.

Provide the Health, Monitoring and Engineering Data Necessary to Revise Drinking Water Regulations. In 1983, toxicological studies focused on carinogenicity, mutagenicity and target organ toxicity for chemicals found in drinking water or used in the distribution system, e.g., 2, 4 dichlorophenol, haloacetonitriles, organotoxins, and coal tar and asphalt paints. The currently available health effects data on disinfectants and disinfectants by-products were summarized in the proceedings of the first international symposium on this subject. Studies on the role of waterborne asbestos in causing gastrointestinal cancer have been completed.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulation. Technical assistance was provided to States and municipalities on a continuing basis. Health effects personnel participated in investigating several waterborne disease outbreaks involving viral gastroenteritis and giardiasis. Toxicity studies on the aqueous components of qasoline, kerosene and fuel oils were conducted.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $5,396,300 supported by 59.3 total workyears for this program, of which $2,950,400 is for Salaries and Expenses and $2,445,900 is for Research and Development. The increase of $161,500 in the Salaries and Expenses appropriation reflects an expansion of research on microbiological problems of water distribution systems. The decrease of $1,381,500 in the Research and Development appropriation results largely from the completion of funding of cooperative research with the water utility industry.

Provide the Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Work will continue to fully evaluate treatment processes for removal of organic, inorganic, and microbial contaminants. This research will provide the ODW with a data base for the next triennial revision of the National Primary Drinking Water Regulations (NPDWR). Cost data will also be compiled for unit processes and treatment to do cost-effectiveness analyses of proposed treatment systems.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. This research will focus on technology which will assist water utilities in complying with drinking water regulations with particular emphasis on the needs of small systems. Areas included are: (1) maintaining microbial quality in distribution systems, (2) treatment technology, and (3) control of corrosion and unwanted additives. Research will determine factors which contribute to deterioration of water quality in distribution systems, methods for controlling these factors and evaluations of technologies for removing volatile organics and pesticides. Studies will be conducted on conditions affecting corrosion and its prevention, and characterization and control of unwanted additives from treatment chemical residuals and coating of pipes and other water contact surfaces.

1984 Program

In 1984, the Agency is allocating a total of $6,616,300 and 59.3 total workyears to this program of which $2,788,900 is under the Salaries and Expenses appropriation and $3,827,400 is for extramural purposes under the Research and Development appropriation.

Provide Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Work in the treatment area includes evaluations of processes for removal of volatile organic compounds, pesticides and other organics, and radionuclides. Work on inorganics removal is concentrating on field testing of various treatment systems with different raw waters and under a range of flow capacities. In the microbiological area, evaluations are being conducted on the effectiveness of treatment processes, disinfection, and other factors which contribute to microbial deterioration in distribution systems.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. The majority of violations of drinking water regulations occur in small systems (less than 10,000 population). The emphasis is therefore on technology which is appropriate for small systems. Research is being conducted on processes for removing organic, inorganic and particulate contaminants with emphasis on groundwater supplies. Research is addressing the causes of corrosion in water distribution systems and methods for prevention and control. Cooperative research with the water utility industry will begin in the areas of treatment of regulated contaminants and improved drinking water quality in distribution systems.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $7,165,000 and 65.4 total workyears for this program of which $2,980,700 was under the Salaries and Expenses Appropriation and $4,184,300 was for extramural purposes under the Research and Development appropriation.

Provide Health, Monitoring and Engineering Data Necessary to Develop and Revise Drinking Water Regulations. Research in 1983 emphasized high priority areas in support of new and revised drinking water regulations. These areas included the evaluation of treatment techniques for the removal of volatile organic contaminants (VOCs), of disinfection by-products, and of inorganic contaminants from drinking water. Specific outputs were reports on laboratory and pilot plant removing VOC's, on field experiences for removing organics by granular activated carbon (GAC) including GAC reactivation, and on the economics of water treatment processes.

Provide Health and Engineering Information to Assist States and Municipalities in Complying with Drinking Water Regulations. Research in 1983 evaluated technologies to help water utilities and regulatory agencies achieve compliance with drinking water regulations in cost-effective ways. Specific outputs included reports on removing trihalomethane precursors, on establishing corrosion control methods for a city's water supply and an initial evaluation of effects on water quality of lead leaching from pipe solder joints, and on the stability and effectiveness of chlorine disinfectants in water distribution systems.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $4,608,900 supported by 24.5 total workyears for this program, of which $1,170,700 is for Salaries and Expenses and $3,438,200 is for Research and Development. This reflects an increase of $63,500 and a decrease of $289,500 respectively. The decrease results from the completion of funding for the study of Temik in Florida and the completion of projects to develop methods for determining the quantity of subsurface microorganisms. The addition in Salaries and Expenses reflects an increase of in-house support costs.

Provide Scientific Methods and Data for Protection of Groundwater Resources. This research will support groundwater protection efforts in a number of program offices including Drinking Water, Solid Waste, Superfund, Pesticides and Toxic Substances, as well as State and local efforts. Although the research is directed toward providing widely applicable prediction tools, these tools will in most cases be specifically applicable to improving the implementation of the Underground Injection Control program and protection of underground sources of drinking water.

In order to provide the scientific bases for regulatory and management decisions on the protection of underground sources of drinking water, research is focusing in the following three areas: (1) improved methods for determining the transport and transformation of contaminants in the subsurface; (2) methods for predicting the behavior of pollutants in aquifers based on subsurface (site-specific) characteristics and pollutant characteristics; and 3) evaluation of aquifer *in situ* reclamation methods.

In the transport and fate area, acceleration of research in 1984 will permit the study of the interrelationship between biological and non-biological processes affecting groundwater quality in 1985 in order to include this data in predictive models. Specific attention will be given to the interaction of injection materials with geologic materials, which could affect transport and tranformation processes.

In the *in situ* aquifer restoration area, resources will be increased slightly in order to begin pilot scale evaluation of methods judged feasible and cost-effective in 1984 laboratory studies. Process parameters will be selected and optimized based on understanding of subsurface processes gained in our transport and fate research program.

1984 Program

In 1984, the Agency is allocating a total of $4,834,900 and 24.5 total work years to this program, of which $1,107,200 is under the Salaries and Expenses appropriation and $3,727,700 is for extramural purposes under the Research and Development appropriation.

Provide Scientific Methods and Data for Protecton of Ground Water Resources. A number of parameters have been identified which provide information on the fate and transport of contaminants in ground water. Research will be developing and evaluating improved methods for using these parameters (for example, oxidation reduction potential) in assessing groundwater contamination. Such technology is

available for surface water, but not for ground water. The effects of well materials and sampling methods on these parameters is being evaluated. Support for information transfer activities, specifically the National Groundwater Information Center and the International Ground Water Modeling Clearinghouse is provided. Laboratory studies are investigating how organic chemicals and pathogens of concern behave in the subsurface. This area is supplemented by research in the Hazardous Waste decision unit. In the in situ aquifer reclamation area, methods and data are being developed to determine the costs and applicability of practices which have the potential for success. Research will also be conducted on the effects of the contaminant Temik in Florida ground water.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $4,420,600 and 20.5 total workyears for this program of which $990,900 was under the Salaries and Expenses Appropriation and $3,429,700 was for extramural purposes under the Research and Development Appropriation.

Provide Scientific Methods and Data for Protection of Groundwater Resources. An article was published on "Biological Transformation of Organic Pollutants in Ground Water." The Sixth National Groundwater Quality Symposium, entitled "State, County, Regional, and Municipal Jurisdiction of Groundwater Protection," was held. The Third National Symposium and Exposition on Aquifer Restoration and Groundwater Monitoring was also held. A number of short training sessions were conducted for EPA Region, State, and EPA headquarters Personnel on the utilization of groundwater models.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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DRINKING WATER

Drinking Water Criteria, Standards & Guidelines

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)					
PROGRAM								
Criteria, Standards & Guidelines								
Salaries & Expenses		$5,353.7	$5,168.8	$5,168.8	$5,168.8		$5,640.0	$471.2
Abatement Control and Compliance		$2,663.3	$2,595.2	$3,095.2	$3,095.2		$4,545.2	$1,450.0
	TOTAL	$8,017.0	$7,764.0	$8,264.0	$8,264.0		$10,185.2	$1,921.2
TOTAL:								
Salaries & Expenses		$5,353.7	$5,168.8	$5,168.8	$5,168.8		$5,640.0	$471.2
Abatement Control and Compliance		$2,663.3	$2,595.2	$3,095.2	$3,095.2		$4,545.2	$1,450.0
Drinking Water Criteria, Standards & Guidelines	TOTAL	$8,017.0	$7,764.0	$8,264.0	$8,264.0		$10,185.2	$1,921.2
PERMANENT WORKYEARS								
Criteria, Standards & Guidelines		86.2	83.6	83.6	83.6		95.5	11.9
TOTAL PERMANENT WORKYEARS		86.2	83.6	83.6	83.6		95.5	11.9
TOTAL WORKYEARS								
Criteria, Standards & Guidelines		103.6	100.5	100.5	100.5		103.5	3.0
TOTAL WORKYEARS		103.6	100.5	100.5	100.5		103.5	3.0

Drinking Water Criteria, Standards and Guidelines

Budget Request

The Agency requests a total of $10,185,200 supported by 103.5 total workyears for 1985, an increase of $1,921,200 and 3.0 workyears from 1984. Included in this total is $5,640,000 for Salaries and Expenses and $4,545,200 for Abatement, Control and Compliance.

Program Description

This activity represents the entire Headquarters component of the drinking water abatement and control program. This involves the following:

Regulations Development and Review: EPA has the responsibility to review and revise the existing National Primary Drinking Water Regulations (NPDWR) in light of latest scientific and field evidence and, as necessary, to augment existing regulations with standards for newly identified contaminants.

Complementing enforceable primary drinking water regulations are health advisories. They are used principally to guide State and local authorities in deciding the course of action to take in potentially health-threatening situations by providing quantitative limits for transient exposure. Together, regulatory standards and health advisories serve as benchmarks for public health protection not only for drinking water supplies but also in other environmental programs.

The Agency also has the responsibility for establishing Underground Injection Control (UIC) program regulations for preventing contamination of underground drinking water sources by well injection of fluids. The Safe Drinking Water Act (SDWA) prohibits all underground injection that has not been sanctioned by appropriate EPA or State regulations. Regulations detailing the minimum requirements for operating programs were promulgated in 1980.

National Stewardship of PWS and UIC Programs: National program direction for the Public Water Systems Supervision (PWS) and Underground Injection Control programs is provided by Headquarters to assure consistency and progress in meeting the goals of the SDWA.

Ground-Water Protection: The need for ground-water protection is a growing national concern highlighted by the increasing number of ground-water contamination cases being discovered by the Agency's hazardous waste cleanup efforts and by the water systems. (About 80% of the top priority Superfund sites have contaminated ground water.) States and communities frequently call upon the laboratory and technical services capacity maintained for standards development to assist in identifying, assessing, and controlling contamination of public water systems which poses a human health risk. As cleanup activities are expanded under the Hazardous Waste and Superfund programs to find and confine contamination sources, more threats to drinking water supplies will likely be discovered. This will increase the demand for such advisory services.

DRINKING WATER CRITERIA, STANDARDS AND GUIDELINES

1985 Program Request

The Agency requests a total of $10,185,200 supported by 103.5 total workyears, of which $5,640,000 will be for the Salaries and Expenses appropriation and $4,545,200 will be for the Abatement, Control and Compliance appropriation. This

represents an increase of 3.0 workyears and $471,200 in the Salaries and Expenses appropriation, which reflects an Agency adjustment of personnel costs. The increase of $1,450,000 in the Abatement, Control and Compliance appropriation supports an increased effort in evaluating the health effects of both regulated and unregulated contaminants and a study on surface impoundments and their contamination potential.

Revision of the National Primary Drinking Water Regulations will continue to be the focal point of regulatory development efforts during 1985. In early 1985, we expect to complete the first phase of the revision with the proposal of maximum contaminant levels (MCLs) for volatile organic contaminants (VOCs) followed by promulgation late in the year. EPA will promulgate final Phase II recommended maximum contaminant levels (RMCLs) and simultaneously propose MCLs in late 1985. The final phases of revising the NPDWR, Phase III (radionuclides) and Phase IV (disinfectant by-products including trihalomethanes) will still be in the early stages of development in 1985. EPA will propose RMCLs during 1985 for Phase III.

In addition, we will continue to complement the enforceable primary drinking water standards with health advisories developed from toxicological information. The demand for health advisories has increased as the Agency's program to clean up hazardous waste sites revealed a large number of unregulated contaminants in groundwater supplies. These health advisories contain the best scientific information on the health risk. With the increase in resources the program will enhance the scientific content of advisories ensuring evaluation for long-term chronic, as well as short-term, exposures. These advisories will then better support their use as criteria for emergency response and remedial management decisions in other environmental programs.

The drinking water program will be faced with the challenge of the first year of full national implementation of the UIC regulations. EPA expects to be responsible for full or partial programs in 29 States and for most programs on Indian lands. The program emphasis shifts from delegating primacy programs and developing nonprimacy programs to program implementation. The highest priority will be to provide the guidance and support necessary so that Regions and States can implement effective programs. We will also continue to develop and exercise oversight to assure the adequacy of Regional and State programs.

In both the UIC and PWS programs, the Agency will continue to collect and analyze compliance data as well as compiling the data into a national report on progress of the program in meeting the goals of the Safe Drinking Water Act. The Agency will sponsor a followup study of surface impoundments to determine the potential risk to ground water posed by the various types of surface impoundments, the feasibility and cost of their control, the effectiveness of existing and prospective State programs, and the ability of existing and potential Federal regulatory frameworks for dealing with such problems. The study will also address surface disposal of brine generated during oil production. Following completion of this study, the Agency will begin analyzing the data gathered and move forward as warranted.

1984 Program

In 1984, the Agency is allocating a total of $8,264,000 supported by 100.5 total workyears for this program, of which $5,168,800 is for the Salaries and Expenses appropriation and $3,095,200 is for the Abatement, Control and Compliance appropriation. Extramural funds support projects to assemble the latest toxicological information on contaminants of concern, to compile data on human exposure to waterborne contaminants which may support new primary standards, to collect data on treatment technology, performance and cost, and the financial impact of regulatory requirements, to provide analytic support and technical expertise to address groundwater contamination issues, and to support activities for developing health advisories.

Phases I and II of the development of Revised National Primary Drinking Water Regulations are the focus of the program in 1984. Prior to proposing Phase I RMCLs in February 1984, the Agency continues to analyze comments received from the workshops and scientific data to determine health goals. The Agency is reviewing all comments on the RMCLs, as well as completing the technology and monitoring documents and the Regulatory Impact Analyses, in anticipation of proposing MCLs in early 1985. The Agency will propose RMCLs for Phase II in late 1984. A separate proposal will also be prepared for fluorides based upon the Surgeon General's report as part of the Phase II revisions. For Phase III (radionuclides) the Agency is about to begin sampling for the radionuclide and inorganic occurrence survey prior to proposal of RMCLs and MCLs. Finally, the Agency is reviewing work of the research and development program for Phase IV regulations. In addition to the revisions to the drinking water regulations, the Agency will continue to develop health advisories which apply to contaminants not covered by existing regulations.

Because UIC delegation of primacy did not proceed as rapidly as anticipated, processing the remaining primacy applications continues to be an important activity. By the end of 1984, we expect to have approved a total of 28 full and 8 partial State programs. The Agency will also operate Federal programs in nonprimacy States and on several Indian lands beginning in March 1984. We will also propose regulations for additional direct implementation programs.

In addition to oversight activities, the Agency's concern with environmental effects of Class I (deep injection) wells has led to a study of 21 sites to determine the extent and magnitude of the problem. The Agency will begin to structure a study on surface impoundments which will assist in determining their overall contamination potential. Meanwhile, we are continuing to provide staff support to the Deputy Administrator in the development of the Ground Water Protection Strategy. The Agency is working on final revisions to its Strategy, which focuses on building State institutional capabilities, assessing major unregulated sources of contamination such as surface impoundments and leaking underground storage tanks, creating a policy for increased consistency and coherence among EPA programs protecting ground water, and improving EPA's institutional capability by designating organizational responsibility.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $8,017,000 supported by 103.6 total workyears for this program, of which $5,353,700 was for the Salaries and Expenses appropriation and $2,663,300 was for the Abatement, Control and Compliance appropriation. Regulation development and review activities were conducted on various phases of developing revised primary drinking water regulations. As part of Phase I (VOCs), the Agency completed the Ground Water Survey, summarized comments on the Advance Notice of Proposed Rulemaking (published in March 1982), and conducted workshops where EPA solicited comments and ideas on issues connected with the regulation of these contaminants. Supporting documentation (14 occurrence and exposure documents, nine health effects criteria documents, draft technology and cost document, and draft analytical methods document) were prepared. The proposed RMCLs for VOCs were developed and reviewed within the Agency.

The ANPRM for Phase II was signed by the Administrator in late 1983, one public workshop was conducted, and three more were scheduled for 1984. Initial development of the RMCLs began with the completion of various support documents and studies. A comprehensive two-year national survey for inorganics and radionuclides was developed as the first step in the revisions for Phases II and III.

Health advisories were prepared for six additional chemicals. In the additives program, the Agency reviewed approximately 250 petitions, published the first edition of the National Academy of Science Codex, and prepared a notice to solicit for third party certification of additives.

By the end of 1983, the Agency had approved 12 full and 7 partial State UIC programs. In addition, the Agency proposed in the Federal Register Federal UIC programs for certain nonprimacy States and Indian lands. PWS primacy was delegated to one Territory, Northern Marianas, for the PWS program bringing the total to 51. In the PWS program, seminars were held on data management as part of an overall effort to provide for more accurate and up-to-date compliance data. The Agency also initiated an assessment of PWS direct implementation programs both in the States and on Indian lands. Technical assistance was provided to the States through the development of sanitary survey training manuals, a compendium of State management practices, operator certification materials, and treatment guides for small water systems. Staff support was provided to the Deputy Administrator for the development of an Agencywide Ground Water Protection Strategy.

The Agency's Ground Water Task Force reported to the Administrator on the extent of ground-water contamination, the roles and relationships among State and EPA programs, inconsistencies among existing EPA programs affecting ground-water quality, and unaddressed sources of contamination. The Task Force arrayed alternative actions EPA might take to improve its effectiveness in each of these areas, leading to the selection of a proposed strategy.

DRINKING WATER

Drinking Water State Program Resource Assistance

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Public Water Systems Supervision Program Grants								
Abatement Control and Compliance		$27,654.6	$21,204.0	$27,450.0	$27,450.0		$27,450.0	
	TOTAL	$27,654.6	$21,204.0	$27,450.0	$27,450.0		$27,450.0	
Underground Injection Control Program Grants								
Abatement Control and Compliance		$7,039.0	$6,094.2	$7,500.2	$7,500.2		$7,500.2	
	TOTAL	$7,039.0	$6,094.2	$7,500.2	$7,500.2		$7,500.2	
Special Studies & Demonstrations								
Abatement Control and Compliance		$1,900.0		$1,900.0	$1,900.0			-$1,900.0
	TOTAL	$1,900.0		$1,900.0	$1,900.0			-$1,900.0
Training								
Abatement Control and Compliance		$200.0		$200.0	$200.0			-$200.0
	TOTAL	$200.0		$200.0	$200.0			-$200.0
TOTAL:								
Abatement Control and Compliance		$36,793.6	$27,298.2	$37,050.2	$37,050.2		$34,950.2	-$2,100.0
Drinking Water State Program Resource Assistance	TOTAL	$36,793.6	$27,298.2	$37,050.2	$37,050.2		$34,950.2	-$2,100.0

Drinking Water State Program Resource Assistance

Budget Request

The Agency requests a total of $34,950,200 for the Abatement, Control and Compliance appropriation of which $27,450,000 is for the Public Water Systems Supervision Program (PWS) Grants and $7,500,200 is for the Underground Injection Control Program (UIC) Grants.

Program Description

The intent of the Safe Drinking Water Act is that States should assume the primary role for implementing and enforcing the drinking water and the underground injection control regulations. Federal financial assistance, in the form of grants, is provided to States to develop and maintain these programs. To be eligible for grants, States must have primary enforcement responsibility.

Public Water Systems Supervision Program Grants -- The program provides grants to States which have been delegated primary enforcement authority for implementing a Federally approved PWS program. EPA may also use the funds allotted to a nonprimacy State to defray the cost of Federal implementation of the program. The funds used by EPA also support travel associated with Federal implementation of the programs.

Underground Injection Control Program Grants -- This program provides grants to support State activities in implementing the Underground Injection Control program. As with the PWS program, EPA may use the funds allotted to a nonprimacy State for program implementation and travel associated with support activities in nonprimacy States.

Special Studies and Demonstrations -- This program includes resources for the National Rural Water Association for training and technical assistance to operators of small rural water systems.

Training -- This program includes funds for fellowships to State personnel in the public water systems supervision and underground injection control program areas and for academic grants.

PUBLIC WATER SYSTEMS SUPERVISION PROGRAM GRANTS

1985 Program Request

The Agency requests $27,450,000 for Abatement, Control and Compliance appropriation for public water systems supervision grants. There is no change from 1984 in the funds requested to support this program. These funds will support programs to supervise the application of primary drinking water regulations by public water systems in all 57 States and Territories, and on Indians lands either by the primacy States or by EPA in nonprimacy States.

During 1985 primary emphasis will shift from compliance by larger systems to improving the compliance rate among small systems, particularly in instances of violations posing serious health threats. States will conduct sanitary surveys of these systems to identify potential or existing problems and to evaluate the associated risks. In the course of these surveys, the States will conduct reviews of the files (general, chemical, and bacteriological files), self-monitoring reports,

complaints against the systems, and monthly operating and monitoring reports; investigate the supply, treatment, and distribution facility; sample (as required); notify systems of findings; and follow up to determine if progress is being made and provide technical assistance as necessary. In cases of persistent violations where no progress is indicated, the States will initiate formal enforcement activities. Another major 1985 activity will be the revision of programs to include the development of laboratory capability to support implementation of the volatile organic contaminants regulations and to strive toward full compliance with existing regulations.

In addition to these priority activities, the grants will support activities to maintain existing programs including data management and compilation of required annual reports, preparation of grant applications, development of program plans, financial management activities, and emergency response.

1984 Program

The Agency is allocating $27,450,000 for public water systems supervision grants to 57 States, Territories and Indian lands under the Abatement, Control and Compliance appropriation. Fifty-three States are receiving grants (one developmental grant to Pennsylvania), and EPA is using the funds allocated to the remaining States for EPA direct implementation activities. The grant funds support basic PWS programs, including such activities as laboratory certification, on-site evaluations in cases of persistent violations of regulatory requirements, and initiation of enforcement actions as necessary. The States are working to bring the systems in violation of the trihalomethane maximum contaminant levels (MCLs) and monitoring and reporting requirements into compliance. They are working toward improved compliance among small systems by developing State compliance strategies and goals. These strategies will provide for a State-specific compliance target, particularly focusing on small systems with serious violations. The strategies acknowledge that the small systems are usually under financial constraints and offer alternative methods for achieving and maintaining compliance. The State agencies also make their expertise available in implementing these strategies.

The grants also support management activities such as fiscal management, program planning, employee training, and emergency response.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

The Agency obligated $27,654,600 under the Abatement, Control and Compliance appropriation for public water system supervision grants to the 57 States and Territories. The Agency's general grant regulations allowed EPA to use grant funds allotted to nonprimacy States for direct implementation activities. Grants were awarded to primacy States, and EPA used the funds allotted to the nonprimacy States for implementation of the Federal programs.

State programs focused on achieving and maintaining compliance among public water systems. Data indicated that the large systems were generally in compliance while many of the smaller systems were facing major problems. These small systems are typically the ones with financial constraints and limited experienced personnel. To improve compliance among these systems the States provided guidance and assistance in determining causes and corrective actions for MCL violations. Where corrective action was not taken or no progress made, the State agencies initiated enforcement actions.

The grants also supported management activities such as program planning, financial management, implementation of regulatory changes, employee training, and response to contamination incidents.

UNDERGROUND INJECTION CONTROL PROGRAM GRANTS

1985 Program Request

The Agency requests $7,500,200 for grants under the Abatement, Control and Compliance appropriation. There is no change in the funding level of the program from 1984. The funds will support implementation of underground injection control programs for all 57 States and Territories and Indian lands. EPA will use grant funds allotted to nonprimacy States to support direct implementation activities.

Fiscal year 1985 will be the first full year of implementation by both EPA and many of the States. With the completion of the developmental phase of the program, emphasis will be redirected to support such activities as permit review and issuance, assessment of Class V (miscellaneous injection) wells, witnessing mechanical integrity tests, and compliance monitoring. The States and EPA will conduct on-site inspections of wells, following up on recalcitrant violators of permit conditions and initiating enforcement actions as necessary. In the area of permit reviews, highest priority is placed on review and issuance of permits for existing Class I wells (those which may inject hazardous waste) and existing Class III wells (which are used to extract minerals). Following the issuance of these permits, the States and EPA will be encouraged to process applications for all new oil and gas wells (Class II) in order to prevent the disruption of oil production.

The grant funds also support other activities such as program planning, financial management, employee training, and response to emergencies.

1984 Program

The Agency is allocating $7,500,200 for grants under the Abatement, Control and Compliance appropriation to support implementation of underground injection control programs in all 57 States and Territories and on Indian lands either directly by the States or by EPA in nonprimacy States. The States and EPA are at various stages of program implementation. States with primacy are issuing permits for existing Class I and III wells and new Class II facilities, conducting assessments of Class V wells, ensuring closure of Class IV wells (those that inject into an aquifer), witnessing mechanical integrity tests, reviewing compliance monitoring, and conducting surveillance and inspection of permitted wells.

EPA is not beginning full program implementation in nonprimacy States until mid-1984. At this time, we are establishing the administrative and procedural framework for program implementation and beginning review of permit applications, assessing Class V wells, and initiating the closure of Class IV wells. These Class IV wells must be closed within six months after promulgation of the program. Both the States and EPA are required to maintain inventory data and compile an annual report of monitoring and compliance data. The States and EPA also provide for emergency response capability.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

During 1983 the Agency obligated $7,039,000 under the Abatement, Control and Compliance appropriation to support underground injection control program grants. The major grant-supported activity was the review of existing State laws and regulations and preparation of regulatory and statutory amendments in order to conform to Federal regulatory requirements for program delegation. Nineteen State programs were approved for primacy by the end of 1983. Activities in these States centered around establishing permit programs (and issuance of permits), initiating Class V inventories, and ensuring the closure of Class IV wells. Training was also provided to well operators on the requirements of the UIC program. EPA used the funds allotted to nonprimacy States to perform aquifer mapping, inventory updates, data management, and training.

State-specific programs were also developed for each Federal implementation program and were published in the Federal Register on September 2, 1983.

SPECIAL STUDIES AND DEMONSTRATIONS

1985 Program Request

No funding is requested for 1985. The Agency believes that the National Rural Water Association has demonstrated the effectiveness of grass roots training and technical assistance programs to benefit small systems and that the individual State associations should be able to move toward self-sufficiency through the use of organizational dues and training fees.

1984 Program

The Agency is allocating $1,900,000 for grants under the Abatement, Control and Compliance appropriation to support the training and technical assistance activities of the National Rural Water Association. The National Association, through 31 State associations, provides guidance and instructions to public water systems on determining compliance, problem solution, and prevention of future problems. Five State associations are working closely with Indian Nations and the Indian Health Service in developing training programs focusing on water systems on Indian lands.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

The Agency obligated $1,900,000 for grants under the Abatement, Control and Compliance appropriation in support of the National Rural Water Association's outreach program. Each of the 31 State associations conducted at least 12 workshops where operators of small rural water systems were provided training and guidance on complying with the Safe Drinking Water Act. In addition to training, the State associations responded to an estimated 10,000 technical assistance requests from rural systems. Five State associations provided training designed specifically for Indian lands.

TRAINING

1985 Program Request

No funds are requested for this program in 1985. The Agency believes that there are sufficient opportunities for State personnel to obtain training in environmental and public health fields without Federal support.

1984 Program

The Agency is allocating $200,000 for grants under the Abatement, Control and Compliance appropriation to provide for training of State Agency personnel. These funds will provide training in the form of fellowships to State Agency personnel in areas related to public water systems supervision and underground injection control.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

During 1983 the Agency obligated $200,000 for grants under the Abatement, Control and Compliance appropriation. The funds supported academic training for 108 State agency personnel. Of these, 10 went to State personnel directly involved in State UIC programs and the remainder provided training to employees directly involved in State PWS programs.

DRINKING WATER

Drinking Water Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Public Water Systems Supervision Program Assistance								
Salaries & Expenses		$4,458.6	$4,992.9	$5,009.7	$4,699.2		$4,999.7	$300.5
Abatement Control and Compliance		$163.7			$20.0			-$20.0
	TOTAL	$4,622.3	$4,992.9	$5,009.7	$4,719.2		$4,999.7	$280.5
Underground Injection Control Program								
Salaries & Expenses		$3,458.6	$4,286.7	$4,099.9	$3,767.8		$4,640.4	$872.6
	TOTAL	$3,458.6	$4,286.7	$4,099.9	$3,767.8		$4,640.4	$872.6
TOTAL:								
Salaries & Expenses		$7,917.2	$9,279.6	$9,109.6	$8,467.0		$9,640.1	$1,173.1
Abatement Control and Compliance		$163.7			$20.0			-$20.0
Drinking Water Management	TOTAL	$8,080.9	$9,279.6	$9,109.6	$8,487.0		$9,640.1	$1,153.1
PERMANENT WORKYEARS								
Public Water Systems Supervision Program Assistance		122.3	119.1	119.1	119.1		119.5	.4

DRINKING WATER

Drinking Water Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Underground Injection Control Program	83.0	90.6	90.6	90.6		100.6	10.0
TOTAL PERMANENT WORKYEARS	205.3	209.7	209.7	209.7		220.1	10.4
TOTAL WORKYEARS							
Public Water Systems Supervision Program Assistance	130.9	132.4	132.4	132.4		132.4	
Underground Injection Control Program	100.6	120.8	119.5	119.5		129.5	10.0
TOTAL WORKYEARS	231.5	253.2	251.9	251.9		261.9	10.0

Drinking Water Management

Budget Request

The Agency requests a total of $9,640,100 supported by 261.9 total workyears for 1985 for the Salaries and Expenses appropriation. This represents an increase over the 1984 level of $1,153,100 and 10.0 workyears, reflecting increased efforts in Underground Injection Control (UIC) permitting in nonprimacy States.

Program Description

This subactivity, which consists of two major Regional programs, encompasses EPA Regional efforts to prevent and control the contamination of drinking water supplies and their sources.

Public Water Systems Supervision Program Assistance -- This program consists of Regional activities related to national implementation of drinking water regulations. The Regional Offices provide oversight and support to primacy States in administering public water systems supervision (PWS) programs and implement programs in those States which do not have primacy and on Indian lands where States do not have civil jurisdiction. The Regions assist States where specific problems are identified, evaluate State programs, and award the PWS grants. The Regions continue to respond to contamination incidents which may potentially affect public water supplies.

Underground Injection Control Program -- This program consists of Regional activities related to the protection of underground water sources. The Regions are responsible for ensuring implementation of the Underground Injection Control Regulations, either through oversight and assistance to primacy States or Federal implementation in nonprimacy States and on Indian lands. They are also responsible for review of sole source aquifer designation petitions. Grant awards for the UIC program are also administered by the Regions.

PUBLIC WATER SYSTEMS SUPERVISION PROGRAM ASSISTANCE

1985 Program Request

The Agency requests $4,999,700 for Salaries and Expenses supported by 132.4 total workyears for this program. This represents an increase of $300,500 in the Salaries and Expenses appropriation over 1984 to reflect an Agency adjustment of personnel costs and a decrease of $20,000 in the Abatement, Control and Compliance appropriation.

During 1985, we expect to delegate primary enforcement responsibility to two additional States, bringing the total to 54. EPA will negotiate with each State specific annual targets for reducing the violation rate. Although the PWS program has a high rate of compliance with existing standards and reporting requirements, the systems remaining out of compliance tend to be small systems, either recalcitrant or clearly lacking the ability to comply. EPA has issued a national compliance strategy which urges States to rank violations and address them in a systematic fashion.

While the Regions continue to encourage the remaining States to assume primacy, they also will be responsible for implementing Federal PWS programs in three States and on Indian lands. Federal programs will focus on compliance with microbiological and turbidity maximum contaminant levels (MCLs) as well as monitoring and reporting requirements, particularly among small systems. The Regions will focus on informal enforcement measures to assure compliance including site visits. Recalcitrant

violators will be referred for formal enforcement action. The Regional Offices will also work with the systems in implementing and improving compliance with trihalomethane (THM) regulations. EPA is allowed use of the PWS grant funds allotted to nonprimacy States for conducting program activities.

The Regions are also responsible for oversight of primacy States, which will include working with the States in achieving increased compliance particularly for microbiological and turbidity MCLs and for the inorganic and radionuclide standards. As part of this effort, the Regional Offices will negotiate compliance targets with States and follow up to ensure that the States are making progress in achieving their goals. They will guide and assist States before the actual implementation of the volatile organic compounds regulations as well as certify the necessary laboratories for conducting required analyses.

The Regions will respond to contamination of public water supplies, usually by a ground-water source located in the vicinity of hazardous waste sites. They will take an active role in these situations by working with the States in gathering information, assessing the health impacts, and establishing the necessary EPA groundwork to develop an EPA and State response. The Agency will negotiate an action plan with the States which will delineate cleanup responsibilities and time schedules. At the same time, they will make available to the States and utilities their services and expertise on determining health effects and levels of contamination, investigating pathways of contamination, and advising on the proper procedures to correct the situation.

1984 Program

The Agency is allocating a total of $4,719,200 supported by 132.4 total workyears for this program, of which $4,699,200 is for the Salaries and Expenses appropriation and $20,000 is for the Abatement, Control and Compliance appropriation. We expect one additional State to assume primacy during 1984 for a total of 52 primacy States. EPA will implement the program on Indian lands and in the remaining five nonprimacy States. The Regions are continuing to work with these nonprimacy States to encourage their assumption of primacy.

The Agency is emphasizing increased compliance in nonprimacy States, particularly among small systems. They are focusing on decreasing the number of persistent violations of microbiological requirements and chronic violations of inorganic and radiological requirements. The Regions are conducting informal enforcement activities (phone calls, letters, on-site visits) in an effort to achieve increased compliance. Enforcement actions are being initiated when no action has been taken or progress is not being made. In addition, the Regions are working toward full compliance with the THM regulations by providing guidance and technical assistance to those systems having problems meeting the regulatory requirements. Information and experience gained during implementation will be used by Headquarters in revising the THM regulations during Phase IV of the regulatory process. Other activities in nonprimacy States include certifying laboratories, preparing inventory updates and preparing annual reports. The Agency uses the PWS grant allotments of the nonprimacy States to support these activities in the nonprimacy States.

Regional oversight activities are focusing on State compliance rates to determine the effectiveness of the programs and on progress in meeting environmental goals. The Regional Offices provide technical assistance and guidance to the States in implementing the THM regulations as well as in identifying specific problems and corrective actions in emergency situations. They also ensure proper management of the grant program.

The Regions are responsible for planning, implementing, and evaluating State program activities as part of Regional management responsibilities. Responsibilities include providing input into the development of National policies and regulations, and responding to Congressional inquiries and citizen complaints. The

Regions also are assessing underground and surface water contamination incidents which may affect public water supplies, advising programs on precautions necessary to protect public health, and coordinating activities with Superfund and other emergency response programs at the Regional, State, and local levels when public water supplies are involved. They are working with the National program in providing health advice on the toxicology of unregulated contaminants identified in public water supplies.

1984 Explanation of Changes from the Amendment

The net decrease of -$290,500 results from the following actions:

-Reprogrammings. (-$290,500) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$24,600 to the Salaries and Expenses appropriation and a net increase of +$20,000 to the Abatement, Control and Compliance appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$335,100, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

During 1983 the Agency obligated $4,622,300 supported by 130.9 total workyears for this program, of which $4,458,600 was for the Salaries and Expenses appropriation and $163,700 was for the Abatement, Control and Compliance appropriation. The program continued to support State activities aimed at assuring implementation of drinking water regulations. The Region VII office worked closely with Iowa in the transition period before it returned primacy to the State. The Agency also delegated primacy to the Northern Mariana Islands, bringing the total number of primacy States and Territories to 51. EPA was responsible for implementing programs in the remaining nonprimacy States and on Indian lands.

In the six nonprimacy States and on Indian lands, Regional activities focused on assuring compliance among small systems. The Regions emphasized compliance efforts in those systems which persistently violated monitoring requirements or that posed serious health threats. They conducted sanitary surveys, which are the primary means of technical assistance to systems with water quality problems. When violations were detected, the Regions issued warnings and initiated formal followup. They also maintained and analyzed data on compliance. They assisted community systems with MCL violations in an effort to help solve individual problems. Other activities included preparing annual reports on the program's progress, updating inventory data and providing technical assistance and guidance as requested, and developing strategies for delegating the PWS program to the remaining nonprimacy States.

Regional overview of primacy States focused on State program accountability to foster improved compliance. Regions provided assistance to States in verifying the accuracy of their data systems. Approximately half the States have also prepared compliance strategies. Regions also reviewed and approved State grant applications, conducted on-site reviews of State activities, and conducted audits of State grants.

Regional management activities included the administrative and compliance support for both primacy and nonprimacy States such as responding to Congressional inquiries and citizen complaints and analyzing nationwide compliance data for inclusion into annual reports. They provided assistance to the States in revising their programs to include any regulatory updates. Coordination of the PWS program with other related programs at the Regional and State levels was expanded to ensure adequate protection of drinking water sources in the event of contamination incidents.

UNDERGROUND INJECTION CONTROL PROGRAM

1985 Program Request

The Agency requests $4,640,400 supported by 129.5 total workyears under the Salaries and Expenses appropriation, an increase of $872,600 and 10.0 workyears over 1984. The increase will support increased UIC permitting in nonprimacy States by EPA in 1985 as well as an Agency adjustment for personnel costs.

Agency activities related to the protection of underground sources of drinking water are divided into the following areas: oversight of States with primacy for UIC programs, implementation of programs in nonprimacy States, designation of sole source aquifers, and Regional management.

Oversight of primacy States will include reviewing State activities to ensure program consistency and to evaluate environmental progress on ground water protection. The Regions will review annual State compliance and monitoring reports to assess compliance with the regulations as well as identify problem areas and provide technical assistance on mechanical integrity testing and permit application review.

Direct Federal programs in nonprimacy States will be in the first full year of implementation. During 1985 Regional activities will focus on reviewing permit applications for existing Class I and III wells (deep injection and mining), which present the greatest danger to underground sources of drinking water, new Class II wells (oil and gas), witnessing mechanical integrity tests, and assessing Class V wells (miscellaneous) to determine the need for regulation. They will monitor compliance reports and provide assistance to the operators as necessary. In cases of serious non-compliance or where no action is being made to correct deficiencies, the Regional Offices will initiate enforcement actions. They will maintain inventory data and prepare an annual report of State activities. As in primacy States, they will begin to conduct a technical review of program requirements to determine if regulatory changes are needed. The UIC grant funds will partially support these nonprimacy State activities.

In addition to protecting underground sources of drinking water from contamination caused by improper injection practices, the Agency is responsible for designating and protecting sole source aquifers from contamination. During 1985, the Agency expects to designate three aquifers as sole sources of drinking water. The Agency is also responsible for ensuring that Federally financed projects in the recharge area of a sole source aquifer will not potentially contaminate the designated aquifer.

1984 Program

In 1984, the Agency is allocating $3,767,800 supported by 119.5 total workyears to this program under the Salaries and Expenses appropriation. During the second half of 1984 the Agency will begin implementing Federal UIC programs in nonprimacy States and programs on Indian lands. In addition to ensuring the implementation of the UIC regulations, the Regions are responsible for implementing the sole source aquifer program, providing coordination of ground-water activities, and conducting Regional management activities.

The Regions also are continuing to process the remaining State primacy applications and are negotiating with States on program plans and implementation activities. For those States with primacy, the Regional offices are reviewing compliance and monitoring reports and providing guidance and assistance on mechanical integrity testing and technical program requirements. They are reviewing the States' annual report data and processing the information for compilation into the annual report of program accomplishments. They are also responsible for managing the State grant program, which includes review of program plans, negotiating changes, grant award, and grant audit.

In the direct implementation programs, activities are focusing on working with facility operators to notify them of the UIC requirements, issuing permits for existing Class I and III and new Class II facilities (in order to prevent the disruption of oil and gas production). Another major activity will be ensuring that Class IV wells are properly closed within six months of promulgation and initiating the assessment of Class V wells to determine regulatory need. Other activities will include updating inventory data and witnessing mechanical integrity tests. The Agency is using the Underground Injection Control grants allotted to these nonprimacy programs to support its implementation activities.

The Regions will continue to process applications for sole source aquifers. We anticipate three designations during 1984. The Agency is reviewing proposed Federally financed projects on sole source aquifers to ensure they will not endanger the sole source aquifer.

1984 Explanation of Changes from the Amendment

The net decrease of -$332,100 results from the following actions:

-Reprogrammings. (-$332,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$25,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$357,100, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

The Agency obligated $3,458,600 supported by 100.6 total workyears under the Salaries and Expenses appropriation. The funds were used to support activities related to the protection of ground water.

During 1983, the program focused on processing primacy applications. The Regions worked with the States in developing their programs, negotiated changes and processed final applications to Headquarters. The Regions also managed the UIC grant program and provided guidance and assistance in response to technical aspects of the program to those States which had already been delegated primacy.

The Regions developed State-specific nonprimacy programs which were proposed in the Federal Register on September 2, 1983. The Agency conducted inventories of existing wells, provided for the mapping of aquifers, and ensured that the proper procedural framework for implementation activities such as the permit process and Class V assessment were established.

The Regions continued to review petitions for aquifer designations. They also reviewed a limited number of Federally financed projects to ensure no contamination potential exists.

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DRINKING WATER

Drinking Water Enforcement

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Drinking Water Enforcement								
Salaries & Expenses		$785.5	$1,114.3	$1,130.6	$1,113.8		$1,374.5	$260.7
	TOTAL	$785.5	$1,114.3	$1,130.6	$1,113.8		$1,374.5	$260.7
TOTAL:								
Salaries & Expenses		$785.5	$1,114.3	$1,130.6	$1,113.8		$1,374.5	$260.7
Drinking Water Enforcement	TOTAL	$785.5	$1,114.3	$1,130.6	$1,113.8		$1,374.5	$260.7
PERMANENT WORKYEARS								
Drinking Water Enforcement		21.7	29.7	29.7	29.7		33.2	3.5
TOTAL PERMANENT WORKYEARS		21.7	29.7	29.7	29.7		33.2	3.5
TOTAL WORKYEARS								
Drinking Water Enforcement		21.7	29.7	29.7	29.7		34.7	5.0
TOTAL WORKYEARS		21.7	29.7	29.7	29.7		34.7	5.0

Drinking Water Enforcement

Budget Request

The Agency requests a total of $1,374,500 supported by 34.7 total workyears for 1985 for this subactivity under the Salaries and Expenses appropriation. This represents an increase of $260,700 and 5.0 workyears from 1984. This program element includes both Headquarters and Regional resources.

Program Description

The Safe Drinking Water Act (SDWA) charges EPA to establish minimum requirements for programs to assure that all drinking water supplies are free from contamination and to protect underground sources of drinking water from contamination arising from unsafe injection practices. The Act, however, clearly intended that the States would be responsible for enforcing these programs. Should a State be unable or unwilling to do so, EPA would assume the responsibility.

Drinking Water Enforcement -- This program encompasses enforcement for two Agency programs.

The Public Water Systems (PWS) Supervision program is responsible for assuring the implementation of the drinking water regulations either by oversight of primacy States or by direct implementation in nonprimacy States and Indian lands. The enforcement activities associated with this program include providing legal support against violators of the statutory provisions in nonprimacy jurisdictions. As part of this, the Regions are responsible for developing the technical and supporting documentation for enforcement actions, providing expert testimony, and participating in negotiations with violators. Other enforcement responsibilities include review of primacy applications for conformance with enforcement requirements and developing critical data relating to emergency actions in the face of imminent health hazards under Section 1431 of the SDWA.

The Underground Injection Control (UIC) program is responsible for preventing the contamination of underground sources of drinking water by unsafe injection practices. The enforcement program participates in the review of primacy applications, ensuring that all enforcement requirements are met. In nonprimacy States, activities center on working with the drinking water personnel to develop Federal programs for nonprimacy States and Indian lands, reviewing permits for administrative and legal considerations, initiating enforcement actions against violators, and providing assistance in emergencies as necessary.

DRINKING WATER ENFORCEMENT

1985 Program Request

The Agency requests a total of $1,374,500 supported by 34.7 total workyears for this program for 1985 in the Salaries and Expenses appropriation. This increase of $260,700 and 5.0 workyears over 1984 will cover permitting activities associated with the full implementation of the UIC program in nonprimacy jurisdictions.

During 1985 enforcement activities in the PWS program will focus on compliance with microbiological and turbidity maximum contaminant levels, particularly among small systems. As part of this compliance effort, the enforcement program will work with the drinking water program personnel in negotiating compliance targets and schedules with the systems in violation of the maximum contaminant level. They will continue to supply the technical support in legal actions taken against

recalcitrant violators. This will include developing the technical and support documentation for cases referred to EPA's Office of Enforcement and Compliance Monitoring and ultimately the Department of Justice, as well as providing testimony. They will provide support for cases referred by State authorities if they choose to pursue violations under Federal law.

Regional enforcement activities for the UIC program will focus on the administrative aspects of permit issuance in nonprimacy jurisdictions. This will involve the administrative review of the application, working with the drinking water personnel on the review of the technical aspects, conduct of hearings as required, and issuance of the final permit. They will review compliance reports to ensure adherence to the regulations and, as necessary, initiate enforcement actions.

1984 Program

The Agency is allocating $1,113,800 supported by 29.7 total workyears during 1984 in the Salaries and Expenses appropriation. The enforcement program is working closely with the drinking water program in implementing the compliance strategies for public water systems supervision programs and with the States in developing compliance targets and providing alternative ways which compliance can be achieved and maintained especially for small systems. They are conducting the enforcement aspects of Federal programs in nonprimacy States and Indian lands, initiating formal enforcement proceedings against recalcitrant violators, preparing the back-up and technical documents for the Office of Enforcement and Compliance Monitoring, and providing testimony in support of the cases. They are also responsible for reviewing the enforcement section of primacy applications.

During 1984, the Regions are beginning implementation of UIC programs in non-primacy States and Indian lands. Activities focus on reviewing the legal and administrative aspects of UIC permits to be issued. Regions will be initiating formal enforcement actions against operators not complying with the UIC regulations and reviewing additional primacy applications. To ensure adequate provisions for enforcement of the program, the Regions are assisting in the development of Federal programs for programs not delegated to the States during 1984.

1984 Explanation of Changes from the Amendment

The net decrease of -$16,800 results from the following action:

-Reprogramming. (-$16,800) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$16,800, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $785,500 supported by 21.7 total workyears for this program under the Salaries and Expenses appropriation. During 1983, EPA referred nine civil actions for violations of the Safe Drinking Water Act to the Department of Justice for filing and prosecution.

Drinking water enforcement activities also included participation in development activities for the Federal UIC programs for nonprimacy States and Indian lands and review of draft and final UIC State program approval applications. Nineteen programs were approved by the end of 1983.

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HAZARDOUS WASTE

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$34,088.3	$35,038.6	$40,694.1	$38,947.6		$45,724.1	$6,776.5
Abatement Control and Compliance	$63,185.4	$58,150.4	$68,099.2	$68,120.2		$75,934.4	$7,814.2
Research & Development	$21,311.2	$16,923.7	$21,623.7	$21,589.2		$21,609.4	$20.2
TOTAL, Hazardous Waste	$118,584.9	$110,112.7	$130,417.0	$128,657.0		$143,267.9	$14,610.9
PERMANENT WORKYEARS	627.7	625.8	794.4	799.6		887.3	87.7
TOTAL WORKYEARS	790.7	830.0	1,015.1	1,015.1		1,090.2	75.1
OUTLAYS	$127,165.0	$114,192.0	$126,750.7	$126,912.7		$137,748.6	$10,835.9
AUTHORIZATION LEVELS	Authorization for the Resource Conservation and Recovery Act expired September 30, 1982. Reauthorization pending.						

HAZARDOUS WASTE

OVERVIEW AND STRATEGY

Subtitle C of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, provides the legislative mandate for the Federal development of effective national programs to regulate hazardous wastes from generation, through transportation, storage, or treatment, to disposal. RCRA also imposes significant civil and criminal penalties for failure to comply with Federal requirements. The RCRA program is designed to respond comprehensively to the environmental and public health problems caused by hazardous wastes. It does this through regulatory development, State program authorization, permit issuance, enforcement, and research and development.

STRENGTHENING THE REGULATORY PROGRAM

The Agency's strategy for the hazardous waste program involves regulating those wastes or processes that are not currently covered or are inadequately covered under existing RCRA regulations. It provides national guidance and oversight to the Regions and States for implementing the hazardous waste program, and it includes reviewing and revising existing hazardous waste regulations for areas that provide the greatest environmental benefits.

The Agency promulgated the core RCRA regulations between May 1980 and July 1982. The regulations establish lists and characteristics of hazardous waste (Section 3001); generator and transporter requirements (Sections 3002 and 3003); financial responsibility, interim status, and technical permitting standards for new and existing storage, treatment, and disposal facilities (Section 3004); and requirements for State programs and permits (Sections 3005 and 3006).

Since promulgating the core regulations, the Agency has embarked on an intensive effort to finalize the hazardous waste regulatory program. However, gaps still exist in the coverage of the RCRA hazardous waste program. To fill these gaps, the Agency is reviewing additional listings of hazardous wastes, focusing particularly on the organic chemical industry. The Agency is re-examining the small quantity generator exclusion. It is also undertaking the following major new regulatory efforts in 1984 and 1985: Waste oil; boilers burning hazardous waste; restricting certain wastes from land disposal; and air emissions from hazardous waste facilities. The Agency will also begin the remaining RCRA Section 8002 large volume studies in 1985.

The Agency will propose land disposal liner standards, promulgate regulatory amendments for liquids in landfills and class permits for storage facilities, and propose amendments for underground tanks and miscellaneous hazardous waste standards. Regulatory impact analyses to support these efforts will identify potential areas for increased program effectiveness and cost savings. The preliminary findings of a recent survey, undertaken to develop data bases to support regulatory impact analyses, suggest that as much as 150 million metric tons of hazardous waste were generated in 1981, compared to previous annual estimates of 40 million metric tons.

DEVELOPING STATE PROGRAMS

One of the Agency's highest RCRA program priorities in 1984 and 1985 is to authorize States to operate their own hazardous waste programs in lieu of the Federal regulatory program. State programs are authorized in phases: Phase I - manifest and interim status standards; Phase IIA - permitting tanks, containers, and piles; Phase IIB - permitting incineration facilities; and Phase IIC - permitting land disposal facilities and surface impoundments. The Agency has already granted interim authorization to States and Territories whose programs provide substantially equivalent coverage to that of the RCRA regulations.

State programs became eligible for full authorization in January 1983. In accordance with RCRA statutory requirements, interim authorization will expire in January 1985. States with interim authorization must receive full authorization by that date or the responsibility to operate their hazardous waste program will revert to EPA. However, States which miss the deadline can continue to develop programs for full authorization at a later date. The Agency assists the States to upgrade their program capabilities to meet Federal standards. It also provides guidance on development of applications for full authorization and approves State applications. By the end of 1985, the Agency estimates 40 States to be fully authorized and an additional 11 States will have applications under Agency review.

In addition to program development guidance, the Agency will continue to provide financial assistance to States to encourage them to accept and to implement their own hazardous waste program, as RCRA envisions. If States do not have interim or full authorization, the Agency must administer the RCRA program. However, since Agency policy encourages State participation even prior to authorization, Cooperative Arrangements allow States to operate parts of the RCRA program on behalf of the Agency and to receive financial assistance.

ISSUING RCRA PERMITS

The issuance of environmentally sound permits is another major RCRA priority. The ultimate success of RCRA rests on national progress in permitting treatment, storage, and disposal facilities. In 1982, the Agency, in cooperation with interim authorized States, began processing permits for storage and treatment of hazardous wastes in tanks, containers, and piles. However, when the permit standards for incineration and land disposal facilities became effective, the Regions and States shifted their permitting emphasis to incineration and land disposal facilities because of their greater potential for adverse environmental impacts. By the end of 1983, EPA and the States had made final determinations on over 500 permit applications. The Agency estimates that an additional 1,400 permit actions will be completed by the end of 1985.

IMPROVING RCRA COMPLIANCE

The Agency's compliance strategy places priority on inspecting major hazardous waste handlers. These major handlers include all facilities required to comply with ground water monitoring requirements; incineration facilities; and selected storage and treatment facilities, generators, and transporters. During these inspections, EPA and the States will focus on evaluating compliance with the interim status standards with special emphasis on ground water monitoring, closure/post-closure plans, and financial assurances.

EPA and States will expand their compliance monitoring programs in 1984 and 1985 to include activities which support the permit program such as pre-permit inspections and initiating enforcement actions if these facilities are out of compliance with the interim status standards. In addition, EPA and the States will enforce against late and/or incomplete permit applications and violations of recently issued permit conditions.

EPA and the States will work to reduce the number of significant violations through an increased emphasis on issuing Compliance and Administrative Orders and assessing consistent penalties nationwide. Where States lack the authority to assess penalties, EPA may intervene using federal authority.

RESEARCH AND DEVELOPMENT

The research and development program provides the scientific and engineering basis for characterizing wastes, determining the specific problems they represent, and formulating the controls necessary for their proper management. Research also plays a key role in implementing the program at the State level by providing information and technical assistance to permitting and enforcement officials. It

also supports responses for cleaning up and removing spills of hazardous substances. More specifically, the research program is organized to achieve the following objectives: Developing the tests and procedures needed for characterizing wastes; developing technical data needed to support treatment, storage, and disposal regulations; developing technical data to support permitting and enforcement actions; developing the techniques and equipment needed to prevent and contain hazardous spills; providing quality assurance for sample collection and analysis activities; and conducting the assessment and control research necessary to address dioxin.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase+ Decrease- 1985 vs. 1984
RCRA Standards Proposals and Promulgations.....	10	15*	16	22	+6
Section 3001 Listings Proposal & Promulgation.....	2	--	6	11	+5
Implementation Guidances.....	17	20	15	20	+5
Reports to Congress.	--	--	1	2	+1
States with Hazardous Waste Grant/Cooperative Arrangements...	51	56	51	51	0
States with Authorization:					
Phase I only.....	25	7	15	--	-15
Phase I and II.....	16	25	21	--	-21
Full.....	--	18	11	40	+29
Compliance Monitoring Inspections:					
EPA.....	3,873**	1,085	915	1,399	+484
State.....	12,874	10,320	11,970	12,236	+266
Permit Call-Ins:					
EPA.....	758	325***	774	137	-637
State.....	594	--	276	205	-71
Permits in Process:					
EPA.....	1,132	500***	1,652	918	-734
State.....	1,052	--	1,038	1,377	+339
Final Determinations:					
EPA.....	249	575***	342	294	-48
States.....	295	--	395	440	+45

*Includes listing actions

**Includes Cooperative Arrangement State inspections

***Nationwide permit estimates

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HAZARDOUS WASTE

Hazardous Waste Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Scientific Assessment							
Salaries & Expenses	$832.3	$960.9	$1,060.9	$1,060.9		$1,020.0	-$40.9
Research & Development	$615.4	$550.9	$810.9	$980.4		$811.5	-$168.9
TOTAL	$1,447.7	$1,511.8	$1,871.8	$2,041.3		$1,831.5	-$209.8
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$3,108.0	$2,986.5	$2,986.5	$2,899.1		$3,905.0	$1,005.9
Research & Development	$4,019.7	$4,029.9	$4,999.9	$4,936.9		$6,215.4	$1,278.5
TOTAL	$7,127.7	$7,016.4	$7,986.4	$7,836.0		$10,120.4	$2,284.4
Health Effects							
Salaries & Expenses	$358.3	$381.2	$381.2	$381.2		$756.4	$375.2
Research & Development	$691.7	$586.9	$586.9	$586.9		$586.9	
TOTAL	$1,050.0	$968.1	$968.1	$968.1		$1,343.3	$375.2
Environmental Engineering & Technology							
Salaries & Expenses	$4,998.7	$3,684.7	$3,768.2	$3,836.4		$4,784.6	$948.2
Research & Development	$13,431.0	$9,567.1	$12,597.1	$12,513.1		$11,567.3	-$945.8
TOTAL	$18,429.7	$13,251.8	$16,365.3	$16,349.5		$16,351.9	$2.4
Environmental Processes & Effects							
Salaries & Expenses	$2,823.3	$2,452.3	$2,535.0	$2,535.0		$2,681.3	$146.3
Research & Development	$2,553.4	$2,188.9	$2,628.9	$2,571.9		$2,428.3	-$143.6
TOTAL	$5,376.7	$4,641.2	$5,163.9	$5,106.9		$5,109.6	$2.7
TOTAL:							
Salaries & Expenses	$12,120.6	$10,465.6	$10,731.8	$10,712.6		$13,147.3	$2,434.7
Research & Development	$21,311.2	$16,923.7	$21,623.7	$21,589.2		$21,609.4	$20.2
Hazardous Waste Research TOTAL	$33,431.8	$27,389.3	$32,355.5	$32,301.8		$34,756.7	$2,454.9

HAZARDOUS WASTE

Hazardous Waste Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Scientific Assessment	14.0	14.1	16.1	16.1		14.1	-2.0
Monitoring Systems & Quality Assurance	21.2	25.0	25.0	25.0		36.0	11.0
Health Effects	4.0	4.0	7.6	7.6		8.0	.4
Environmental Engineering & Technology	79.8	60.0	68.0	68.0		83.4	15.4
Environmental Processes & Effects	35.3	30.8	33.3	33.3		37.9	4.6
TOTAL PERMANENT WORKYEARS	154.3	133.9	150.0	150.0		179.4	29.4
TOTAL WORKYEARS							
Scientific Assessment	18.4	20.6	23.6	23.6		21.1	-2.5
Monitoring Systems & Quality Assurance	27.9	35.0	35.0	35.0		43.0	8.0
Health Effects	4.0	4.0	8.0	8.0		8.0	
Environmental Engineering & Technology	108.9	77.0	87.0	87.0		102.4	15.4
Environmental Processes & Effects	48.5	50.5	53.0	53.0		53.0	
TOTAL WORKYEARS	207.7	187.1	206.6	206.6		227.5	20.9

Hazardous Waste Research

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimated 1985
Develop Techniques and Procedures to Characterize Wastes and Listing and Other RCRA Regulatory Activities			
- Prepare health and environmental effects profiles for specific chemicals (Scientific Assessment)	9/83	9/84	9/85
- Prepare hazard profiles for specific chemicals (Scientific Assessment)	9/83	9/84	9/85
- Evaluate inductively coupled plasma technique (Monitoring)		9/85	9/85
- Provide research support on final evaluation of prescreen protocol (Health)		10/86	10/86
Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations			
- Evaluate the volatile organic industry stack sampling train (Monitoring)		9/85	9/85
- Prepare report on synthetic liner design, operation and maintenance for waste management facilities (Engineering)	9/85	9/86	9/86
Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities			
- Prepare draft report on evaluation of existing alternative systems for hazardous waste treatment (Engineering)	9/85	9/85	
- Prepare hydrogeological protocol or determining the suitability of a site for waste disposal (Environmental Processes)	12/85	12/85	

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimated 1985
Develop Techniques & Procedures to Prevent & Contain Hazardous Materials Releases			
- Field evaluate biological protocol for assessment of hazardous releases (Environmental Processes)		9/85	9/85
Conduct the Assessment and Control Research Necessary to Address Dioxin			
- Prepare guidance for exposure and risk assessments from dioxin (Scientific Assessment)		7/84	9/85
- Prepare report on the use of UV photolysis and APEG reagents on dioxin-contaminated soils (Engineering)		9/85	9/85

Hazardous Waste Research

Budget Request

The Agency requests a total of $34,756,700 supported by 227.5 total workyears for 1985, an increase of $2,454,900 and 20.9 permanent workyears from 1984. Included in this total is $13,147,300 for Salaries and Expenses and $21,609,400 for Research and Development, with increases of $2,434,700 and $20,200 respectively. The increases occur mainly in the monitoring systems and quality assurance and health effects program elements, respectively. These increases will support the validation of waste characterization methods for listing/delisting decisions and accelerate the development of an inexpensive battery of health tests for screening wastes for listing/delisting purposes.

Program Description

The Resource Conservation and Recovery Act (RCRA) authorizes a regulatory program to identify those wastes which pose a substantial hazard to human health or the environment, and management standards sufficient to prevent such harm. Research funded through this program provides the scientific and engineering basis for characterizing and determining the extent of the problems and for formulating controls. Section 311 of the Clean Water Act of 1977 (CWA) and its amendments also mandate some of the research conducted under this program, specifically the hazardous materials release efforts.

Objective 1. Develop Techniques and Procedures to Characterize Waste for Listing and Other RCRA Regulatory Activities. Section 3001 of RCRA requires that the Agency designate hazardous wastes and the characteristics of wastes which cause them to be hazardous. Research under this objective develops analytical procedures and techniques required to characterize a waste and assess the hazards posed from exposure that will be used for listing/delisting decisions by the Office of Solid Waste.

Objective 2. Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Section 3004 of RCRA requires the Agency to promulgate regulations and establish performance standards for the treatment, storage and disposal of hazardous waste as may be necessary to protect human health and the environment. Research under this objective develops the engineering and technical data necessary to support the Agency in the development and revision of hazardous waste regulations.

Objective 3. Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Section 3005 of RCRA requires that all hazardous waste treatment, storage, and disposal be conducted in accordance with operating permits. This research provides the necessary data and techniques for permit writers to assess permit applications and provide enforcement officials with legally defensible sampling and analysis procedures and information to ensure compliance with permits and agreements.

Objective 4. Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Section 311 of the Clean Water Act mandates Spill Prevention Control and Countermeasure (SPCC) plans be prepared for all facilities engaged in the production, storage, refining, processing and distribution of hazardous materials, and that the Agency maintain an emergency support program. Research supporting this objective assesses the most cost-effective technology and scientific techniques available for prevention and control of releases of hazardous substances so that emergency response personnel can direct countermeasure operations.

Objective 5. Provide Quality Assurance to the Hazardous Waste Program. A quality assurance program is being conducted to provide a scientific data base of known quality to support RCRA regulatory activities. The program includes a repository of calibration standards, reference materials and solutions and on-site evaluations of contractor laboratories.

Objective 6. Conduct the Assessment and Control Research Necessary to Address Dioxin. Due to discovery of numerous instances of dioxin-contaminated soils, fish, and wastes in various parts of the United States, concern is increasing about the magnitude of the dioxin problem in this country. Research supporting this objective will determine the nature and extent of dioxin contamination in the U.S., evaluate the potential for human and environmental effects, and determine the efficacy and costs of potential control technologies.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $1,831,500 supported by 21.1 total workyears for this program, of which $1,020,000 is for Salaries and Expenses and $811,500 is for Research and Development. This reflects a decrease of $40,900 in Salaries and Expenses, a decrease of $168,900 in Research and Development, and a decrease of 2.5 total workyears. These resources were transferred to the interdisciplinary program to consolidate ORD's efforts to develop uniform risk assessment guidelines. Similarly, hazardous spills research was transferred to the Superfund program where the work is more appropriately carried out.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Health effects assessments will be prepared at varying levels of detail for specific chemicals or hazardous waste sites. These may range from detailed, exhaustive assessments on a particular site through summarized assessments leading to determinations of "Acceptable Daily Intakes," accompanied only by a brief explanation. Assessment methods developed in 1984 will be revised to reflect recent developments in toxicology and exposure evaluation. Of particular concern will be developments in the areas of metabolism studies and prediction of physical and chemical parameters from chemical structure. Also, to correct frequent limitations in transport and fate assessments, critical physical and chemical properties will be obtained for compounds contained in hazardous wastes.

Conduct the Assessment and Control Research Necessary to Address Dioxin. The risk assessment methodology for hypothetical exposure situations will be completed. Risk assessment models for other isomers also will be developed. The most toxic isomers will be used in chronic and subchronic animal testing to determine tissue distribution, and simple neurologic and reproductive endpoints. The birth weight and childhood cancer rate studies will continue in an effort to determine if dioxin exposure is statistically correlated with abnormalities in these parameters.

1984 Program

In 1984, the Agency is allocating a total of $2,041,300 and 23.6 total workyears to this program, of which $1,060,900 is for the Salaries and Expenses appropriation and $980,400 is for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Ongoing support activities include the preparation of Health and Environmental Effects Profiles (HEEP) for approximately one hundred chemicals to support regulatory office listing decisions and preparation of other health assessments at different levels of detail as needed by the program.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Health risk assessments are being modified to reflect recent developments in toxicology and exposure evaluation. Of special concern will be developments in the areas of structure-toxicological activity relationships, metabolism studies, prediction of physical and chemical parameters from chemical structure, risk associated with less than lifetime exposure, and estimating exposure from waste site vapors and dust.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Ongoing support activities include preparation of approximately one hundred health summaries and developoment of chemical-specific data regarding the properties and health hazards of substances involved in spills for use by on-scene personnel.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Exposure and risk assessment techniques applicable to 2,3,7,8-dioxin exposed populations are being developed and should be completed early in 1984. A risk assessment technique for individuals involved in specific hypothetical exposure situations is being initiated. An effort is also underway in conjunction with the Missouri Health and Vital Statistics Department to geographically correlate birth weights and childhood cancer rates with documented 2,3,7,8-dioxin levels.

1984 Explanation of Changes from the Amendment

The net increase of +$169,500 results from the following actions:

-Reprogrammings. (+$169,500) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$169,500 to the Research and Development appropriation.

1983 Accomplishments

In 1983 the Agency obligated a total of $1,447,700 and 18.4 total workyears for this program, of which $832,300 was under the Salaries and Expenses appropriation and $615,400 was for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. In 1983, Health and Environmental Effects Profiles were updated for 48 chemicals and ten Profiles were completed on chemicals not previously addressed to support the listing of hazardous wastes under RCRA Section 3001.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. In 1983, a symposium was held to assess the state-of-the-art methods which have been and are being used in health risk assessments for multiple chemical exposures. Results will enable use of improved methods in risk assessment to support permitting and enforcement functions.

Develop Techniques and Procedures to Prevent and Contain Hazardous Releases. In 1983, enforcement-related health summaries were completed for 30 chemicals likely to be involved in accidental release situations.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $10,120,400 supported by 43.0 total workyears for this program, of which $3,905,000 is for Salaries and Expenses and $6,215,400

is for Research and Development. This reflects an increase of $1,278,500 in Research and Development, an increase of $1,005,900 in Salaries and Expenses and an increase of 8 total workyears. The increases will support the continuing validation of waste characterization analytical methods and validation of methods for instack monitoring.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Cost effective procedures for characterizing wastes will be accelerated. Obtaining high quality data will be emphasized as analytical methods are evaluated. Where proven methods are lacking for analysis of RCRA wastes, new methods will be evaluated, such as the inductively coupled plasma/ Atomic Absorption method for contaminated soils. Laboratory techniques to determine such characteristics of wastes as corrosivity, gas generation reactivity and ignitability are also being developed. Validation of the methods contained in the publication "Test Methods for Evaluating Solid Waste" (SW-846) will continue. New ambient air monitoring techniques for rapid screening and identification of organic air pollutants such as benzene and toluene will be developed.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Field monitoring methods will continue to be developed for hazardous waste site investigations. These will include geophysical techniques such as downhole sensors, vadose zone monitoring, and plume detection methods. Evaluation of two methods for determining the effectiveness of incinerators will be accelerated. These methods are the volatile organic industry stack sampling train and semivolatile organic stack sampling train.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Analytical methods will be developed for use in rapidly identifying hazardous wastes at permitted sites. A portable x-ray fluorescence device will be developed for screening suspected wastes. A technique for screening organic compounds with infrared spectrometry will be evaluated. Guidance will be provided on the selection of parameters which will reliably indicate the presence of hazardous constituents in groundwater during site operation and post closure monitoring.

Develop Techniques ancd Procedures to Prevent and Contain Hazardous Materials Releases. The technology and remote monitoring techniques required to support Regional compliance programs will be applied. Aerial photo analysis will be provided at a centralized data gathering and interpretation facility. New methods and techniques for analyzing aerial photos, satellite imagery, thermal and multispectral data will be developed for identification of spills and spill movement.

Provide Quality Assurance to the Hazardous Waste Programs. Evaluation and distribution of standard reference materials will be continued. The site laboratory performance evaluations effort started last year will increase and include the preparation of performance samples for submission to the analytical laboratories. The Dioxin Monitoring Program will assure that OSW and Regions acquire analytical data of known quality.

Conduct Assessment and Control Research to Address Dioxin. Dioxin research initiated in 1984 will continue to develop sampling and analysis guidance at the parts per trillion or parts per quadrillion level for dioxin in air, water, soil sediment and fish. Guidance for additional isomers will also be developed. Issues will include the use of high resolution methods, their sensitivity and limitations.

1984 Program

In 1984, the Agency is allocating a total of $7,836,000 and 35.0 total workyears for this program of which $2,899,100 is for the Salaries and Expenses appropriation and $4,936,900 is for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Procedures for efficiently characterizing specific wastes and criteria and tests for determining if a waste constitutes a potential hazard continue to be investigated. A protocol is being prepared and tested to determine the precision, accuracy, sensitivity, and reliability of advanced analytical methods when applied to highly toxic wastes. Methods are being developed for detection of organics in the ambient air around waste disposal facilities.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Monitoring research is exploring improved field methods. Guidelines for post-closure monitoring of ground water and techniques for monitoring soils, air, and biota are being developed. Geophysical techniques are being investigated for hazardous waste landfill monitoring, and an extraction procedure for use in determining the leachability of cyanide in wastes is being developed. Validation of methods for instack monitoring of volatiles and semi-volatiles is being initiated.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Screening methods and biological monitoring methods are being developed for use in identifying hazardous wastes at permitted sites. Remote monitoring techniques will be investigated for use in issuing permits and for enforcement activities.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Technology and related remote monitoring techniques required to support Regional compliance programs and methods necessary to provide data to on-scene coordinators in emergency situations are being developed. Centralized data gathering and interpretation facilities are applying methods and techniques to analyze aerial photos.

Provide Quality Assurance to the Hazardous Waste Program. Evaluation of standard reference materials is continuing. On-site laboratory performance evaluations have increased and preparation of performance samples are being submitted to contract and Regional analytical laboratories. The Agency's Dioxin Monitoring Program is being expanded to ensure that the data collected by the Program and Regional offices are of known quality.

Conduct Assessment & Control Research to Address Dioxin. A methodology for measuring dioxins and dibenzofurans at the parts per trillion level using high resolution GC/MS is being developed. Standard approaches for sampling and analysis of 2,3,7,8 TCDD and other chlorinated dibenzo-p-dioxins in environmental samples is being investigated. A guidance document for managers and analysts is being prepared for sampling and measuring dioxin.

1984 Explanation of Changes from the Amendment

The net decrease of -$150,400 results from the following actions:

-Reprogrammings. (-$150,400) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$87,400 to the Salaries and Expenses appropriation and a net decrease of -$63,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983 the Agency obligated a total of $7,127,700 and 27.9 total workyears of which $3,108,000 was under the Salaries and Expenses appropriation and $4,019,700 was for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Analytical methods were evaluated to determine their precision, accuracy, and reliability. Studies were performed to identify instrument operating conditions and quality assurance requirements for the analysis of wastes. Methods for use in determining whether a waste is hazardous due to its flash point were evaluated.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Research was conducted on techniques for detecting contamination before it gets to the water table. Geophysical techniques (resistivity, electromagnetic induction, and ground penetrating radar) to detect contamination were evaluated. Research was conducted on how to monitor leachates resulting from ruptured synthethic and natural liners.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Research on analytic methods for dioxin was initiated and technical assistance to Regional and State enforcement officials was provided. Methods were evaluated to determine corrosivity, ignitability, and reactivity of wastes.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. The 1983 Hazardous Spills Program was transferred to the Hazardous Waste Program from the Municipal Wastewater Program. Remote sensing of spills was conducted with overhead aerial support. Interpretation of imagery for the Spill Prevention, Containment and Control (SPCC) Program was conducted and river spill contingency planning was accomplished.

Provide Quality Assurance to the Hazardous Waste Program. This program developed, evaluated, and provided standard reference materials in support of RCRA waste characterization. A repository of standard reference materials containing priority pollutants and hazardous substances was provided. Support was provided to the OSW in the areas of methods validation, and development of quality assurance criteria for analytical data.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $1,343,300 supported by 8.0 total workyears for this program, of which $756,400 is for Salaries and Expenses and $586,900 is for Research and Development. This reflects an increase of $375,200 in Salaries and Expenses to support an increasingly in-house program to develop a series of tests to characterize wastes as hazardous.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. The goal of this program is to provide an inexpensive and rapid qualitative screening protocol (prescreen) for use in characterizing the health hazards of substances proposed for listing and delisting actions. Research will focus on developing a biological testing battery of short term tests to determine potential adverse human health effects. These tests will emphasize exposure to complex mixtures. Once completed, these tests will support listing/delisting decisions as well as permitting and enforcement activities.

1984 Program

In 1984, the Agency is allocating a total of $968,100 and 8.0 total workyears to this program of which $381,200 is for the Salaries and Expenses appropriation and $586,900 is for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Short-term test systems for use in evaluating the health effects of exposure to complex hazardous waste mixtures are being developed. These test systems are state-of-the-art for testing single compounds but require development and validation for use on complex mixtures.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,050,000 and 4 total workyears for this program, of which $358,300 was under the Salaries and Expenses appropriation and $691,700 was for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Development of a neurological field testing system to determine the adverse effects of exposure to hazardous wastes on human behavior was completed and is being validated. A normative data base was developed to determine human sensory, cognitive, and motor performance capabilities. This effort provided a battery of tests to rapidly identify health problems in workers at hazardous waste sites. The tests will also be used during permitting, compliance monitoring and cleanup operations.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $16,351,900 supported by 102.4 total workyears for this program, an increase of $2,400 and 15.4 total workyears from 1984. Included in this total is $4,784,600 for Salaries and Expenses and $11,567,300 for Research and Development with an increase of $948,200 and a decrease of $945,800 respectively. The increase primarily reflects a greater emphasis toward evaluating and comparing alternative treatment technologies to land disposal. The decrease reflects completion of the field assessment project for incinerators.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Section 3004 of RCRA requires the Agency to promulgate regulations establishing performance standards for both new and existing factilities that treat, store, and dispose of hazardous wastes. Analytical methods to determine incinerator destruction efficiency and a methodology for continuous control technology monitoring will be developed to support regulations. Surface impoundments research will include analysis of infiltration data and leakage rate data to determine performance of installed clay liners. Land disposal research will emphasize analysis of (1) the cause/effect relationship of subsidence on cover systems integrity; (2) the long-term viability of modified bentonite clay for liners; (3) redesign of land disposal systems proven to be inadequate; and (4) processes for solidifying and fixing wastes. Data will be obtained for the design and operation of land treatment facilities including: (1) the effects of waste mixtures; (2) closure procedures; (3) examination of treatment zone limitation required by RCRA, and (4) evaluation of run-off control needs. A manual on hazardous waste land treatment will be updated to reflect the state-of-the-art.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Engineering research is divided into four areas: laboratory scale incineration; pilot scale incineration; high temperature industrial processes; and alternative technology assessment. Laboratory scale research will continue to focus on the development of destruction efficiency and by-product

formation data of selected hazardous compounds. In addition, research on combustion processes to better understand the failure modes of incinerators will be undertaken. Pilot scale research will continue to develop data on destruction efficiencies under varied waste loads and operating conditions using two types of incinerators. Destruction of hazardous waste in high temperature industrial furnaces will continue to be investigated.

Performance evaluations and engineering assessments of hazardous waste treatment processes which can provide alternatives to land disposal and incineration will be accelerated. Both existing technologies and emerging technologies are included in this effort. The goal of this effort is to characterize the performance of these systems and to quantify the character of process residues, liquid effluents and air emissions.

Special attention will be devoted to high hazard wastes. The chemical detoxification of these high hazard wastes will be evaluated. A field application manual will be produced and made available to the Office of Solid Waste and Emergency Response and the Regions and will include alternative, cost effective chemical methods that may be applied to a variety of high hazard wastes. As an alternative to chemical methods, genetic engineering studies will be initiated to evaluate the technical and environmental implications of these organisms.

Technical Resource Documents (TRDs) will be updated in the following subject areas: (1) liner compatability guidance, (2) soil liner design, and (3) clay liner design.

Develop Techniques and Procedures to Prevent and Contain Hazardous Material Releases. Research will focus on the evaluation of technology to detect and counteract leaks from underground storage tanks, as well as continuation of the examination of emerging commercially available technologies for applicability to spill and waste site cleanup problems. Additionally, performance testing will be continued in order to provide technical guidance for selecting and using chemicals to control releases of floating hazardous substances. This program will provide emergency response personnel with information regarding the most cost effective technologies available as well as data to support Agency policy on chemical use in accordance with the National Contingency Plan.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Dioxin Engineering research will focus on continuation of work initiated in 1984 and on evaluation of the technical feasibility and costs of alternative remedial techniques. Specific activities will include: expanding the Method 5 sampling train to characterize dioxin emissions from combustion processes; testing and evaluating the mobile incinerator and soils washer in New Jersey; and testing and evaluating ultraviolet photolysis and solvent reagents on dioxin contaminated soil plots.

1984 Program

In 1984, the Agency is allocating a total of $16,349,500 and 87.0 total workyears to this program, of which $3,836,400 is for the Salaries and Expenses appropriation and $12,513,100 is for extramural purposes under the Research and Development appropriation.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Research is being conducted on process measurement and the development of improved sampling and analysis protocols which can be used to routinely sample incinerators being used to dispose of hazardous wastes to ensure they maintain their destruction efficiency. On-going research in land disposal is focusing on the study of synthetic and natural liners to determine their expected service life and ability to retain or retard the movement of hazardous pollutants.

Research on containment systems is being conducted to provide reliable information for policy guidance to State agencies and for determining whether regulations are adequate or excessive.

Design, operation, and closure procedures for surface impoundments is being developed to minimize environmental and health impacts. Land treatment research is directed toward determining optimum techniques for using the assimilative capacity of the land for application of hazardous wastes, providing guidance on leachate control, site selection, fate and transport, and establishing waste loading rates commensurate with organic degradation.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and and Enforcement Activities. Technical Resource Documents (TRD's) are being updated for disposal facilities to provide more detailed, up-to-date guidance to the Regions and State agencies responsible for permitting and enforcing applicable regulations. The TRD's document procedures for design, operation, maintenance, and closure of facilities and the extent to which these procedures will minimize the release of pollutants to the environment.

Research is also focusing on the assessment of incinerator performance, other high temperature processes, and alternative technologies which may be used in the destruction of hazardous wastes.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Activities are concentrating on development of new, more effective techniques and procedures in support of emergency responses to hazardous materials releases. Research is being conducted to evaluate the feasibility of using specialized equipment and techniques from different industries for adaptation to removal of releases. User's manuals are being prepared on prevention, containment and cleanup of residuals.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Research will provide data in the following areas: the release of dioxin from contaminated soils; dioxin emissions from industrial boilers and commercial incinerators; the technical and economic feasibility of existing technologies for on-site treatment; an effective solvent/reagent scheme for field treatment of dioxin contaminated soils; and an assessment of transformer fires for dioxin and furan formation.

1984 Explanation of Changes from the Amendment

The net decrease of -$15,800 results from the following actions:

-Reprogrammings. (-$15,800) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$68,200 to the Salaries and Expenses appropriation and a net decrease of -$84,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983 the Agency obligated a total of $18,429,700 and 108.9 total workyears for this program, of which $4,998,700 was under the Salaries and Expenses appropriation and $13,431,000 was for extramural purposes under the Research and Development appropriation.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. An initial assessment of the effectiveness of clay soils as liners for landfills and surface impoundments by determining the effects of organic

solvents on the permeability of clay soils was completed. In the chemical stabilization area, the assessment of the long-term field performance of the solidified treated wastes was completed.

A Hazardous Waste Land Treatment Pilot Research Facility was established to develop a broad, comprehensive data base relating to the efficacy of land treatment as a hazardous waste management alternative for a wide variety of waste types.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Two additional Technical Resource Documents were prepared and submitted to the Office of Solid Waste and Emergency Response for public notice. These documents related to waste leaching and clay soil liners. Laboratory and pilot scale research was conducted to better define the operating conditions required for the destruction of hazardous wastes and to simulate full scale incineration conditions. This included research on destruction efficiencies, by-product formation and air emission characteristics to allow scale-up to full scale incinerators.

Research was conducted to obtain emission and performance data at full scale industrial facilities for the combustion of hazardous wastes mixed with conventional fuels in industrial boilers and a cement kiln. Research was also conducted to evaluate advanced hazardous waste treatment technologies including studies on advanced biological conversion processes, supercritical solvents and metals recovery using adapted metallurgical techniques.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Over one dozen hazardous material release research reports were completed during 1983. They cover such issues as prevention, situation assessment and analytical support, containment and confinement, separation and concentration, ultimate destruction, and restoration. In addition, research was initiated for development of a cover system for waste lagoons to eliminate rain water overtopping, and development of improved techniques for removal of sediments containing hazardous materials.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $5,109,600 supported by 53.0 total workyears for this program, of which $2,681,300 is for Salaries and Expenses and $2,428,300 is for Research and Development. This reflects an increase of $146,300 and a decrease of $143,600 respectively. The decrease reflects completion of a project to develop, evaluate, and recommend a biological screening protocol for assessment of hazardous releases. The increase reflects the need for additional resources to support in-house projects.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. The two research areas that support listing decisions for new, complex wastes streams will be continued. Quantitative Structure Activity Relationship (QSAR) methods, which are used to predict the toxicity of single chemicals, will be adapted for use with complex waste mixtures. Classes of chemicals which have the same modes of toxicological action will be defined. Microcosm technology will test specific wastes. When completed, this technology will provide a fast and inexpensive determination of a waste's potential to move in the environment.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. Field and laboratory studies of the processes studied in 1983 and 1984 on individual waste components in ground water will be accelerated with emphasis on the effects of subsurface variabilities and mixtures of organic co-solvents. In addition, the adaptation and improvement of models for predicting human exposure to emissions from landfills will be accelerated.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. This program provides on-scene coordinators with evaluated methods, criteria, and guidance with which to conduct and interpret bioassessments of samples from hazardous release sites. Bioassessment methods developed and field evaluated during 1983 and 1984 will be synthesized into a user-oriented protocol. The battery of evaluated bioassessments will enable response personnel to determine the extent and degree to which an area is contaminated with biologically available hazardous substances.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Research in two areas will continue to support efforts to assess and control dioxin contamination. Laboratory experiments will define the potential uptake, bioaccumulation and bioavailability of 2,3,7,8-TCDD in selected fish, plants and mammals. Laboratory studies will define the potential movement and persistence of 2,3,7,8-TCDD in soils and water. These studies will provide an initial assessment of the movement and food-chain impact of 2,3,7,8-TCDD and will be used in modelling the risk it poses to humans and ecosystems.

1984 Program

In 1984, the Agency is allocating $5,106,900 and 53.0 total workyears to this program, of which $2,535,000 is for the Salaries and Expenses Appropriation and $2,571,900 is for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. Research developing quantitative structure activity relationships and microcosm technology methods for predicting waste toxicity and mobility are currently underway. QSAR methods were first developed in the Toxics program for predicting the toxicity of single chemicals.

Develop Technical Data Necessary to Support RCRA Treatment, Storage and Disposal Regulations. This research is developing models to determine potential human exposure resulting from various methods of hazardous waste disposal. A considerable portion of this research is devoted to developing, improving, and field evaluating groundwater models (by supplementing the groundwater research in the Drinking Water Decision Unit), since this is considered the major potential route of exposure to hazardous wastes. Other efforts include coordinating groundwater with other exposure routes for multimedia predictions.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. Criteria developed in 1983 for site selection and evaluation based on site-specific hydrogeological factors are being evaluated in several hydrogeological settings jointly by EPA and USGS.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. Field evaluations of bioassessment sampling and assay procedures and comparisons of bioassessment results with documented environmental field assessments are being evaluated at a semi-tropical geoclimatic region. Evaluations of terrestrial indicator species responses are being conducted and the recommendations of a technical program review panel are being implemented.

Conduct the Assessment and Control Research Necessary to Address Dioxin. Laboratory studies are being initiated to define the potential transport and fate of 2,3,7,8-TCDD through human food chains and the environment. These data will be used to estimate human and ecosystem exposure to 2,3,7,8-TCDD.

1984 Explanation of Changes from the Amendment

The net decrease of -$57,000 results from the following action:

-Reprogramming. (-$57,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$57,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $5,376,700 and 48.5 total workyears for this program, of which $2,823,300 was under the Salaries and Expenses appropriation and $2,553,400 was for extramural purposes under the Research and Development appropriation.

Develop Techniques and Procedures to Characterize Wastes for Listing and Other RCRA Regulatory Activities. An integrated computer system to estimate properties of chemicals such as bioconcentration factor and acute toxicity in aquatic animals, was completed. Microcosm technology was developed, constructed and tested, and is now being used to predict the subsurface behavior of actual chemicals of interest.

Develop Technical Data Necessary to Support RCRA Treatment Storage, and Disposal Regulations. A study was completed entitled "Groundwater Modeling of Selected Hydrogeological Settings to Determine Leachate Fate and Transport from Waste Facilities." The second year's monitoring at a small field site was completed where five chemicals and two tracers were injected into an aquifer. The results will be available for model verification in 1984. This is the first groundwater field project to use a natural gradient and follow an organic chemical plume from its inception.

Develop Technical Data and Methods Necessary to Support RCRA Permitting and Enforcement Activities. A scientific advisory group was formed to develop the protocol for judging the suitability of a site for waste disposal based on hydrogeological factors.

Develop Techniques and Procedures to Prevent and Contain Hazardous Materials Releases. The 1983 Releases Program was transferred to the Hazardous Waste Program from the Municipal Wastewater Program. During 1983, environmental sampling and field assessments were conducted at a semi-arid geoclimatic region.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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HAZARDOUS WASTE

Waste Management Regulations, Guidelines & Policies

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Regulations, Guidelines & Policies - Hazardous Waste							
Salaries & Expenses	$7,994.9	$6,928.3	$8,135.5	$8,135.5		$10,311.9	$2,176.4
Abatement Control and Compliance	$17,177.1	$13,664.0	$19,061.5	$19,061.5		$24,198.0	$5,136.5
TOTAL	$25,172.0	$20,592.3	$27,197.0	$27,197.0		$34,509.9	$7,312.9
TOTAL:							
Salaries & Expenses	$7,994.9	$6,928.3	$8,135.5	$8,135.5		$10,311.9	$2,176.4
Abatement Control and Compliance	$17,177.1	$13,664.0	$19,061.5	$19,061.5		$24,198.0	$5,136.5
Waste Management Regulations, Guidelines & Policies TOTAL	$25,172.0	$20,592.3	$27,197.0	$27,197.0		$34,509.9	$7,312.9
PERMANENT WORKYEARS							
Regulations, Guidelines & Policies - Hazardous Waste	123.4	116.4	149.7	154.9		187.6	32.7
TOTAL PERMANENT WORKYEARS	123.4	116.4	149.7	154.9		187.6	32.7

HAZARDOUS WASTE

Waste Management Regulations, Guidelines & Policies

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Regulations, Guidelines & Policies - Hazardous Waste	164.6	155.9	192.4	192.4		217.4	25.0
TOTAL WORKYEARS	164.6	155.9	192.4	192.4		217.4	25.0

Waste Management Regulations, Guidelines, and Policies

Budget Request

The Agency requests a total of $34,509,900 supported by 217.4 total workyears for this subactivity of which $10,311,900 will be for the Salaries and Expenses appropriation and $24,198,00 for the Abatement, Control, and Compliance appropriation. This represents a net increase of $7,312,900 and 25.0 workyears.

Program Description

The Agency's hazardous waste regulatory, guidance, and policy making activities are carried out under this program. Activities include provision of national guidance and oversight to the Regions and States for implementation of the hazardous waste regulatory program, including facility permitting, and management of a national compliance monitoring and technical enforcement program. Other activities include reviewing and revising existing hazardous waste regulations, as necessary, and completing the development of the hazardous waste program to fill in key regulatory gaps.

Regulations, Guidelines, and Policies - Hazardous Waste -- This Headquarters' program provides for the management of the national Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste program. Activities include the issuance of guidance to the Regions and States for nationally consistent administration of the Subtitle C regulations as well as evaluation of implementation policies. In addition, this program includes the promulgation and refinement of the criteria and regulations for identification, tracking, management, and disposal of hazardous wastes. Technical studies, regulatory impact and economic analyses, and assessments of control options and technologies necessary for regulatory decision-making are also covered.

REGULATIONS, GUIDELINES, AND POLICIES - HAZARDOUS WASTE

1985 Program Request

The Agency requests a total of $34,509,900 supported by 217.4 total workyears for this program, of which $10,311,900 will be for the Salaries and Expenses appropriation and $24,198,000 will be for the Abatement, Control, and Compliance appropriation. This represents an increase of $7,312,900 and 25.0 total workyears. Of this amount, $2,176,400 will be for the Salaries and Expenses appropriation and $5,136,500 will be for the Abatement, Control and Compliance appropriation. These increases will support the Agency's efforts to list new wastes, ban wastes from land disposal, and develop regulations for boilers and small quantity generators.

Resources requested will concentrate on granting States full authorization to administer their own hazardous waste program in lieu of the Agency. The Agency will review applications for authorization against criteria for full equivalence with the Federal program and will prepare guidance documents on full authorization and implementation of State hazardous waste programs. Other activities include reviewing and refining State reporting requirements, as necessary, for national program management and accountability to Congress, and establishing policies and procedures for approving revisions to State programs after full authorization. The annual on-site program reviews will continue. The focus of these in-depth program evaluations will shift to program performance in authorized States. EPA will analyze data on the status of Regional and State permitting activities for performance against call-in and final determination (includes issuance, denial, and approved closures or withdrawals) targets, identification of impediments to permitting, and development of recommendations to improve Regional and State performance.

Permit Assistance Teams (PATS) will support permit development. They will be responsible for reviewing and commenting on major (incineration and land disposal facilities) permit actions conducted by the authorized States. PAT reviews serve to ensure proper application and interpretation of regulations, nationally consistent permit conditions, and technical advice on difficult issues.

Resources in the Headquarter's enforcement program will support the compliance monitoring and enforcement programs in the States and Regions. The Agency will review the enforcement aspects of full authorization applications with special emphasis on ground water monitoring, closure plans, and financial responsibility instruments. In addition, the Agency will develop program policy and provide information on technical issues to Regional and State personnel to address deficiencies and improve implementation of the technically complex aspects of the program. Contract resources will provide technical assistance, training, and specialized expertise for the Regions and States.

The Agency plans to complete the regulatory impact analysis for small quantity generators and the evaluation of air emissions from storage, treatment, and disposal facilities. The Agency will propose standards for waste oil and rules for restricting land disposal of wastes containing solvents and dioxins. The Agency will also propose technical standards and promulgate administrative standards for boilers. In addition to these activities, the Agency will propose and/or promulgate the following Section 3001 listings: Pesticides, organo bromines, carbamates, chlorinated aliphatics, and lithium batteries.

To fullfill mandates under RCRA Section 8002, the Agency will complete reports to Congress on utility and metals mining wastes and propose a regulation on smelting and refining wastes. The Agency will also begin the other studies required under Section 8002. The Agency will propose RCRA Section 6002 procurement guidelines for paper containing recovered materials. Work on other required guidelines under Section 6002 will be initiated.

In order to review and revise existing regulations, the Agency will begin development of location standards addressing hydrogeologic and climatic locations that are not appropriate for land disposal. The Agency will also propose land disposal liner standards covering the use of soil liners in conjunction with synthetic liners. In addition, the Agency will promulgate regulatory amendments for liquids in landfills and class permits for storage facilities and propose amendments for underground tanks.

The Agency will develop guidance on new regulatory actions which will affect the implementation of the RCRA program, particularly regulations covering boilers and banning certain wastes from landfills. Additionally, the Agency will revise and update existing documents to reflect regulatory and policy modifications and new technical information.

1984 Program

In 1984, the Agency is allocating a total of $27,197,000 and 192.4 total workyears to this program, of which $8,135,500 is for the Salaries and Expenses appropriation and $19,061,500 is for extramural purposes under the Abatement, Control, and Compliance appropriation.

Under the implementation and enforcement components of this program, the Agency will focus on assisting the Regions and States on State authorization, permitting, and enforcement activities. These activities include timely review of applications for final authorization, training for permit writers and inspectors, and developing program policy and guidance documents.

The Agency will continue to develop regulations to fill in gaps in the regulatory program. For small quantity generators, the Agency will complete a survey to determine the numbers and types of generators, quantities and types of waste

generated, and waste management practices. In addition, the Agency will evaluate State program data on small quantity generators. The effort to restrict certain wastes from land disposal will focus on an analysis of wastes containing dioxins and solvents. The Agency will develop standards governing the management and listing of waste oil. In conjunction with these activities, the Agency will continue to list waste from processes within the organic chemical industry. An interim final rule on chlorinated aliphatics will be proposed. Proposals for lithium batteries and toluene diisocyanate, to name a few, will occur. The Agency will promulgate the dioxin waste listing. In addition, the Agency will complete the risk assessment analysis to support development of air emission standards.

The Agency will continue to review and revise existing hazardous waste regulations. Major regulatory amendment activities include: Proposal of standards for class permits of storage facilities; proposal of standards governing bulk liquids in landfills and notice of free liquids test methods; and promulgation of the definition of solid waste and satellite accumulation. The Agency will conduct regulatory impact analyses to support development of regulatory amendments for liner standards and underground tanks.

The Agency plans to draft reports to Congress on utility and metals mining wastes and develop regulations on smelting and refining wastes. The Agency will also prepare a report to Congress on the Post-Closure Liability Trust Fund.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $25,172,000 and 164.6 total workyears for this program, of which $7,994,900 was for the Salaries and Expenses appropriation and $17,177,100 for extramural purposes under the Abatement, Control, and Compliance appropriation.

Headquarters provided national guidance to the Regions and States on RCRA implementation policies and requirements. State authorization activities included pre-application reviews of State statutes, review of draft and complete applications for authorization, and guidance documents such as the full authorization guidance manual. The Agency also proposed regulations revising the State RCRA program by allowing States one full year from the effective date of amended Federal regulations to make revisions in their programs. In addition, annual RCRA program reviews were started. Teams, led by Headquarters, assessed management of the implementation activities by the Regional offices as well as by selected States.

The Agency established the Permit Advisory Committee (PAC) consisting of representatives from industry, government, and environmental interest groups to make recommendations on policy, technical, and procedural improvements for the RCRA permit program. In addition, Headquarters continued to provide national Permit Assistance Teams (PATs). The teams provide expert technical and procedural assistance for developing sound facility permits.

Management of the RCRA enforcement activities included development and issuance of guidance documents; the provision of expert witnesses for Federal and State enforcement actions; laboratory testing and analysis in support of Federal enforcement actions and compliance sampling inspections.

The Agency initiated regulatory activities to cover small quantity generators, waste oil, boilers, the restriction of certain wastes from land disposal, and financial responsibility requirements for corrective action at land disposal facilities. The Agency also began a study to identify wastes and to evaluate control technologies for air emissions from hazardous waste facilities. In addition, the

Agency continued to document and propose the listing of wastes from processes within various organic chemical industries. The Agency proposed the listing of dioxin-containing wastes and developed an interim final rule on chlorinated aliphatics.

The Agency continued its review and revision of the RCRA Section 3004 facility standards. Major activities included: Evaluation of liner requirements, development of standards for storage of wastes in underground tanks, and development of standards for class permits of storage facilities. The Agency also developed plans to modify CFR Part 264/265 of RCRA Section 3004 to prohibit disposal of bulk liquids in landfills and to specify test methods for identifying free liquids.

HAZARDOUS WASTE

Financial Assistance

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Hazardous Waste Management Financial Assistance to States								
Abatement Control and Compliance		$43,975.0	$42,500.0	$47,000.0	$47,000.0		$47,000.0	
	TOTAL	$43,975.0	$42,500.0	$47,000.0	$47,000.0		$47,000.0	
Resource Recovery Local Financial Assistance								
Abatement Control and Compliance		$29.0						
	TOTAL	$29.0						
TOTAL:								
Abatement Control and Compliance		$44,004.0	$42,500.0	$47,000.0	$47,000.0		$47,000.0	
Financial Assistance	TOTAL	$44,004.0	$42,500.0	$47,000.0	$47,000.0		$47,000.0	

Financial Assistance

Budget Request

The Agency requests a total of $47,000,000 for this program under the Abatement, Control, and Compliance appropriation. This is the same resource level provided for 1984.

Program Description

This program provides financial assistance to State governments for developing and implementing the hazardous waste management programs under Subtitle C of the Resource Conservation and Recovery Act.

Hazardous Waste Management Financial Assistance to States -- This program provides financial assistance to States to develop, implement, and enforce programs that monitor and control hazardous wastes from cradle to grave, including generation, transportation, storage, treatment, and disposal.

HAZARDOUS WASTE MANAGEMENT FINANCIAL ASSISTANCE TO STATES

1985 Program Request

The Agency requests a total of $47,000,000 for this program under the Abatement, Control, and Compliance appropriation. Resources remain constant with 1984. This level is due to a shift in program emphasis from program development activities, as the States achieve authorization, to permitting and enforcement activities.

States that are awarded grants must either be operating a substantially equivalent hazardous waste program under interim authorization or working toward full authorization through a Cooperative Arrangement. State grant targets are allocated on a formula basis that accounts for a State's population, land area, number of hazardous waste generators, and amount of hazardous waste. The actual grant amount is negotiated based on the target, but depends on the portion of the Federal program the State is operating. States are required to provide a 25% match in order to receive these funds.

States will use these funds to continue progress toward authorization. States will submit applications for full authorization and work to ensure that their programs are equivalent to the Federal program. The Agency estimates 40 States will receive full authorization by the end of 1985. The remaining States will have applications under review.

States will also play a strong role in national permitting efforts. As in 1984, almost half of the State grant resources will be earmarked for permitting activities. In order to expedite the processing of permits for new or expanding facilities, States will devote sufficient permitting resources to respond to all anticipated applications from these facilities. Authorized States will be responsible for processing approximately 1,377 permits in 1985. However, the States will not complete processing on all of these permits to the point of issuance or denial in 1985 because of the length of time required for final determination. Of the permits in process, the Agency expects States to complete final action on 440 permits.

The States, in conjunction with the Regions, will continue their focus on improving compliance with the interim status standards. States will perform approximately 12,000 compliance monitoring inspections. Emphasis will remain on

evaluating the adequacy of ground water monitoring systems. In addition, the States will complete technical reviews of closure/post-closure plans and financial assurance instruments for all non-major interim status facilities. States will issue, as necessary, administrative enforcement actions in response to significant violations.

1984 Program

In 1984, the Agency is allocating $47,000,000 to State financial assistance under the Abatement, Control, and Compliance appropriation. States are using these funds to continue working toward interim and full authorization and to continue operating the Federal program for unauthorized phases through Cooperative Arrangements.

Based on the Agency's promulgation of the land disposal regulations in July 1982, Phase IIC (permitting of land disposal facilities) and full authorization became available January 1983. By the close of 1984, 47 States and Territories will be in some phase of authorization as a result of their progress in developing satisfactory hazardous waste management authorities and programs.

States with Phase II authorization will be expected to focus 50 percent of their resources on permitting new and expanding facilities and major facilities, i.e., incineration and land disposal facilities. Cooperative Arrangement States will be eligible, based on Region and State negotiations, technically to evaluate permit applications; however, EPA retains responsibility for making the final permit decision of issuance or denial. Authorized States will be responsible for processing approximately 1,038 permits in 1984. It is estimated that the States will make final determinations on approximately 395 permit applications.

State compliance monitoring and enforcement efforts, in partnership with Federal activities, will concentrate on establishing an enforcement presence in the regulated community. State compliance monitoring activities will focus on compliance with the ground water monitoring, closure/post-closure, and financial assurance requirements. The States will conduct intensive ground water monitoring inspections which will include a detailed technical analysis of the ground water monitoring systems (e.g., placement and depth of monitoring wells). States will also complete technical reviews of closure/post-closure plans and financial assurance instruments for all major interim status facilities. Where violations are detected, States will initiate and follow-up on all enforcement actions.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $43,975,000 for this program under the Abatement, Control, and Compliance appropriation. The grant funds supported continued development of substantially equivalent legislation and regulations required for interim authorization, implementation of those programs, and operation of delegated aspects of the Federal program (manifest, compliance monitoring, permit evaluation) through Cooperative Arrangements.

States were eligible to apply for interim authorization for Phase I, Phase IIA (permitting of tanks, containers and piles), and Phase IIB (permitting of incineration facilities). By the end of 1983, 41 States had received interim authorization for Phase I and 16 of these States also had interim authorization for Phase IIA/B.

Grant funds also supported Cooperative Arrangements for 11 States to operate selected aspects of the Federal program. States negotiated with Regions the tasks they performed while working toward interim authorization. After final negotiation of the grants, both for interim authorized and Cooperative Arrangement States,

funds which the States could not expend were used by the Region to provide contractor support for implementation of the Federal hazardous waste program.

The States called in and initiated the permit process for 533 storage and treatment facilities, 46 incineration facilities, and 15 land disposal facilities. In addition, the States processed nine permits for new or expanding facilities whose owners or operators submitted applications voluntarily.

State compliance monitoring and enforcement activities concentrated on those handlers which posed the greatest potential for environmental problems, such as ground water monitoring facilities. States conducted approximately 13,000 compliance monitoring inspections and initiated enforcement actions as necessary.

HAZARDOUS WASTE

Waste Management Strategies Implementation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
PROGRAM							
Hazardous Waste Management Regulatory Strategies Implementation							
Salaries & Expenses	$11,166.0	$14,135.2	$15,160.7	$14,168.9		$15,334.5	$1,165.6
Abatement Control and Compliance	$1,691.3	$1,986.4	$2,037.7	$2,058.7		$2,986.4	$927.7
TOTAL	$12,857.3	$16,121.6	$17,198.4	$16,227.6		$18,320.9	$2,093.3
TOTAL:							
Salaries & Expenses	$11,166.0	$14,135.2	$15,160.7	$14,168.9		$15,334.5	$1,165.6
Abatement Control and Compliance	$1,691.3	$1,986.4	$2,037.7	$2,058.7		$2,986.4	$927.7
Waste Management Strategies Implementation TOTAL	$12,857.3	$16,121.6	$17,198.4	$16,227.6		$18,320.9	$2,093.3
PERMANENT WORKYEARS							
Hazardous Waste Management Regulatory Strategies Implementation	277.4	305.4	332.7	332.7		345.4	12.7
TOTAL PERMANENT WORKYEARS	277.4	305.4	332.7	332.7		345.4	12.7

HAZARDOUS WASTE

Waste Management Strategies Implementation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Hazardous Waste Management Regulatory Strategies Implementation	339.2	411.6	439.6	439.6		451.9	12.3
TOTAL WORKYEARS	339.2	411.6	439.6	439.6		451.9	12.3

Waste Management Strategies Implementation

Budget Request

The Agency requests a total of $18,320,900 supported by 451.9 total workyears for this subactivity, of which $15,334,500 will be for the Salaries and Expenses appropriation and $2,986,400 for the Abatement, Control, and Compliance appropriation. This represents a net increase of $2,093,300 and 12.3 workyears.

Program Description

This program includes the hazardous waste implementation program which supports the Regional activities necessary to oversee, and operate when required, the RCRA-mandated hazardous waste program.

Hazardous Waste Management Regulatory Strategies Implementation -- This program supports the Regional activities necessary to provide guidance and technical assistance to authorized States and to operate the Federal hazardous waste program in unauthorized States. Regions assist the States in developing substantially equivalent hazardous waste management programs to qualify for interim authorization and fully equivalent programs to qualify for full authorization which became available in January 1983.

HAZARDOUS WASTE MANAGEMENT REGULATORY STRATEGIES IMPLEMENTATION

1985 Program Request

The Agency requests a total of $18,320,900 supported by 451.9 total workyears for this program of which $15,334,500 will be for the Salaries and Expenses appropriation and $2,986,400 will be for the Abatement, Control, and Compliance appropriation, representing an increase of $2,093,300 and 12.3 total workyears. Of this amount, $1,165,600 will be for the Salaries and Expenses appropriation and $927,700 will be for the Abatement, Control, and Compliance appropriation. This increase reflects the growing permitting workload facing the Agency. In addition, this increase will support Regional efforts to enhance State technical capabilities through training and guidance.

The Regions' highest priority activity in 1985 is State program development. Aggressive delegation efforts will ensure that a substantial number of States achieve full authorization before January 1985. The statute intends for the States to have full responsibility for operating a Federally equivalent hazardous waste program. State programs were eligible for full authorization beginning in January 1983. The statute requires the States to receive full authorization by January 1985 or the Agency must operate the hazardous waste program. However, this deadline does not preclude States from continuing to develop their own programs and attaining full authorization at a later date.

This request will enable the Regions to assist States in the development of both their authorization applications and their program capabilities. The Regions will review full authorization applications against full equivalence criteria, recommend approval of applications in a timely manner, and negotiate State grants and Cooperative Arrangements.

As a result of this investment, the Agency anticipates that by the end of 1985, 40 States will be fully authorized and 11 States will have applications under review. States with full authorization applications pending by the end of the year will be working under Cooperative Arrangements for portions of the program.

The Regions' second priority is the preparation and processing of permits in unauthorized States for new and expanding hazardous waste management facilities, existing incineration facilities, and existing land disposal facilities. These facilities will be a high permitting priority due to their greater potential for adverse environmental impacts. The Regions will complete processing of 294 permits in 1985. In addition, the Regions will call in 137 facilities in order to maintain a timely and effective program to permit facilities of the most environmental concern.

In authorized States, Regions will review State permit actions on major facilities to ensure technical adequacy, enforceability, and national consistency. Regional review of the initial State processed permits will provide increased technical knowledge and understanding to the States and will result in a stronger and more effective State permitting process.

1984 Program

In 1984, the Agency is allocating a total of $16,227,600 and 439.6 total workyears to the program of which $14,168,900 is for the Salaries and Expenses appropriation and $2,058,700 is for extramural purposes under the Abatement, Control, and Compliance appropriation.

The Regions are negotiating, awarding, and administering grants and Cooperative Arrangements based on the individual State's authorization status and acceptance of delegable activities. The Regions operate all manifest activities and technical evaluations of permit applications not delegated to Cooperative Arrangement States.

The Regions are focusing on delegating the various phases of program authorization. Regions are assisting States to develop application packages, design and strengthen their programs, and ensure that all interim authorized programs meet substantial equivalence requirements. In addition, the Regions review applications for full authorization and ensure that the State programs meet full equivalence requirements. By the end of 1984, the Agency anticipates that 15 States will have Phase I only interim authorization, 21 States will possess one or more components of Phase II interim authorization, and at least 11 States will be fully authorized.

The second critical implementation task is completing the processing of permits. The Regions will make final determinations on 342 permits in 1984. In addition, the Regions will begin to review State permit actions on major facilities to ensure national consistency.

1984 Explanation of Changes from the Amendment

The net decrease of -$970,800 results from the following actions:

-Reprogrammings. (-$970,800) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$171,400 to the Salaries and Expenses appropriation and a net increase of +$21,000 to the Abatement, Control and Compliance appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$820,400, was included in a reprogramming letter to Congress of September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $12,857,300 and 339.2 total workyears for this program, of which $11,166,00 was for the Salaries and Expenses appropriation

and $1,691,300 for extramural purposes under the Abatement, Control, and Compliance appropriation.

The Regions focused on assisting States to achieve various phases of authorization. As of September 1983, 41 States had achieved Phase I interim authorization and 16 of these States had also received Phase IIA/B interim authorization.

The Agency called in and initiated the permit process for 437 storage and treatment facilities, 37 incineration facilities, and 284 land disposal facilities. In addition, the Regions processed 29 permits for new or expanding facilities whose owners or operators submitted applications voluntarily.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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HAZARDOUS WASTE

Hazardous Waste Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Hazardous Waste Enforcement - Office of Solid Waste & Emergency Response							
Salaries & Expenses	$2,806.8	$3,509.5	$6,666.1	$5,930.6		$6,930.4	$999.8
Abatement Control and Compliance	$313.0					$1,750.0	$1,750.0
TOTAL	$3,119.8	$3,509.5	$6,666.1	$5,930.6		$8,680.4	$2,749.8
TOTAL:							
Salaries & Expenses	$2,806.8	$3,509.5	$6,666.1	$5,930.6		$6,930.4	$999.8
Abatement Control and Compliance	$313.0,					$1,750.0	$1,750.0
Hazardous Waste Enforcement TOTAL	$3,119.8	$3,509.5	$6,666.1	$5,930.6		$8,680.4	$2,749.8
PERMANENT WORKYEARS							
Hazardous Waste Enforcement - Office of Solid Waste & Emergency Response	72.6	70.1	162.0	162.0		174.9	12.9
TOTAL PERMANENT WORKYEARS	72.6	70.1	162.0	162.0		174.9	12.9

HAZARDOUS WASTE

Hazardous Waste Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Hazardous Waste Enforcement - Office of Solid Waste & Emergency Response	79.2	75.4	176.5	176.5		193.4	16.9
TOTAL WORKYEARS	79.2	75.4	176.5	176.5		193.4	16.9

Hazardous Waste Enforcement

Budget Request

The Agency requests a total of $8,680,400 supported by 193.4 total workyears for this program of which $6,930,400 will be for the Salaries and Expenses appropriation and $1,750,000 for the Abatement, Control and Compliance appropriation. This represents a net increase of $2,749,800 and 16.9 workyears.

Program Description

This program serves to ensure compliance with the Resource Conservation and Recovery Act (RCRA). The principle objectives are to monitor and evaluate hazardous waste generator, transporter, and facility compliance with the statutory and regulatory requirements of RCRA; encourage and promote voluntary compliance by hazardous waste handlers; take appropriate administrative, civil, and criminal enforcement actions when necessary; and assist and evaluate program implementation in the States.

Hazardous Waste Enforcement -- This program supports Regional activities to operate and enforce the Federal regulatory program in States which have not received interim or full authorization. These activities include compliance monitoring of interim status facilities, permitted facilities, and hazardous waste generators. Enforcement actions against violators of RCRA or its regulations are taken when necessary. The Agency is also responsible for evaluating programs in authorized and Cooperative Arrangement States to assess their progress in conducting hazardous waste compliance monitoring and enforcement activities.

HAZARDOUS WASTE ENFORCEMENT

1985 Program Request

The Agency requests a total of $8,680,400 supported by 193.4 total workyears for this program, of which $6,930,400 will be for the Salaries and Expenses appropriation, and $1,750,000 will be for the Abatement, Control, and Compliance appropriation, representing an increase of $2,749,800 and 16.9 workyears. Of this amount, $999,800 will be for the Salaries and Expenses appropriation and $1,750,000 will be for the Abatement, Control, and Compliance appropriation. This increase supports a growth in the level of Regional compliance monitoring inspections and technical support activities that are provided to the States.

EPA will conduct compliance evaluation inspections at permitted facilities and interim status ground water monitoring facilities. All ground water monitoring facilities will receive a detailed technical evaluation to ensure that monitoring equipment is adequate and properly installed and that sampling and analysis are being conducted properly. Awareness of both public and Congressional concern that adequate independent sampling be conducted to evaluate the quality of ground water and the extent of contamination has led the Agency to the decision to increase the level of effort for compliance sampling inspections. The Regions will also conduct technical evaluations of closure/post-closure plans and financial assurance instruments for all non-major hazardous waste facilities in unauthorized States.

The Agency plans to continue its expanded enforcement efforts. It is the goal of the program to foster compliance and lower the rate of noncompliance. The Regions will initiate warning letters and compliance orders in unauthorized States in order to secure compliance with interim status standards. In addition, enforcement resources will be provided for the Regions to continue their support

of the permitting program. This request will support pre-permit inspections and enforcement actions in response to violations occurring during the permit or closure process. The Regions will also continue their support for criminal investigations.

This request includes resources for continued State evaluation and support. The Regions will conduct program reviews for all 52 participating States. In addition, the Regions will conduct over 1,000 joint inspections and initiate enforcement actions in States that fail to secure compliance, or in response to a State request for enforcement assistance.

Extramural funding will provide technical assistance in the areas of training, ground water monitoring, sampling and lab support.

1984 Program

The Agency is allocating a total of $5,930,600 and 176.5 total workyears for this program, all of which is for the Salaries and Expenses appropriation.

The 1984 Hazardous Waste Enforcement Program expands significantly from 1983. Recent program experience and a number of studies have highlighted the level of non-compliance with the interim status standards in the regulated community, in particular, the ground water monitoring requirements. The Regions will increase their efforts in unauthorized States to focus the compliance evaluation inspections at interim status ground water monitoring facilities. In addition, the Regions will complete technical reviews of closure/post-closure plans and financial assurance instruments for all major interim status facilities. These reviews will help to ensure that these facilities have adequately planned for closure activities and that sufficient assurances are available to support closure requirements.

In the event that inspections or report reviews reveal violations, the Regions will initiate appropriate enforcement actions. The Agency expects to issue RCRA Section 3008 Compliance Orders, RCRA Section 3013 Administrative Orders requiring monitoring and analysis of sites which may present a substantial threat to human health or the environment, and RCRA Section 7003 Administrative Orders to handlers posing imminent and substantial endangerment. The Regions will also assess financial penalties in conjunction with Compliance and Administrative Orders. In addition, the Agency will develop the technical aspects of civil and criminal actions under the authority of RCRA Sections 7003 and 3008.

As part of State evaluation efforts, the Agency will conduct joint inspections with State personnel and will review the compliance monitoring and enforcement programs in all authorized and Cooperative Arrangements States. In addition, the Agency will support State enforcement actions by providing technical support, such as expert witnesses, sampling and laboratory analysis, and other technical expertise not normally found in State governments.

1984 Explanation of Changes from the Amendment

The net decrease of -$735,500 results from the following action:

-Reprogramming. (-$735,500) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$735,500, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $3,119,800 and 79.2 total workyears for this program, of which $2,806,800 was for the Salaries and Expenses apropriation and $313,000 was for extramural purposes under the Abatement, Control and Compliance appropriation.

In 1983, the Agency conducted compliance monitoring inspections of 100 percent of designated major handlers, 25 percent of other interim status facilities, and 10 percent of selected generators and transporters. To return violators to compliance, the Agency issued 46 RCRA Section 3008 Warning Letters, 12 RCRA Section 3008 Compliance Orders, 15 RCRA §3013 monitoring and analysis Administrative Orders, and, where, practices presented an imminent and substantial endangerment, RCRA Section 7003 Administrative Orders. Technical support for the development of civil actions and criminal investigations were provided.

In its State oversight role, the Agency conducted joint inspections with State personnel to evaluate the quality of inspections as well as to train State inspectors. In addition, the Regions provided technical support and assistance to States conducting compliance monitoring and enforcement activities.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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PESTICIDES

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$29,036.8	$31,435.2	$34,598.4	$34,204.4		$37,361.4	$3,157.0
Abatement Control and Compliance	$22,253.0	$19,634.4	$21,419.4	$21,419.4		$23,168.4	$1,749.0
Research & Development	$2,058.1	$1,673.0	$1,673.0	$1,673.0		$2,728.4	$1,055.4
Operations, Research and Facilities	$150.0						
TOTAL, Pesticides	$53,497.9	$52,742.6	$57,690.8	$57,296.8		$63,258.2	$5,961.4
PERMANENT WORKYEARS	665.1	652.7	694.5	694.5		727.5	33.0
TOTAL WORKYEARS	726.4	736.9	783.7	783.7		808.7	25.0
OUTLAYS	$57,888.0	$53,430.0	$56,018.4	$56,233.4		$60,680.8	$4,447.4
AUTHORIZATION LEVELS	One year extension to September 30, 1984 passed December 2, 1983 authorizes not to exceed $64,000,000, including $6,062,600 for Research and Development, for 1984.						

PESTICIDES

OVERVIEW AND STRATEGY

As a class, pesticides are among the most beneficial and the most hazardous of substances. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and Sections 402, 406, 408, and 409 of the Federal Food, Drug, and Cosmetic Act (FFDCA) invest in the Environmental Protection Agency the authority to regulate the distribution and use of pesticides in the United States. The Agency is thereby charged with a regulatory task of enormous scope and complexity. An estimated 2.7 billion pounds of pesticide active ingredients are used annually in this country, representing about 40,000 products. These products provide social as well as economic benefits to society by substantially contributing to agricultural productivity and controlling human disease vectors, such as mosquitoes. At the same time, pesticides are inherently hazardous in that they are specifically formulated to be injurious to living target organisms, and are deliberately introduced into the environment for this purpose. The hazards of pesticide exposure are thus by no means incidental to the use of these products. While many pesticides are available for use only by trained pest control operators and farmers, many others are used by persons who have no special expertise in the use of pesticides. In addition, many pesticides are used on food or animal feed crops, so that human dietary exposure cannot be avoided, although it can be controlled by regulatory measures.

Under FIFRA and the FFDCA, the Agency is responsible for ensuring that pesticides perform their intended functions without unreasonable adverse effects on public health and the environment. The projected 1985 Pesticides Program strategically builds on accomplishments achieved by EPA in previous years, and reflects a continued active commitment to fulfill our congressional mandate. The statutory goal of balancing health and environmental protection with economic stability and growth requires regulatory operations within EPA that are flexible, efficient, and effective. It also requires ongoing close cooperation with pesticide users, public interest groups, and the regulated industry. In addition, the Agency intends to encourage increased involvement by State and local governments in regulatory matters, especially in connection with local pest control needs and emergencies, the enforcement of regulations, and the education and training of persons such as applicators and farmworkers who are particularly likely to be exposed to pesticides.

The Agency's pesticide regulation strategy focuses on four broad program areas: 1) registration of new products, 2) review and reregistration of existing products, 3) enforcement of pesticide use rules, and 4) research and development to support and improve EPA's ability to evaluate the risks and benefits of pesticides. The continued importance of improving review processes is reflected in 1985 projections for the separate program areas.

REGISTRATION ACTIVITIES

FIFRA and FFDCA authorize EPA to set the terms and conditions of pesticide registration, marketing, and use. The purpose of Federal registration of pesticides by EPA is to protect public health and the environment from unreasonable risks while allowing users the benefits of needed pesticides. Under the Registration program, new pesticide products are registered on the basis of data reviewed by Agency scientists, and current registrations are amended to add new uses and/or new formulations.

The Registration program faces major uncertainties as a result of two recent court decisions, the scope and effect of which have not yet been determined. Depending on the outcomes of detailed negotiations, rule-making, and the appeals process, these decisions could necessitate comprehensive revisions to Agency policies and procedures.

The Special Registration program will continue to perform an auxiliary function by permitting certain unregistered pesticide uses to serve for experimental purposes (including temporary tolerances for residues on food destined for the market) and to deal with emergency pest situations. It also provides oversight and guidance to State Registration and Experimental Use Permit programs. The Tolerance program establishes safe and enforceable tolerance levels (or in some instances exemptions from tolerance requirements) for pesticide residues in or on raw agriculture commodities and processed foods. Tolerances (maximum permissible residue levels) are set for both active and inert pesticide ingredients.

The Agency will initiate a program of field and laboratory studies of the efficiency of protective clothing and the efficacy of current protective clothing technology as a means of reducing exposure. This activity will build upon previous investigations of protective clothing and develop options for a regulatory strategy and will propose ways to increase use of protective clothing. This is a critical area, since requiring protective clothing is a key strategy to reduce exposure to an acceptable level.

The Agency will continue the enhancement of outmoded information management support systems to improve Agency responses to public requests for pesticide information. This system will thus facilitate not only the Registration program, but also reregistrations and special reviews.

GENERIC CHEMICAL REVIEW AND REREGISTRATION

The registrations of the majority of existing pesticide chemicals are supported by data bases which the Agency has found insufficient to support statutory determinations of no unreasonable risk. The Generic Chemical Review program is designed to remedy this by reviewing current knowledge about each chemical, requiring upgrading of the scientific data base supporting registrations, and establishing scientifically based regulatory standards for reregistration of existing products and registration of future products. The Agency will review, for the first time in significant numbers, scientific studies conducted by registrants in response to recently established data requirements.

The Generic Chemical Review program, through its special review (formerly Rebuttable Presumption Against Registration, or RPAR) activities, also systematically identifies and takes appropriate regulatory action on special problems which some pesticides are found to pose for human health and the environment.

PESTICIDES ENFORCEMENT

Pesticides enforcement activities and the certification and training of restricted use pesticide applicators are undertaken primarily by States and Territories through two grant programs. The Agency will continue to provide program direction and management for the operation of the grant programs.

In addition to supporting State activities, the Agency also conducts a limited Federal Pesticide Enforcement program, principally through the Regions, which initiates enforcement in response to the four nondelegated State referrals, undertakes laboratory inspections and data audits, conducts import and export surveillance, provides technical and compliance assistance to States, the regulated community, and the public, and operates a computer system for data on registration of pesticide producer establishments and for other enforcement related data.

Headquarters enforcement personnel provide support for the development of FIFRA regulations, development of compliance monitoring strategies and enforcement response policies as new rules become effective, as well as annual grant guidance for both the Enforcement and Certification and Training grant programs.

RESEARCH AND DEVELOPMENT

EPA's pesticides research efforts provide the scientific basis for pesticide compliance and registration activities. The thrust of these activities is to provide an understanding of pesticide interactions with humans and the environment in order to ensure maximum effectiveness of pest control measures with minimum adverse effects to human health and the environment. The research program provides an integrated mix of health, monitoring, environmental processes, engineering, and risk assessment activities to improve the scientific basis for pesticide abatement, control, and compliance efforts.

In 1985, the research program will devote additional resources to develop and validate test methods necessary to measure the effect of pesticides. In addition, a portion of the increase will be used to support quality assurance, and research to evaluate the safety of protective clothing used by pesticide applicators.

PESTICIDES

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs. 1984
Registration Standard Guidance Packages Established	23	35	25	25	--
Chemical Data Call-In Requirements	75	70	70	70	--
Incoming Data Call-In and Registration Standard Data Reviews	--	--	--	560	+560
Special Review Decisions	8	10	10	11	+ 1
Laboratory Data Audits	36	18	60	60	--
New Chemical and Biorational Reviews	281	250	260	280	+ 20
Old Chemical Reviews	8,455	8,500	3,700	3,750	+ 50
Amended Registration Reviews 2/	8,971	20,300	7,0001/	7,000	--
New Use Reviews	--	1503/	135	135	--
Emergency Exemption Reviews	754	770	770	770	--
Experimental Use Permit Reviews	399	425	425	425	--
24(c) State Registration Reviews	1,058	1,100	1,100	1,100	--
Temporary Tolerance Petitions	141	175	175	175	--
5(f) State Experimental Use Permit Reviews	--	100	100	100	--
Tolerance Petition Reviews	551	640	600	600	--
Inert Ingredient Request Reviews	46	50	50	50	--
Producer Establishment Inspections 4/	2,236	2,360	2,411	2,410	-1
Use/Reentry and Experimental Use Observations 4/	16,328	9,344	16,306	19,175	+2,869
Marketplace Investigations 4/	20,896	6,402	19,203	16,530	-2,673
Import Inspections 4/	512	80	703	703	--
State Applicator License and Record Inspections	16,508	9,530	16,304	16,304	--
State Dealer Record Inspections	12,414	6,049	12,355	12,355	--
Federal Laboratory Inspections	39	40	40	40	--

1/ The number projected in the 1984 justification was 20,300. This number included 13,300 "supplemental" registrations. Since these are no longer processed or tracked, they have been removed for proper comparison purposes.

2/ Amended registration reviews include amendments to current pesticide labels, administrative amendments, and supplemental registrations.

3/ Included in earlier years under Old Chemical Reviews and Amended Registration Reviews.

4/ Includes both Federal and State enforcement activities.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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PESTICIDES

Pesticides Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Scientific Assessment							
Salaries & Expenses	$271.4	$382.9	$382.9	$382.9		$404.5	$21.6
Research & Development	$10.5	$27.5	$27.5	$27.5		$27.5	
TOTAL	$281.9	$410.4	$410.4	$410.4		$432.0	$21.6
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$463.1	$470.9	$470.9	$467.1		$492.9	$25.8
Research & Development	$233.2	$408.0	$408.0	$408.0		$659.3	$251.3
TOTAL	$696.3	$878.9	$878.9	$875.1		$1,152.2	$277.1
Health Effects							
Salaries & Expenses	$1,046.2	$1,389.0	$1,689.0	$1,689.0		$2,049.6	$360.6
Research & Development	$1,198.3	$1,049.3	$1,049.3	$1,049.3		$1,162.4	$113.1
TOTAL	$2,244.5	$2,438.3	$2,738.3	$2,738.3		$3,212.0	$473.7
Environmental Engineering & Technology							
Salaries & Expenses						$51.3	$51.3
Research & Development						$550.0	$550.0
TOTAL						$601.3	$601.3

PESTICIDES

Pesticides Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Environmental Processes & Effects							
Salaries & Expenses	$2,300.2	$2,146.8	$2,083.0	$2,083.0		$2,311.8	$228.8
Research & Development	$616.1	$188.2	$188.2	$188.2		$329.2	$141.0
TOTAL	$2,916.3	$2,335.0	$2,271.2	$2,271.2		$2,641.0	$369.8
TOTAL:							
Salaries & Expenses	$4,080.9	$4,389.6	$4,625.8	$4,622.0		$5,310.1	$688.1
Research & Development	$2,058.1	$1,673.0	$1,673.0	$1,673.0		$2,728.4	$1,055.4
Pesticides Research TOTAL	$6,139.0	$6,062.6	$6,298.8	$6,295.0		$8,038.5	$1,743.5
PERMANENT WORKYEARS							
Scientific Assessment	4.8	6.7	6.7	6.7		7.7	1.0
Monitoring Systems & Quality Assurance	5.3	7.0	7.0	7.0		7.0	
Health Effects	16.1	18.7	24.1	24.1		26.6	2.5
Environmental Processes & Effects	46.2	38.3	38.3	38.3		38.3	
TOTAL PERMANENT WORKYEARS	72.4	70.7	76.1	76.1		79.6	3.5

PESTICIDES

Pesticides Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	6.2	7.7	7.7	7.7		7.7	
Monitoring Systems & Quality Assurance	6.3	8.1	8.1	8.1		8.1	
Health Effects	20.9	31.2	37.2	37.2		37.2	
Environmental Engineering & Technology						1.0	1.0
Environmental Processes & Effects	61.4	55.3	55.3	55.3		55.3	
TOTAL WORKYEARS	94.8	102.3	108.3	108.3		109.3	1.0

PESTICIDES

Pesticides Research

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Develop and Validate Test Methods That Identify Health and Environmental Effects			
- Report on the effects of toxic exposure during selected critical development periods on sexual dimorphisms (Health)	6/86	6/86	6/86
- Report on data requirements for testing the safety of Biological Control Agents (Env. Processes)	10/83	10/84	10/85
- Report on method evaluation for predicting the effects of a pesticide on non-target organisms in a freshwater pond (Env. Processes)	5/84	5/84	
- Report on field evaluation of EPA reproductive test for avian species using Endrin (Env. Processes)		1/85	1/85
Provide Quality Assurance Assistance			
- Provide high purity chemicals and comparison samples (Monitoring)	9/83	9/84	9/85
Develop and Validate Techniques That Assess Exposure			
- Report on the pesticide leaching/ migration field study (Env. Processes)	3/84	3/84	3/85
- Manual - Pesticide leaching potential using PRZM-1 (Env. Processes)	4/84	4/84	
- Report on review publication describing and evaluating available methodology for human exposure estimation (Health)	12/86	12/86	12/86
Conduct and Review Risk Assessments			
- Provide human health related risk assessments (Scientific Assessment)	9/83	9/84	9/85

Pesticides Research

Budget Request

The Agency requests a total of $8,038,500 supported by 109.3 total workyears for 1985, an increase of $1,743,500 and 1.0 workyear from 1984. Included in this total is $5,310,100 for Salaries and Expenses and $2,728,400 for Research and Development, with increases of $688,100 and $1,055,400 respectively. The increased resources will be used for the development and validation of test methods necessary to measure the effect of pesticides, quality assurance, and research to evaluate the safety of protective clothing used by pesticides applicators.

Program Description

Research focuses on increasing our understanding of how pesticides interact with man's activities and the environment, to assure that their use can minimize damage from pests, while maximizing the protection of man's food and fiber and the environment from unreasonable adverse effects.

Objective 1. Develop Methodologies That Improve the Agency's Risk Assessment Capability Under FIFRA. This activity develops and validates new or improved environmental and public health risk assessment methods. The risk assessment methods represent an improved capability for the Office of Pesticide Programs (OPP) to analyze and aggregate the data submitted by the pesticide industry to determine the risks and benefits resulting from pesticide usage.

Objective 2. Develop and Validate Test Methods That Identify Health and Environmental Effects of Pesticides for the FIFRA Registration and Enforcement Programs. This research effort will supply validated environmental and health assay methods for use by industry. Research under this objective is needed to develop valid test protocols to meet pesticide registration requirements and enforcement responsibilities under Section 3 and 26 of FIFRA.

Objective 3. Define the Environmental, Health and Engineering Endpoints of Pesticides to Determine Possible Future Test Method Development. This work identifies the toxic effects of pesticides with which the Agency should concern itself. Once the appropriate effects of concern are identified, research results can be utilized to determine likely candidates for test method development.

Objective 4. Provide Quality Assurance Assistance and Support for the Pesticides Repository Program, Regional/State Laboratories, and Other FIFRA Activities. EPA maintains a repository of high purity chemicals that serves as standards for internal quality control to ensure that data in support of pesticides registration is accurate, precise and reliable. In addition, the program provides quality assurance support to the Office of Pesticide Programs contract laboratories in their analytical efforts.

Objective 5. Develop and Validate Techniques That Assess Human and Environmental Exposure to Pesticides for the FIFRA Registration and Enforcement Program. In the health area, exposure data will be developed to enable the Office of Pesticides Programs to set re-entry intervals to protect susceptible populations from pesticides on treated fields. In the environmental area, research develops field validated exposure assessment models to define the concentration of pesticides for use by the Office of Pesticide Programs in anticipating pesticide impacts on populations.

Objective 6. Conduct and Review Risk Assessments in Support of FIFRA Decision Making. This research prepares human health related risk assessments for carcinogenic, mutagenic, and/or reproductive effects of candidate pesticide products.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $432,000 supported by 7.7 total workyears for this program, of which $404,500 is for Salaries and Expenses and $27,500 is for Research and Development. This increase of $21,600 will provide for the evaluation of methods to estimate pesticide dose risk as a result of oral ingestion.

Conduct and Review Risk Assessments in Support of FIFRA Decision Making. The scientific assessment program will provide and review health risk assessments and exposure assessments for the Office of Pesticide Programs. Reproductive effects assessment methods will be modified to address program specific problems. Procedures for estimating dermal absorption of pesticides will be compiled and evaluated. Methods evaluation for estimating pesticide dose-rate and oral ingestion (e.g. from food) are of particular importance where pesticides are concerned.

1984 Program

In 1984, the Agency is allocating a total of $410,400 and 7.7 total workyears to this program, of which $382,900 is under the Salaries and Expenses appropriation and $27,500 is for extramural purposes under the Research and Development appropriation.

Conduct and Review Risk Assessments in Support of FIFRA Decision Making. The scientific assessment program continues to provide and review health risk assessments and exposure assessments. Exposure assessments are being reviewed and assessment methods are modified to address program specific problems. Risk assessment support is provided to OPP on selected chemicals for carcinogenicity, mutagenicity and reproductive effects.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $281,900 and 6.2 total workyears for this program, of which $271,400 was under the Salaries and Expenses appropriation and $10,500 was for extramural purposes under the Research and Development appropriation.

Conduct and Review Risk Assessments in Support of FIFRA Decision Making. Exposure assessment guidelines and handbooks were revised in accordance with Science Advisory Board review comments. Further changes in the exposure handbook were recommended by an extramural peer panel. The guidelines were submitted for final disposition to the Science Advisory Board. Risk assessment support was provided for carcinogenicity, mutagenicity and adverse reproductive effects as requested by OPP.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $1,152,200 supported by 8.1 total workyears for this program, of which $492,900 is for Salaries and Expenses and $659,300 is for Research and Development. The increases of $25,800 in the Salaries and Expenses appropriation and $251,300 in the Research and Development appropriation reflect the need to recertify the purity of the chemical standards and to revise the certification manuals.

Provide Quality Assurance Assistance and Support for the Pesticide Repository Program, Regional/State Laboratories and Other FIFRA Activites. This program maintains the Pesticide Repository of high purity chemicals which are used by over 1400 laboratories in the United States and foreign countries. These are used as standard analytical reference samples for internal quality control to ensure that test data is accurate, precise, and reliable. In addition, interlaboratory comparison samples will be prepared and used to assist contractor laboratories of the Office of Pesticide Programs in their analytical efforts.

Since the shelf life of the chemicals in the repository is limited, the additional funds will be used to institute a recertification program to assure the purity and integrity of the chemicals. The additional funds will also be used to revise and publish quality assurance manuals. Without significant revision, the existing manuals are falling further out-of-date and their usefulness is diminishing rapidly.

1984 Program

In 1984, the Agency is allocating a total of $875,100 and 8.1 total workyears to this program, of which $467,100 is under the Salaries and Expenses appropriation and $408,000 is under the Research and Development appropriation.

Provide Quality Assurance Assistance and Support for the Pesticide Repository Program, Regional/State Laboratories and Other FIFRA Activities. The funds are being used to support the Pesticide Repository which distributes analytical reference samples to the Environmental Protection Agency and other Federal laboratories, as well as State, local, university and industrial laboratories. In addition, interlaboratory comparison samples are prepared and distributed to the Office of Pesticide Program's contract laboratories for use in their analytical work.

1984 Explanation of Changes from the Amendment

The net decrease of -$3,800 results from the following action:

-Reprogramming. (-$3,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$3,800 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $696,300 and 6.3 total workyears for this program, of which, $463,100 is under the Salaries and Expenses appropriation and $233,200 is under the Research and Development appropriation.

Provide Quality Assurance Assistance and Support for the Pesticide Repository Program, Regional/State Laboratories and Other FIFRA Activities. A major part of this effort was the maintenance of the pesticide repository of chemicals which are materials used by over 1400 agencies including: the Environmental Protection Agency, other Federal, State, local, university, and industrial laboratories.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $3,212,000 supported by 37.2 total workyears for this program, of which $2,049,600 is for Salaries and Expenses and $1,162,400 is for Research and Development. This reflects an increase of $360,600 and an increase of $113,100, respectively. The increase of $360,600 will provide for the development of health effects test methods and additional data on the effects of biological pesticides. The increase in extramural funds will be used to develop new models for public health risk assessment.

Develop Methodologies that Improve the Agency's Risk Assessment Capability Under FIFRA. The 1985 program will provide new and improved animal models to assess teratology data and reproductive risks from pesticides. These models represent an improved capability to analyze and aggregate the data submitted by the pesticide industry to determine the risks and benefits resulting from pesticide usage.

Develop and Validate Test Methods that Identify Health and Environmental Effects of Pesticides for FIFRA Registration and Enforcement Programs. This research effort will continue to supply validated health assay methods for industry to use to produce a reliable data base. The increase in 1985 will be used to develop additional test methods in the areas of reproduction/teratology, mutagenesis/ carcinogenicity (genotoxic effects) neurotoxicology and immunotoxicology. Research under this objective is needed to develop validated test protocols to meet pesticide registration requirements and enforcement responsibilities under Sections 3 and 26 of FIFRA.

Define the Environmental, Health and Engineering Endpoints of Pesticides that Determine Possible Future Test Method Development. Additional funds in this area will strengthen efforts to define the critical public health effects pertaining to biological pesticides. We will provide data on the immunological effects which are generally well defined for adults, but more research is needed for developing effects information for children. This work is required to safeguard public health under Sections 3, 4, 5, and 24 of FIFRA.

1984 Program

In 1984, the Agency is allocating a total of $2,738,300 and 37.2 total workyears to this program, of which $1,689,000 is under the Salaries and Expenses appropriation and $1,049,300 is for extramural purposes under the Research and Development appropriation.

Develop Methodologies that Improve the Agency's Risk Asssessment Capability Under FIFRA. Research is continuing on the development of models for evaluating risks on the basis of laboratory animal studies. Emphasis in this research is on reproductive and teratologic effects.

Develop and Validate Test Methods That Identify Health and Environmental Effects of Pesticides for the FIFRA Registration and Enforcement Programs. This research effort validates health assay methods in the areas of reproduction/ teratology, mutagenesis/carcinogenesis (genotoxic effects) and neurotoxicology for industry to use to produce a reliable data base that the Office of Pesticide Programs can use to estimate the risk to humans.

Define the Environmental and Health Endpoints of Pesticides That Determine Possible Future Test Method Develoment. This work effort defines the critical public health effects pertaining to biological pesticides. Also, human health endpoints are currently generally well defined for adults, but additional work is needed for developing endpoints for children.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,244,500 and 20.9 total workyears for this program, of which $1,046,200 was under the Salaries and Expenses appropriation and $1,198,300 was for extramural purposes under the Research and Development appropriation.

Develop Methodologies that Improve the Agency's Risk Assessment Capability Under FIFRA. Dermal and respiratory exposure studies on home gardeners using Diazinon and on apple thinners using Guthion and phasalone have been completed and published. Studies have been completed comparing two methods for assessment of hand exposure to pesticides during mixing, loading and application.

Develop and Validate Test Methods that Identify Health and Environmental Effects of Pesticides for the FIFRA Registration and Enforcement Programs. A report on the Development of Mutagenicity Test Battery for Human Risk Estimates was completed.

Define the Environmental and Health Endpoints for Pesticides to Determine Possible Future Test Method Development. Studies are continuing on insect viruses. Methods are being developed for studying potential DNA replication and gene expression in mammalian cells. In studies in rats, the herbicide Nitrofen has been found to induce hernias in offsprings at maternal dosage levels as low as 1 mg/kg. Input from these studies are provided to the Office of Pesticide Programs to aid in the registration decision on this compound. Age-related dermal penetration studies in an in vivo rat model were completed on 12 pesticides.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $601,300 supported by 1.0 workyear for this program, of which $51,300 is for Salaries and Expenses and $550,000 is for Research and Development. This is a new activity designed to provide procedures for selecting protective clothing materials to minimize exposure of applicators to highly toxic pesticides.

Define the Environmental, Health and Engineering Endpoints of Pesticides to Determine Future Test Method Development. Research activities will be initiated to provide interim user manuals for selection of protective apparel by conducting standardization laboratory evaluations (including those by the American Society for Testing Materials) on the permeability and penetrability of various fabrics and rubber compounds by highly toxic pesticides (e.g. carbamates and organophosphates). Additional studies will establish the effects of apparel degradation (wear) and decontamination (e.g. laundering) on pesticide retention, and on apparel protective capability. Ultimately, a 'Field Users Guide' will be developed for selection of toxic pesticide protective apparel based on scientifically acceptable data from field testing under 'real world' use conditions.

1984 Program

This effort was not part of the 1984 program.

1983 Accomplishments

This effort was not part of the 1983 program.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $2,641,000 supported by 55.3 total workyears for this program, of which $2,311,800 is for Salaries and Expenses and $329,200 is for Research and Development. The increase of $228,800 in the Salaries and Expenses appropriation and $141,000 in the Research and Development appropriation will be used to validate test methods for inclusion in test guidelines.

Develop and Validate Test Methods That Identify Health and Environmental Effects of Pesticides for FIFRA Registration and Enforcement Programs. This research will continue to identify, develop, refine and evaluate the impacts of biological control agents and selected chemical pesticides on non-target estuarine/ marine, freshwater and terrestrial biota. This includes toxicological evaluations on various life-cycle stages of fishes, invertebrates (insects), mammals, crustaceans and avian species. Improved testing methods/ protocols will be supplied to the Office of Pesticide Programs for test guideline modifications. Other effects information will be used by the Agency for registration/re-registration and in the review of enforcement activities.

Increased resources will be utilized to perform detailed field validation studies which will be conducted at representative sites to verify that techniques and information derived in the laboratory are applicable for use in hazard assessment where pesticides are used under natural conditions. This research will provide the basis for re-evaluating criteria used in judging whether a given pesticide use requires regulatory action.

Define Environmental, Health and Engineering Endpoints of Pesticides to Determine Possible Future Test Method Development. Research will continue to develop modeling approaches for assessments of pesticide perturbations on natural aquatic ecosystems. Variables such as indicator species, sediment properties and element cycling will factor into this investigation. These studies will incorporate various pesticide concentration distributions and expected effects using existing models to determine the appropriate levels of organisms (populations, communities) which best represent crucial endpoints to indicate stress to the system. Results will be supportive to hazard and risk assessments made by the Office of Pesticide Programs and in enforcement actions.

Develop and Validate Techniques that Assess Human and Environmental Exposure to Pesticides for the FIFRA Registration and Enforcement Program. The research in this objective will continue to develop and validate mathematical and other predictive or descriptive techniques to estimate adverse pesticide exposure in aquatic (freshwater and marine) and terrestrial environments. Such determinations will include pesticide distribution, transport, fate (biodegradation) and exposure levels in these ecosystems.

1984 Program

In 1984, the Agency is allocating a total of $2,271,200 and 55.3 total workyears to this program, of which $2,083,000 is under the Salaries and Expenses appropriation and $188,200 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods That Identify Health and Environmental Effects of Pesticides for the FIFRA Registration and Enforcement Programs. This research includes both field and laboratory studies designed to enhance and validate measurement and testing methodologies and to determine the effects of chemical and/ or biological pest control agents on non-target organisms. Field study emphasis concerns the hazard of chemical pesticides, associated with mosquito control,

to non-target populations in the estuarine/marine and freshwater media and on wild avian species in the terrestrial media. Laboratory studies will determine the hazards associated with the use of biological or biochemical pest control agents on selected non-target biota.

Define Environmental and Health Endpoints of Pesticides to Determine Possible Future Test Method Development. This research identifies critical ecosystem components which are most susceptible to pesticide stress and converts this information into mathematical expressions to provide models for predicting ecosystem stability. This capability, which does not now exist within the regulatory process, strives to supply a more rapid, efficient and accurate analytical procedure of evaluating adverse changes in entire complex environmental systems.

Develop and Validate Techniques That Assess Human and Environmental Exposure to Pesticides for the FIFRA Registration and Enforcement Program. Predictive techniques are being developed, improved and validated through field studies to estimate the transport, exposure and fate of pesticides in the marine, freshwater and terrestrial environments.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,916,300 and 61.4 total workyears for this program of which $2,300,200 was under the Salaries and Expenses appropriation and $616,100 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods That Identify Health and Environmental Effects of Pesticides for the FIFRA Registration and Enforcement Program. Laboratory research addressed the application of methods and techniques used in defining the role of pesticides effects on non-target single species and selected populations under controlled conditions for several priority chemical pesticides and biological control agents. Planning was completed for field studies to evaluate laboratory derived data and investigations were implemented at three sites.

Develop and Validate Techniques That Assess Human and Environmental Exposure to Pesticides for the FIFRA Registration and Enforcement Program. Research focused on the generation of exposure estimates of pesticide levels which estuarine/marine, freshwater and terrestrial organisms may experience. Multimedia exposure models were assembled or expanded incorporating the research exposure estimates or information from previously existing data bases.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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PESTICIDES

Registration, Special Registration & Tolerances

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Registration								
Salaries & Expenses		$7,780.2	$8,916.3	$10,256.3	$10,025.9		$11,004.4	$978.5
Abatement Control and Compliance							$5,237.3	$5,237.3
	TOTAL	$7,780.2	$8,916.3	$10,256.3	$10,025.9		$16,241.7	$6,215.8
Special Registration								
Salaries & Expenses		$2,572.5	$2,569.4	$2,569.4	$2,719.4		$2,833.8	$114.4
	TOTAL	$2,572.5	$2,569.4	$2,569.4	$2,719.4		$2,833.8	$114.4
Tolerances								
Salaries & Expenses		$2,111.9	$2,713.4	$2,649.7	$2,499.7		$2,625.6	$125.9
	TOTAL	$2,111.9	$2,713.4	$2,649.7	$2,499.7		$2,625.6	$125.9
TOTAL:								
Salaries & Expenses		$12,464.6	$14,199.1	$15,475.4	$15,245.0		$16,463.8	$1,218.8
Abatement Control and Compliance							$5,237.3	$5,237.3
Registration, Special Registration & Tolerances	TOTAL	$12,464.6	$14,199.1	$15,475.4	$15,245.0		$21,701.1	$6,456.1

PESTICIDES

Registration, Special Registration & Tolerances

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Registration	181.9	183.5	196.6	196.6		210.5	13.9
Special Registration	58.0	57.8	57.4	57.4		57.4	
Tolerances	65.1	62.4	61.9	61.9		61.9	
TOTAL PERMANENT WORKYEARS	305.0	303.7	315.9	315.9		329.8	13.9
TOTAL WORKYEARS							
Registration	192.8	203.0	217.6	217.6		229.6	12.0
Special Registration	62.6	63.5	63.1	63.1		63.1	
Tolerances	75.7	74.1	73.6	73.6		73.6	
TOTAL WORKYEARS	331.1	340.6	354.3	354.3		366.3	12.0

Registration, Special Registration, and Tolerances

Budget Request

The Agency requests a total of $21,701,100 supported by 366.3 total workyears for this subactivity, of which $16,463,800 will be for the Salaries and Expenses appropriation and $5,237,300 will be for the Abatement, Control and Compliance appropriation, an increase of $1,218,800 and 12 total workyears and $5,237,300 respectively. The latter increase reflects $4,228,300 previously contained in the Generic Chemical Review program element in 1984 and an actual increase of $1,009,000.

Program Description

The Agency evaluates all pesticides under a "no unreasonable adverse effects" standard, taking into account the economic, social, and environmental risks and benefits of the use of any pesticide. The goal of these activities is to facilitate a steady flow of environmentally safe products to the marketplace.

Registration -- The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Section 3, requires that a pesticide be registered by EPA before it can legally be sold, distributed, or made available for use. Under the Registration program, new pesticide products are registered and current registrations are amended to add uses and/or new formulations. Registration is accomplished by 1) reviewing formulation and use data to ensure that use of the products will not result in "unreasonable adverse affects" to man or the environment, and 2) limiting the risks associated with use through label precautions, special packaging requirements, application directions, and, where necessary, restriction of use to trained applicators.

Special Registration -- The Special Registration program performs an auxiliary function to the registration process and contributes to agricultural production and public health by 1) deciding upon applications for experimental use permits, 2) setting temporary tolerances, 3) reviewing proposed emergency exemptions, 4) reviewing State registrations of pesticides distributed and used only within the registering State for special local needs, and 5) reviewing State Experimental Use Permit plans and permits necessary to develop data for State special local need registrations. These functions are required by Sections 5, 18, and 24 of FIFRA and Section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA).

Tolerances -- The Tolerance program protects public health while giving appropriate consideration to the production of an adequate, wholesome, and economical food supply. This is achieved through 1) ensuring that the maximum residue levels likely to be found in foods are safe for human consumption through a careful review and evaluation of residue chemistry and toxicology data, 2) subsequently establishing tolerance levels for both active and inert ingredients or exemptions from the requirement of a tolerance, and 3) ensuring through the testing of analytical methods that adequate enforcement of the established tolerance can be achieved. Authorizing legislation is contained in the FFDCA, as amended, Sections 402, 406, 408, and 409.

REGISTRATION

1985 Program Request

The Agency requests a total of $16,241,700 supported by 229.6 total workyears for this program, of which $11,004,400 will be for the Salaries and Expenses appropriation and $5,237,300 will be for the Abatement, Control and Compliance appropriation, representing increases of $978,500 and 12 total workyears and $5,237,300,

respectively. The Abatement, Control and Compliance increase includes $4,228,300 previously contained in the Generic Chemical Review program. The funds are now included here to more accurately reflect the program activities which they support. The real increase of $1,009,000 in Abatement, Control and Compliance and the increase in workyears and Salaries and Expenses will be used to support increased outputs, complexities introduced by recent court decisions, update of existing registration standards, needed information management improvements, and studies enabling the Agency to evaluate the efficacy of protective clothing.

In 1985, the Agency expects to conduct 280 reviews of new chemicals and biorationals, 3,750 reviews of old chemicals, 7,000 amended registration reviews, and 135 new use reviews.

The Registration program will continue to process applications for registration of new chemicals and biorationals on a priority basis while giving special attention to environmentally protective pesticides and pest management techniques to reduce reliance on other, potentially more hazardous pesticides, and to help provide more effective pest control to U.S. agriculture. Improved cooperation and understanding of registration requirements will be sought among pesticide manufacturers, pesticide users, State governments, and others in order to achieve the goals of FIFRA more effectively and efficiently.

Working with the Food and Agricultural Organization of the United Nations, the Organization for Economic Cooperation and Development (OECD), and others, the Agency will provide active support to the effort to harmonize the various national testing requirements.

The Agency will implement a systematic approach to identifying the level of regulation (full, diminished, or exemption) appropriate for classes of pesticides, e.g., chemical families and use situations. As provided by FIFRA, Section 25(b), pesticides which are reviewed and found to be practically safe or adequately regulated by another Agency will be exempted from regulation. Registration fees may be implemented in late 1985 or early 1986 to begin to recover Agency processing costs associated with providing special benefits to applicants. The fees collected will be deposited directly to the U.S. Treasury. The Agency plans to waive fees when appropriate to the public interest and where fees would cause undue economic hardship.

Work will continue on farm safety with continued emphasis on reentry problems and impacts of agricultural use on human health. This program will focus on educating farm workers, growers, applicators, et al., about pesticide hazards and on involving them in efforts to mitigate those hazards. Cooperative agreements, interagency agreements (USDA, DOL, etc.), and contracts will be employed to promote safe pesticide use practices among various exposure and user groups. The Agency will continue to improve labeling to correct faulty or unclear precautionary statements, to include guidance on hazards of use, and to improve enforcement against misuse.

The Agency relies heavily on protective clothing and equipment to reduce risks to users of important beneficial, but potentially hazardous, pesticides. Unfortunately, there is much uncertainty concerning the actual utility of protective clothing to reduce pesticide exposure as an alternative to more stringent regulatory actions. In 1985, the Agency will initiate an accelerated multiyear program of field and laboratory studies which will provide data leading to a comprehensive assessment of the use of protective clothing as a practical means of reducing pesticide exposure to applicators and agricultural workers.

Registration standards will be further integrated into the Registration program to improve the quality of registration decisions and achieve efficient registration procedures. Under the Registration Standards program, registrants are required to submit new studies (which are reviewed under the Generic Chemical

Review program element). The results of these reviews will require that existing standards be amended (funded under the Registration program). These amendments will require additional resources to update and maintain documentation of scientific conclusions, regulatory positions, labeling, and data compensation determinations.

Improvements in information management support to registration decision-making are becoming increasingly critical to the quality and efficiency of the entire program and will be accelerated in 1985. We believe that information management holds the greatest promise for continued improved efficiency and quality of decision-making in the Pesticides Program. The outmoded Pesticide Product Information System (PPIS) will be improved through conversion to a modern, multi-user, on-line data base management system and by preparations for subsequent enhancements that such a conversion will permit. A system for capture and flexible use of the results of regulatory decision-making will also be funded as a further step toward an integrated pesticide regulation data base.

1984 Program

In 1984, the Agency is allocating a total of $10,025,900 supported by 217.6 total workyears, all of which is for the Salaries and Expenses appropriation.

The Pesticides Program's tentative projection of outputs during 1984 is as follows: new chemical reviews: 200; new biorational reviews: 60; old chemical reviews: 3,700; amended registration reviews: 7,000; and new use reviews: 135.

Highly significant factors affecting our operations are two recent court decisions which have introduced major uncertainties into the Registration program. The National Agricultural Chemical Association (NACA) "Cite-all" decision prohibits us from requiring registrants to cite all relevant data in Agency files in support of their registration requests, regardless of who submitted it. The Monsanto decision ruled that several sections of FIFRA are actually unconstitutional and that EPA cannot use another company's data (without the permission of that company) in support of a registrant's application. It also restricts EPA's ability to release company-submitted data to anyone without the permission of the submitter. A request to the Supreme Court for a stay of this ruling was denied. Although the Justice Department has requested an expedited briefing schedule on the merits of the case, it is extremely unlikely that it will be decided before the summer of 1984. The total scope and effect of these decisions have not yet been determined. Depending on the outcome, comprehensive revisions to Agency policies and procedures could be necessary.

The Agency has already put in place interim procedures that allow the program to continue to function. However, for as long as the Agency is working under the interim guidelines, the internal procedures used in reviewing applications will be more costly and projected outputs reduced, resulting in potential backlogs in several catagories.

Through the implementation of registration standards and supporting information systems, the Agency will improve the quality of registration decisions and will establish efficient registration procedures. We anticipate that a system for charging registration fees will be proposed in late 1984 or early 1985 and that fees may be implemented in late 1985.

In 1984, the Registration program will continue to process applications for registration of new chemicals and biorationals on a priority basis while giving special attention to environmentally protective pesticides and pest management techniques. The Agency will continue to improve labeling by requiring registrants to correct faulty precautionary statements and include guidance on hazards associated with use, and to develop ways to reduce worker exposure through the use of protective clothing, respirators, closed system apparatus, and worker reentry intervals. Efforts will continue in cooperation with other agencies, to develop regulatory,

research, monitoring, and labeling policies to better control exposure of farm workers to pesticides.

During 1984, management improvement efforts will be directed toward more efficient data organization and management in the highly information-intensive Pesticides Program. In addition to the prime objective of improving support to the Agency's regulatory program, improvements in information systems will enable us to improve responses to public requests for pesticide information. The Agency is working with the United States Department of Agriculture and Purdue University in the continuing development of the National Pesticide Information Retrieval System which became available through a commercial vendor in early 1984. This system provides public, on-line access to EPA label information on registered products, as well as selected State registration information.

1984 Explanation of Changes from the Amendment

The net decrease of -$230,400 results from the following action:

-Reprogramming. (-$230,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$230,400 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $7,780,200 supported by 192.8 total workyears, all of which was in the Salaries and Expenses appropriation.

During 1983, the Agency conducted 281 reviews of new chemicals and biorationals, 8,455 reviews of new products containing old chemicals identical or substantially similar to others already registered, and 8,971 amended registration reviews.

In 1983, process changes were made to ensure that the costs of registration were no higher than necessary. Improved process management was accomplished through refinement of an automated tracking system as a means of process control, streamlining operating procedures, and monitoring the progress of priority review registrations. By publishing guidelines for testing pesticides for health and environmental effects, better articulating data requirements, and revising application procedures, the Agency provided the basis for improved quality of data submitted in support of registration applications, fewer industry resubmissions, and improved timeliness and consistency of Agency actions.

In addition, rules have been promulgated to exempt certain uses of pheromones from regulation under authority of Section 25(b) of FIFRA; efficacy data waivers were extended to include all pesticides except those bearing claims for microorganisms posing a threat to public health and fungicides formulated to prevent mold-formed toxins; draft labels are now being accepted in lieu of final printed labels; premarket review of distributor (supplemental) applications was eliminated; and a more flexible approach was developed to determine packaging effectiveness for products requiring child resistant packaging.

SPECIAL REGISTRATION

1985 Program Request

The Agency requests a total of $2,833,800 supported by 63.1 total workyears for this program, all of which will be for the Salaries and Expenses appropriation.

During the course of 1985, the Agency expects to conduct 770 reviews of emergency exemptions, 425 reviews of experimental use permits, 175 reviews of temporary tolerances, 1,100 reviews of special local need registrations, and 100 reviews of state experimental use permits.

In 1985, the Special Registration program will continue to focus on adherence to statutory and administrative time limits, minimization of backlogs, and reductions in processing times. Experimental use permits will continue to be processed on a priority basis, with the Agency focusing on the critical health and safety effects of emergency exemption requests. More direct communication with affected parties and the States will be employed to reduce processing times and costs. State participation in Emergency Exemption, Experimental Use Permit, and Special Local Needs programs will be enhanced through EPA guidance and close Federal/State cooperation. Where warranted, reporting requirements will be reduced and initial screening processes limited to reduce processing times. Chemical reviews conducted as part of the establishment of registration standards are expected to facilitate the Special Registration program through chemical data base improvements.

Following a full-scale review of the program, revised proposed regulations on emergency exemptions will be published in 1985. Surveillance of State programs will be emphasized to guard against unnecessary use of emergency exemptions and special local needs registrations as possible means of circumventing the normal Section 3 registration requirements.

User fees for some special registration activities may be implemented in 1985.

1984 Program

In 1984, the Agency is allocating $2,719,400 supported by 63.1 total workyears, all of which is in the Salaries and Expenses appropriation.

In 1984, the Agency expects to conduct 770 reviews for emergency exemptions, 425 reviews for experimental use permits, 100 reviews for State experimental use permits, 175 reviews for temporary tolerances, and 1,100 reviews for special local need registrations.

In 1984, efficiencies in the special registration process, featuring a more direct working relationship with affected parties and the States, will continue to be employed to reduce processing times and costs. Statutory processing times for experimental use permits (120 days) and for the review of Section 24(c) special local needs registrations (90 days) will generally be met. Decisions on FIFRA Section 18 emergency exemption requests (to allow unregistered uses to meet needs arising from acute and critical pest outbreaks) will generally be reached before the requested implementation time, and backlogs will be minimized. The Agency will support increased State responsibilities for the issuance of experimental use permits to develop data for special local needs registrations through reviews and approvals of State experimental use permit plans and encouragement of registrants to seek State experimental use permits when testing in only one State is required. The Special Registration program should begin to benefit from additions to the chemical data base resulting from chemical reviews conducted in the process of establishing registration standards.

As a result of the five-year audit of the Special Local Needs and Emergency Exemptions programs and the completion of Executive Order 12291 review (requiring a review of each regulation five years after promulgation), the Agency conducted a full-scale review of the emergency exemption regulation and its implications. Followup of the Special Local Needs program audit, conducted in 1983, will continue in 1984. Changes under consideration include improvements in the management of data on State registrations and the development of procedures for the conversion of Section 24(c) registrations (special local needs) to Section 3 registrations (normal registration) when in accordance with the intent of FIFRA.

Rules governing the assessment of user fees for some special registration activities may be proposed in 1984, for possible implementation in 1985.

1984 Explanation of Changes from the Amendment

The net increase of +$150,000 results from the following action:

-Reprogramming. (+$150,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$150,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,572,500 supported by 62.6 total workyears, all of which was in the Salaries and Expenses appropriation.

During 1983, the Agency conducted 754 reviews of emergency exemption requests, 399 reviews of experimental use permits, 141 reviews of temporary tolerances, and 1,058 reviews of special local needs registrations.

Major emphasis was placed on improving response times, adhering to statutory deadlines, minimizing backlogs, and implementing process efficiencies and appropriate regulatory reforms.

The Agency completed an audit of the Emergency Exemption and Special Local Needs program's work for the past five years. In addition, a review was completed under Executive Order 12291 of the emergency exemption regulations. The above reviews were conducted with an eye toward identification of areas of possible abuse wherein registrants might rely excessively on emergency exemptions and 24(c)'s (special local needs) and, thereby, circumvent the normal Section 3 registration process.

The Agency conducted studies on the feasibility and desirability of charging fees to support the processing of special registration actions, including experimental use permits and temporary tolerances.

TOLERANCES

1985 Program Request

The Agency requests a total of $2,625,600 supported by 73.6 total workyears for this program, all of which will be in the Salaries and Expenses appropriation, an increase of $125,900 for higher workyear costs.

Requested resources will permit an anticipated 600 tolerance petition reviews and 50 reviews of inert ingredient requests. Petition reviews will be completed within statutory time limits, whenever possible. Meeting statutory time limits is difficult for the most complex petitions because of the additional scientific review required for petitions involving far more voluminous and sophisticated data than was anticipated when the current time limit was enacted into law. Most inert ingredient requests and minor use petitions will be processed within 90 days.

It is expected that new tolerance fees (including fees for temporary tolerances) will be implemented in 1985 as authorized under Section 408 of the Federal Food, Drug and Cosmetic Act, to more fully recover the costs of processing petitions. However, it is anticipated that most of the 1985 workload will consist of petitions submitted under the old fee structure. The Agency plans to continue waiving fees when appropriate to the public interest or where fees would cause undue economic hardships.

1984 Program

The Agency is allocating a total of $2,499,700 supported by 73.6 total work-years, all of which is for the Salaries and Expenses appropriation.

The Agency expects to conduct 600 tolerance petition reviews and 50 reviews of inert ingredient requests. Statutory deadlines will be met for most tolerances while maintaining a high level of scientific review. Petitions without statutory time limits will be completed on the same schedule as petitions with statutory requirements. Most inert ingredient requests will be processed within 90 days. Reduced data requirements, through such modifications as crop group tolerances, will permit processing for most minor use petitions to be completed within 90 days.

A new tolerance fee structure will be completed in late 1984 or early 1985 to cover more fully the costs of the program. Collections under the new fee schedule are anticipated in 1985. A substantial increase in petitions under the current fee schedule is expected after notice of the proposed increase in the fee schedule is published. This could lead to a temporary increase in backlogs in late 1984 and early 1985.

1984 Explanation of Changes from the Amendment

The net decrease of -$150,000 results from the following action:

-Reprogramming. (-$150,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$150,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,111,900 supported by 75.7 total workyears, all of which was for the Salaries and Expenses appropriation.

The Agency conducted 551 reviews of tolerance petitions and 46 reviews of inert ingredient requests. Support was provided to the Codex Alimentarius program which sets international tolerances and associated activities. Process efficiencies were introduced into the program such as early return of incomplete petitions and fast-track processing of petitions requiring limited review. Reduced data requirements for minor use pesticides and certain types of biological pesticides were completed in 1983 and the applicability of some tolerances was broadened to include crop groupings. These changes will help States in issuing special local need registrations for minor uses; we anticipate that farmers will benefit significantly from the changes. Initial work was begun on the development of a revised tolerance fee structure to be completed in 1984 or early 1985.

PESTICIDES

Generic Chemical Review

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Generic Chemical Review								
Salaries & Expenses		$8,341.9	$8,715.8	$10,193.2	$10,193.2		$11,262.9	$1,069.7
Abatement Control and Compliance		$11,528.2	$10,570.7	$10,570.7	$10,570.7		$7,082.4	-$3,488.3
Operations, Research and Facilities		$150.0						
	TOTAL	$20,020.1	$19,286.5	$20,763.9	$20,763.9		$18,345.3	-$2,418.6
Special Reviews - EIS Preparation								
Salaries & Expenses		$110.5	$55.6	$55.6	$55.6			-$55.6
	TOTAL	$110.5	$55.6	$55.6	$55.6			-$55.6
TOTAL:								
Salaries & Expenses		$8,452.4	$8,771.4	$10,248.8	$10,248.8		$11,262.9	$1,014.1
Abatement Control and Compliance		$11,528.2	$10,570.7	$10,570.7	$10,570.7		$7,082.4	-$3,488.3
Operations, Research and Facilities		$150.0						
Generic Chemical Review	TOTAL	$20,130.6	$19,342.1	$20,819.5	$20,819.5		$18,345.3	-$2,474.2

PESTICIDES

Generic Chemical Review

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Generic Chemical Review	186.0	185.9	202.7	202.7		218.7	16.0
Special Reviews - EIS Preparation	3.0	1.5	1.5	1.5			-1.5
TOTAL PERMANENT WORKYEARS	189.0	187.4	204.2	204.2		218.7	14.5
TOTAL WORKYEARS							
Generic Chemical Review	190.4	192.9	211.4	211.4		224.9	13.5
Special Reviews - EIS Preparation	3.0	1.5	1.5	1.5			-1.5
TOTAL WORKYEARS	193.4	194.4	212.9	212.9		224.9	12.0

Generic Chemical Review

Budget Request

The Agency requests a total of $18,345,300 supported by 224.9 total workyears for this subactivity, of which $11,262,900 will be for the Salaries and Expenses appropriation, and $7,082,400 will be for the Abatement, Control and Compliance appropriation, an increase of $1,014,100 and 12 total workyears and a decrease of $3,488,300, respectively. To more accurately associate the source of funding with the work to be done, in 1985 the Agency has begun to reflect extramural funding in the Registration subactivity. Total funding for the two subactivities increases by $1,749,000, yielding a net increase to Generic Chemical Review of $740,000 in the Abatement, Control and Compliance appropriation.

Program Description

Generic Chemical Review -- The primary goals of the Generic Chemical Review program are 1) registation standards -- to enable the Agency to meet the mandate of Section 3 of FIFRA to update and reexamine information on currently registered pesticides and reregister them as appropriate, and 2) special review (formerly Rebuttable Presumption Against Registration or RPAR) -- to rigorously evaluate the risks and benifits of pesticides with an identified potential for producing significant adverse health or environmental effects.

Special Reviews - Environmental Impact Statement Preparation -- The goal of this program is the preparation of statements which delineate the impact on humans and/or the environment due to exposure to pesticides which are under consideration through the special review process. Such statements are part of the documentation leading to special review decisions. In 1985, this program will be absorbed into the Generic Chemical Review program.

GENERIC CHEMICAL REVIEW

1985 Program Request

The Agency requests a total of $18,345,300 supported by 224.9 total workyears for this program, of which $11,262,900 will be for the Salaries and Expenses appropriation, and $7,082,400 will be for the Abatement, Control and Compliance appropriation, representing an increase of $1,069,700 and a decrease of $3,488,300, respectively. With the realignment of Abatement, Control and Compliance funds with the Registration program element, 1985 Abatement, Control and Compliance funds requested for Generic Chemical Review represent an actual increase of $740,000.

The increase of 13.5 workyears and the net extramural increase will be used to begin the review of the incoming studies generated by the Data Call-In program and by registration standards completed in past years. Approximately 560 reviews of incoming studies will be completed. One additional special review will also be conducted and information systems upgraded.

Resources requested for 1985 will enable the completion of 11 special review decisions. Added emphasis will be placed on reaching final decisions, with appropriate opportunity for public review. The number of special reviews may vary since the initiation of special reviews relies upon the identification of potential risks during registration standard development and the review of new chemicals.

A total of 60 laboratory audits is projected, the results of which will be fed into the special review and registration processes to assure that health and environmental effects data used to support pesticide registration actions are valid. The use of Integrated Pest Management (IPM) techniques in urban pest management will be furthered in cooperation with other agencies, and IPM will be considered in special reviews as the full range of potential risk-reduction measures is examined.

It is anticipated that 25 registration standards will be established in 1985. The Agency will continue to review registration standards in clusters of similar-use chemicals, giving priority to those having high exposure and potential hazards. In addition, the Agency will continue to implement the Data Call-In program by requesting long-term chronic health data on chemicals for which standards have not yet been started. Data Call-In is designed to make these critical data available by the time registration standard development begins.

The Pesticide Document Management System (PDMS) will be upgraded to allow efficient maintenance and control of this major repository of scientific information and ready access to the information by a wide variety of reviewers.

Pursuant to the formulation of the National Pesticide Monitoring Plan in 1984, national pesticide monitoring activities will be reshaped. The plan will emphasize closer coordination of the existing monitoring programs of Federal agencies and States.

1984 Program

In 1984, the Agency is allocating a total of $20,763,900 supported by 211.4 total workyears to this program, of which $10,193,200 is for the Salaries and Expenses appropriation, and $10,570,700 is for the Abatement, Control and Compliance appropriation.

A total of 10 special review decisions is anticipated. During 1984, emphasis will be placed on completing final resolutions on those chemicals remaining in the special review process in order to resolve uncertainty among producers and users. Emphasis will also be placed on identifying and evaluating new chemicals which exceed the established risk criteria. Revised risk criteria will be proposed in 1984 to more realistically reflect both the exposure and hazard aspects of risk.

Twenty-five registration standards are now projected for 1984. While this rate of production will mean that establishment of standards for chemicals will continue into the mid 1990's, the Agency will give priority to those pesticides having high exposure and identified as potentially hazards. Among the factors considered in selecting chemicals for review are volume of use and exposure through food use.

Of the registration standards established to date, several health problems have been identified, and corrective actions taken to reduce risk. In every standard, important health and environmental data gaps are identified, and commitments are being received from registrants to generate and submit required data expeditiously. The data needs are determined on a case-by-case basis, considering the use pattern of each chemical and its actual exposure potential. This ensures that the Agency asks only for data essential to its decision process, and thereby minimizes costs to registrants and the public.

Beginning in 1984, information system support will be improved. The need for system enhancements and a comprehensive information systems approach has been identified by EPA and by the Congress. In addition, a total of 60 laboratory data audits is projected, representing an increased effort to ensure the validity of laboratory studies performed to support registrations.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $20,020,100 supported by 190.4 total workyears, of which $8,341,900 was for the Salaries and Expenses appropriation, $11,528,200 was for the Abatement, Control and Compliance appropriation, and $150,000 was for the Operations, Research and Facilities appropriation.

Special review decisions were reached on eight chemicals and a total of 36 laboratory audits were performed. Two chemicals (Methanearsonates and Naled) were returned to the registration process, and one chemical, Nitrofen (TOK), was voluntarily cancelled. Soil fumigation uses of Ethylene Dibromide (EDB) were subjected to emergency suspension, and all other pesticide uses were proposed for cancellation. Some uses of EPN, Lindane, and Strychnine were cancelled, and controls were imposed on the terms and conditions of other uses. Some rodenticide uses of Compound 1080 were proposed for cancellation or modified terms and conditions of use.

The formal Industrial Biotest (IBT) Laboratory reviews were completed. Sponsors of IBT studies were notified of the results of the program review and informed of the necessary corrective steps.

In 1983, 23 Registration Standards Guidance Packages were established, for a cumulative total of 65 (cumulative poundage and the percent usage covered by existing registration standards is 931,000,000 pounds or 34.5 percent) and the first cluster reviews were begun. Data for 70 chemicals was called in to ensure that critical data gaps are filled early in the registration standard process.

SPECIAL REVIEWS - ENVIRONMENTAL IMPACT STATEMENT PREPARATION

1985 Program Request

In view of its small size and the extent to which it is functionally integrated into the Generic Chemical Review program, this program element will be absorbed into that program element in 1985. The environmental impact analysis is an integral part of the special review documentation and is not issued as a separate statement. In 1985, this activity will continue on the same basis as in 1984.

1984 Program

In 1984, the Agency is allocating a total of $55,600 supported by 1.5 total workyears, all of which is in the Salaries and Expenses appropriation. Special review activities for 1984 include preparation of analyses of projected impacts on humans and/or the environment due to a pesticide exposure. Such analyses are part of the documentation supporting special review decisions. In developing the documentation, the Agency considers the adverse effects (health and environmental impacts) of the pesticide under review.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $110,500 supported by 3.0 total work-years, all of which was in the Salaries and Expenses appropriation. Activities completed included preparation, in the special review process, of impact analyses concerning exposure to pesticides. The analyses were used to support special review decisions.

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PESTICIDES

Pesticides Enforcement

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Pesticides Enforcement								
Salaries & Expenses		$4,038.9	$4,075.1	$4,248.4	$4,088.6		$4,324.6	$236.0
Abatement Control and Compliance		$90.1	$45.3	$45.3	$45.3		$45.3	
	TOTAL	$4,129.0	$4,120.4	$4,293.7	$4,133.9		$4,369.9	$236.0
Pesticides Enforcement Grants								
Abatement Control and Compliance		$8,717.9	$6,918.4	$8,703.4	$8,703.4		$8,703.4	
	TOTAL	$8,717.9	$6,918.4	$8,703.4	$8,703.4		$8,703.4	
Pesticides Certification & Training								
Abatement Control and Compliance		$1,916.8	$2,100.0	$2,100.0	$2,100.0		$2,100.0	
	TOTAL	$1,916.8	$2,100.0	$2,100.0	$2,100.0		$2,100.0	
TOTAL:								
Salaries & Expenses		$4,038.9	$4,075.1	$4,248.4	$4,088.6		$4,324.6	$236.0
Abatement Control and Compliance		$10,724.8	$9,063.7	$10,848.7	$10,848.7		$10,848.7	
Pesticides Enforcement	TOTAL	$14,763.7	$13,138.8	$15,097.1	$14,937.3		$15,173.3	$236.0

PESTICIDES

Pesticides Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Pesticides Enforcement	98.7	90.9	98.3	98.3		99.4	1.1
TOTAL PERMANENT WORKYEARS	98.7	90.9	98.3	98.3		99.4	1.1
TOTAL WORKYEARS							
Pesticides Enforcement	107.1	99.6	108.2	108.2		108.2	
TOTAL WORKYEARS	107.1	99.6	108.2	108.2		108.2	

Pesticides Enforcement

Budget Request

The Agency requests a total of $15,173,300 supported by 108.2 total workyears for this subactivity, of which $4,324,600 will be for the Salaries and Expenses appropriation and $10,848,700 will be for the Abatement, Control and Compliance appropriation, representing an increase in the Salaries and Expenses appropriation of $236,000. With some minor refinements to the program, the 1985 Pesticides Enforcement program will continue its 1984 activities.

Program Description

Pesticides Enforcement -- The Pesticides Enforcement program emphasizes compliance with FIFRA and related rules and regulations. This is accomplished primarily through cooperative enforcement agreements with States and Territories.

The Regional offices negotiate and monitor grant activities for the Cooperative Enforcement programs and the State Applicator Certification and Training programs, conduct compliance monitoring, enforcement, certification and training activities in non-grant States, and monitor laboratories performing tests in support of FIFRA regulations. The Regional Pesticide Enforcement program also provides compliance assistance to the agricultural chemical industry, commercial and private applicators, user groups, and States. Compliance assistance efforts are undertaken to assist these groups with product registrations, special local need registrations, and emergency exemptions, helping them understand and meet their obligations under FIFRA.

The Regional Enforcement program provides assistance in enforcement actions initiated by the States. In addition, it prepares and issues notices of violation and administrative orders, with the concurrence of the Office of Enforcement and Compliance Monitoring (OECM), in instances where the State does not participate in the Cooperative Enforcement program or where the State refers the case to the Agency for action.

Headquarters provides overall program guidance and sets national program priorities. The major functions of Headquarters are to provide support to regulation development including policies and compliance strategies; provide technical case development and general oversight to cooperative Federal/State Enforcement programs and Federal/State Applicator Certification and Training programs; and develop the annual grant guidance documents.

Pesticides Enforcement Grants -- Pesticide cooperative enforcement agreements account for most of the pesticide compliance monitoring enforcement activities. Under the terms of cooperative agreements with EPA, States inspect pesticide producer establishments, provide marketplace surveillance, and investigate pesticide use. The grants also support the States in monitoring pesticide imports, inspecting pesticide dealer records, and reviewing commercial applicator records.

Pesticides Certification and Training -- The Agency provides funds, which are split between the Training program and the Certification program, to ensure that highly toxic, restricted-use pesticides are handled, applied, and stored only by certified, trained applicators. Funds for training applicators are transferred to the U.S. Department of Agriculture for distribution to State Cooperative Extension Services. Certification funds are distributed through grants to designated State agencies. Funds are used by the States for certification activities such as developing and grading exams, issuing credentials, monitoring, training, and keeping records of certified applicators. The Agency also provides funding for Federal Certification and Training programs in Colorado and Nebraska.

PESTICIDES ENFORCEMENT

1985 Program Request

The Agency requests a total of $4,369,900 supported by 108.2 total workyears for this program, of which $4,324,600 will be for the Salaries and Expenses appropriation, and $45,300 will be for the Abatement, Control and Compliance appropriation, representing an increase of $236,000 in the Salaries and Expenses appropriation to cover increased salary obligations. Contract funds will be used for ADP support to store annual pesticide production data as required by Section 7 of FIFRA and for support of the FIFRA and TSCA Enforcement System (FATES), the computer system used to store and maintain compliance data.

In 1985, the major emphasis of the Pesticides Enforcement program will be to continue the level of participation with the States through the grant programs. Program emphasis will be on achieving compliance with rules governing pesticide use and production, mainly through the cooperative agreements. As a consequence of the States' role in the compliance program, the primary Federal role will be oversight of State Cooperative Grant programs, and administration of the Federal Applicator Certification and Training programs in Colorado (for private applicators) and Nebraska and of the Pesticides Enforcement program in Nebraska. The Federal program will initiate enforcement actions in response to State referrals. The Agency will also administers the laboratory inspection program, conduct import and export surveillance, and provide technical assistance to States.

In addition, the Regional Enforcement program will provide compliance assistance to the agricultural chemical industry, commercial and private applicators, user groups, and States to assist them to understand and comply with FIFRA rules and regulations as well as obtain product registrations, experimental use permits, special local need registrations, and emergency exemptions.

Headquarters will provide support to the FIFRA regulatory development and review process. Headquarters will also develop compliance monitoring strategies and enforcement response policies for all rules and orders as well as guidance and general oversight to the cooperative Federal/State Enforcement programs and State Applicator Certification and Training programs. Technical and analytical support for Regional activities will be provided.

1984 Program

In 1984, the Agency is allocating a total of $4,133,900 supported by 108.2 total workyears, of which $4,088,600 is for the Salaries and Expenses appropriation and $45,300 is for the Abatement, Control and Compliance appropriation.

The major emphasis of the 1984 Pesticides Enforcement program will be to maintain the level of State participation with the grant programs and to negotiate and oversee the grants. The Agency will manage 54 cooperative enforcement agreements and oversee 51 State Certification and 52 Training programs. Training of State personnel will continue, as will Federal compliance monitoring activities, in those States not participating in the grant program and in those States with enforcement issues which the State cannot adequately address. The Pesticide Enforcement program will undertake laboratory/data audit inspections, conduct import and export surveillance, and operate the computer system for pesticide producer establishment registration and other related enforcement data. Federal compliance assistance will continue to be provided to States and the regulated community.

1984 Explanation of Changes from the Amendment

The net decrease of -$159,800 results from the following actions:

-Reprogrammings. (-$159,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$500 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$159,300, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $4,129,000 supported by 107.1 total workyears, of which $4,038,900 was for the Salaries and Expenses appropriation and $90,100 was for the Abatement, Control and Compliance appropriation.

During 1983, the EPA Federal Compliance Monitoring program accomplished the following: 275 inspections of pesticide producing establishments, 320 use and reentry inspections, 327 inspections at ports of entry, 892 marketplace inspections, and 39 laboratory inspection audits. As a result of Federal and State efforts, the Agency issued 296 administrative orders and 1,473 notices of warning for product/producer and use violations.

EPA also provided management and oversight to 53 cooperative agreements, 50 State Certification programs, and 52 Training programs. State inspectors, chemists, and case preparation officers were trained as part of the cooperative agreements.

PESTICIDES ENFORCEMENT GRANTS

1985 Program Request

The Agency requests a total of $8,703,400 for grants in the Abatement, Control and Compliance appropriation.

As part of the cooperative enforcement agreements, States and Territories will determine their program priorities and use the resources provided to act upon these priorities. State compliance monitoring activities will include pesticide producer establishment and marketplace inspections, use and reentry investigations, applicator license and record inspections, and dealer record inspections.

The Agency will continue the Cooperative Enforcement program with 54 States and Territories.

1984 Program

In 1984, the Agency is allocating a total of $8,703,400 for grants in the Abatement, Control and Compliance appropriation. In 1984, these agreements stress compliance with pesticide use and application regulations, and improvement of State program priority-setting methodologies. As in previous years, the Pesticides Enforcement program will foster user compliance with label directions and manufacturer adherence to product formulation requirements under FIFRA.

One new State, Colorado, will be added to the Cooperative Enforcement program for a total of 54 States and Territories.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $8,717,900 for grants in the Abatement, Control and Compliance appropriation. This funding provided resources for 53 States to conduct 1,961 establishment inspections, 16,008 use and reentry inspections, 20,004 marketplace inspections, 185 import inspections, 16,508 applicator license and record inspections, and 12,414 dealer record inspections.

PESTICIDES CERTIFICATION AND TRAINING

1985 Program Request

The Agency requests a total of $2,100,000 for grants in the Abatement, Control and Compliance appropriation. The program will support 51 Applicator Certification and 52 Training programs in States and Territories and a Federally run Certification program in Colorado (for private applicators), and Nebraska. In addition, EPA will assist States in updating and improving training materials in 1985.

1984 Program

In 1984, the Agency is allocating a total of $2,100,000 for grants in the Abatement, Control and Compliance appropriation. This program will support 51 Certification programs (with the addition of a Commercial Applicator program in Colorado) and 52 Training programs with States and Territories. In addition, these funds support Federal programs in Colorado (for private applicators) and Nebraska. The resources will continue to be used for certification and training of applicators using highly toxic, restricted use pesticides.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,916,800 for grants in the Abatement, Control and Compliance appropriation. These resources supported 50 Certification and 52 Training programs in States and Territories. In addition, resources funded Federal Certification and Training programs in Colorado and Nebraska.

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RADIATION

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$7,480.0	$7,742.4	$8,298.3	$8,208.0		$8,878.2	$670.2
Abatement Control and Compliance	$3,842.8	$3,095.7	$3,095.7	$3,095.7		$2,195.7	-$900.0
Research & Development	$357.6	$16.7	$1,016.7	$1,016.7		$1,016.7	
TOTAL, Radiation	$11,680.4	$10,854.8	$12,410.7	$12,320.4		$12,090.6	-$229.8
PERMANENT WORKYEARS	139.0	126.9	142.2	142.2		153.8	11.6
TOTAL WORKYEARS	161.6	146.4	164.6	164.6		164.6	
OUTLAYS	$14,363.0	$11,419.0	$12,331.2	$12,372.0		$13,211.5	$839.5
AUTHORIZATION LEVELS	All except Research and Development is by virtue of Appropriation Act. R&D Act expired September 30, 1981 and reauthorization is pending.						

RADIATION

OVERVIEW AND STRATEGY

EPA's mandate to protect the public health and environment from adverse effects of radiation exposure is derived from several statutes: (1) the Federal guidance and general environmental standard authorities under the Atomic Energy Act, transferred to EPA by Reorganization Plan #3 of 1970; (2) the Clean Air Act Amendments of 1977, which provide authority to regulate radioactive air pollutants through the standard setting authorities of the Act; (3) the Resource Conservation and Recovery Act and the Uranium Mill Tailings Radiation Control Act, which charge EPA with providing standards for protection from waste materials with radioactive content; (4) the Nuclear Waste Policy Act; and (5) other authorities contained in the Federal Water Pollution Control Act, the Marine Protection Research and Sanctuaries Act, the Safe Drinking Water Act, the Public Health Service Act, and the National Environmental Policy Act.

EPA's legislative authorities generally prescribe an environmental assessment, technology assessment, and standard setting role for EPA. In some cases, enforcement responsibilities are vested in other agencies, notably the Nuclear Regulatory Commission. In these instances, EPA performs some oversight functions to ensure that established standards and guidance are followed.

Within the framework of applicable legislation, EPA's radiation program strategy includes: 1) Establish radiation standards and guidance that result in regulatory controls which promise the greatest reduction in adverse health effects and environmental impacts; 2) Maintain a capability to assess and quantify existing and emerging radiation problems and the potential impact of technologies under development; 3) Evaluate and respond to issues of serious public concern, and identify situations where corrective action is the responsibility of other organizations; and, 4) Maintain a capability to respond to emergencies and to aid development and testing of State, local, and Federal plans for emergency response.

Within this general strategy, highest priorities have been given to activities mandated by the Clean Air Act Amendments of 1977, radioactive waste management activities, completion of Federal Guidance currently under development, and testing of State radiological emergency response plans.

The emphasis on the Clean Air Act activities is consistent with public concern over radiation, the existence of a significant number of poorly defined and uncontrolled sources that emit radioactive air pollutants, and the court decision mandating EPA action on airborne radionuclides.

EPA's role in the control of radioactive waste disposal is prescribed in the Nuclear Waste Policy Act, the Uranium Mill Tailings Radiation Control Act, and by the Interagency Review Group on Nuclear Waste Management. Areas covered by Federal Guidance currently under development include general occupational exposure and radiofrequency exposure. EPA responsibilities for review and testing of emergency response plans and development of Protective Action Guides are specified in regulations issued by the Federal Emergency Management Agency in March 1982. Monitoring of the Three Mile Island cleanup is a result of a White House directive for this activity.

EPA's radiation research program provides other EPA offices, as well as other Federal, State and local agencies, with scientifically credible data, methodologies, and assessments required to determine public exposure to nonionizing radiation and radioactive material in the environment and to control such exposure. The Agency's nonionizing research program will provide health data and assessments for establishing, reviewing and revising the radiofrequency guidelines. Data for regulatory strategies for continuous-wave and whole body exposure will be analyzed. The significance of central nervous system effects from low-level exposures and the risks of exposure for frequencies outside the range of present guidelines need to be determined. The off-site monitoring program conducted to support the Department of Energy's operation of nuclear test sites and the quality assurance program for radiochemical analyses will be maintained at the same level of effort.

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RADIATION

Nonionizing Radiation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$159.5	$216.4	$216.4	$214.8		$207.1	-$7.7
Research & Development	$16.7	$16.7	$16.7	$16.7		$16.7	
TOTAL	$176.2	$233.1	$233.1	$231.5		$223.8	-$7.7
Health Effects							
Salaries & Expenses	$935.2		$562.2	$562.2		$897.7	$335.5
Research & Development	$340.9		$1,000.0	$1,000.0		$1,000.0	
TOTAL	$1,276.1		$1,562.2	$1,562.2		$1,897.7	$335.5
TOTAL:							
Salaries & Expenses	$1,094.7	$216.4	$778.6	$777.0		$1,104.8	$327.8
Research & Development	$357.6	$16.7	$1,016.7	$1,016.7		$1,016.7	
Nonionizing Radiation TOTAL	$1,452.3	$233.1	$1,795.3	$1,793.7		$2,121.5	$327.8
PERMANENT WORKYEARS							
Monitoring Systems & Quality Assurance	4.1	5.0	5.0	5.0		5.0	

RADIATION

Nonionizing Radiation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Health Effects	15.1		15.3	15.3		16.0	.7
TOTAL PERMANENT WORKYEARS	19.2	5.0	20.3	20.3		21.0	.7
TOTAL WORKYEARS							
Monitoring Systems & Quality Assurance	4.1	5.0	5.0	5.0		5.0	
Health Effects	18.0		17.0	17.0		17.0	
TOTAL WORKYEARS	22.1	5.0	22.0	22.0		22.0	

Nonionizing Radiation

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Conduct Off-Site Radiological Monitoring and Surveillance Program			
- Provide annual reports on off-site surveillance in previous calendar year (Monitoring)	7/83	7/84	7/85
Conduct an Analytical Radiochemical Quality Assurance Program			
- Report on each laboratory quality assurance intercomparison study as completed (Monitoring)	9/83	9/84	9/85
Provide Health Effects Data and Assessments Necessary to Develop, Review and Revise Federal Radiation Protection Guidance			
- Provide draft comprehensive health assessment document, Biological Effects of Radiofrequency Radiation, for SAB review and public comment as part of documentation for development of environmental exposure guidelines (Health)	7/83		
- Provide data on the fetotoxic and metabolic effects of nonionizing radiation (NIR) on various species so that the effect of NIR on pregnant women and their offspring may be predicted with greater confidence (Health)	9/89	9/89	9/89
- Determine the low intensity ELF fields which cause biological changes; how those changes occur and animal impact in terms of immunity, development and behavior (Health)	9/89	9/89	9/89

Nonionizing Radiation

Budget Request

The Agency requests a total of $2,121,500 supported by 22.0 total workyears for 1985, an increase of $327,800 from 1984. Included in this total are $1,104,800 for Salaries and Expenses and $1,016,700 for Research and Development, representing an increase of $327,800 in Salaries and Expenses. The increase reflects additional health effects research on low frequency radiation.

Program Description

The goal of the radiation research program is to provide the Office of Radiation Programs (ORP), and other EPA, Federal, regional, State and local officials with scientifically credible data, methodologies, and assessments required to control and determine public exposure to non-ionizing radiation (NIR) and to radioactive materials in the environment. The following objectives support this goal:

Objective 1. Conduct Off-Site Radiological Monitoring and Surveillance Program. The program under this objective provides comprehensive radiological monitoring and surveillance services to meet specific Department of Energy (DOE) requirements for its nuclear testing programs, especially at the Nevada Test Site (NTS). This work is conducted under a reimbursable arrangement with DOE.

Objective 2. Conduct an Analytical Radiochemical Quality Assurance Program. A quality assurance (QA) program is conducted in support of Federal, regional, State and local laboratories which assess radionuclide activities in air, water, milk, and food to determine the impact of local nuclear facility activities. The QA program supports the Office of Radiation Programs by serving as a source of radionuclide and instrument standards and radiochemical methods for analysis of environmental samples.

Objective 3. Provide Health Effects Data and Assessments Necessary to Develop, Review, and Revise Federal Radiation Protection Guidance. This research supports the responsibilities of the Office of Radiation Programs for establishing, reviewing and revising environmental exposure guidelines for non-ionizing radiation. Despite significant advances in developing a data base on the health effects of NIR, many issues remain to be investigated and resolved in order to ensure that the most appropriate and comprehensive guidelines are developed.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $223,800 supported by 5.0 total workyears for this program, of which $207,100 is for Salaries and Expenses and $16,700 is for Research and Development. The decrease of $7,700 in Salaries and Expenses represents no substantial change from 1984.

Conduct Off-Site Radiological Monitoring and Surveillance Program. National nuclear testing activities must be conducted in a way that does not adversely impact the health and safety of the population or the quality of the environment. To assure this requires comprehensive environmental monitoring and surveillance capabilities. The Environmental Protection Agency (EPA) provides these capabilities to support DOE nuclear test activities. EPA is an active participant in the decision-making process when tests are conducted and serves on the test controller's advisory panel. This panel advises the DOE test controller on whether it is advisable to initiate a test. At each test, radiation safety and monitoring teams are deployed to document environmental levels of radioactivity and to be prepared for remedial action in the event of accidental releases.

Conduct an Analytical Radiochemical Quality Assurance Program. Standard reference materials and laboratory audits are necessary to support the quality assurance aspects of the environmental radiation monitoring program being conducted by program offices, Regions, States, nuclear facilities, and contract laboratories. Over 200 of these organizations routinely make radiation measurements which are reported to various local, State, and Federal agencies. This research program provides technical expertise and guidance to those laboratories for radiochemical analyses of environmental samples. Laboratory intercomparison studies are focused on the accuracy and precision of measurement of radioactivity in milk, simulated diet, drinking water, urine, and air filters. These data will be used in assessments of population exposures to radiation. A total of 16 laboratory intercomparison studies will be conducted in 1985. The integrity of standards or reference materials are ensured through continuing radionuclide traceability studies with the National Bureau of Standards (NBS) and a repository for NBS-certified radionuclide standards will be maintained.

1984 Program

In 1984, the Agency is allocating $231,500 and 5.0 total workyears for this program, of which $214,800 is under the Salaries and Expenses appropriation and $16,700 is under the Research and Development appropriation.

Conduct Off-Site Radiological Monitoring and Surveillance Program. The off-site monitoring and surveillance program at the Nevada Test Site and at former sites of nuclear tests is continuing.

Conduct an Analytical Radiochemical Quality Assurance Program. In 1984, 12 laboratory intercomparison studies are being conducted in the quality assurance program for samples of food, milk, urine and air. About 400 radionuclide standards and reference materials maintained under the repository program are being distributed to Federal, State, and local laboratories.

1984 Explanation of Changes from the Amendment

The net decrease of -$1,600 results from the following action:

-Reprogramming. (-$1,600) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$1,600 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $176,200 and 4.1 total workyears for this program, of which $159,500 was under the Salaries and Expenses appropriation and $16,700 was for extramural purposes under the Research and Development appropriation.

Conduct Off-Site Radiological Monitoring and Surveillance Program. The off-site monitoring and surveillance program at the Nevada Test Site and at former sites of nuclear tests was maintained.

Conduct an Analytical Radiochemical Quality Assurance Program. In 1983, 11 laboratory intercomparison studies were conducted in the quality assurance program for samples of food, milk, urine, and air. About 400 radionuclide standards and reference materials maintained under the repository program were distributed to Federal, State, and local laboratories involved in monitoring radiation in the environment.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $1,897,700 supported by 17.0 total workyears for this program, of which $897,700 is for Salaries and Expenses and $1,000,000 is for Research and Development. The increase of $335,500 in the Salaries and Expenses appropriation reflects an increase in research on low frequency radiation.

Provide Health Effects Data and Assessments Necessary to Develop, Review, and Revise Federal Radiation Protection Guidance. The Agency is confronted with gaps in the health data base underlying the current Federal Radiation Protection Guidelines for radiofrequency (RF) and microwave radiation (10 Khz to 100 GHz). Presently, only continuous wave radiation (as averaged over the whole body) can be addressed in the guidance. Data gaps exist in the following areas. First, data on peak power, intermittent, partial body, lifetime exposures, wave modulation, and non-uniform energy absorption are not yet fully available to permit development of regulatory strategies for these varied and predominating conditions of environmental exposure. Second, effects on the central nervous system have been identified at extremely low levels of exposure (e.g., interference with brain biochemistry and cell growth and development). Third, the potential risks posed by exposure to frequencies outside the range of present guidelines needs to be resolved.

In order to address these information gaps, ORP has requested ORD's assistance in reaching decisions on the need for regulation on these frequencies. In 1985, research on radiofrequency and microwave radiation will increase on neurological effects, long-term low-level exposure, and dose/extrapolation modeling.

1984 Program

In 1984, the Agency is allocating a total of $1,562,200 and 17.0 total workyears to this program, of which $562,200 is under the Salaries and Expenses appropriation and $1,000,000 is under the Research and Development appropriation.

Provide Health Effects Data and Assessments Necessary to Develop, Review and Revise Federal Radiation Protection Guidance. In 1984, ORD will complete the necessary revisions to the health assessment document, Biological Effects of Radiofrequency Radiation, which was made available for public comment and Science Advisory Board (SAB) review in July 1983. This document accompanies the Federal Radiation Protection Guidance for radiofrequency radiation to be promulgated in 1984. During the review of the health assessment document, several issues were raised highlighting the need for additional research outside of the scope of the current radiation protection guidance.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,276,100 and 18.0 total workyears for this program, of which $935,200 was under the Salaries and Expenses appropriation and $340,900 was for extramural purposes under the Research and Development appropriation.

Provide Health Effects Data and Assessments Necessary to Develop, Review and Revise Federal Radiation Protection Guidance. EPA has completed an external review draft health assessment document on radio frequency radiation as part of its analyses to develop Federal Radiation Protection Guidance.

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RADIATION

Radiation Criteria, Standards & Guidelines

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Radiation Criteria, Standards & Guidelines							
Salaries & Expenses	$3,351.3	$3,870.0	$3,870.0	$3,870.0		$4,046.3	$176.3
Abatement Control and Compliance	$3,018.0	$2,495.7	$2,495.7	$2,495.7		$1,595.7	-$900.0
TOTAL	$6,369.3	$6,365.7	$6,365.7	$6,365.7		$5,642.0	-$723.7
TOTAL:							
Salaries & Expenses	$3,351.3	$3,870.0	$3,870.0	$3,870.0		$4,046.3	$176.3
Abatement Control and Compliance	$3,018.0	$2,495.7	$2,495.7	$2,495.7		$1,595.7	-$900.0
Radiation Criteria, Standards & Guidelines TOTAL	$6,369.3	$6,365.7	$6,365.7	$6,365.7		$5,642.0	-$723.7
PERMANENT WORKYEARS							
Radiation Criteria, Standards & Guidelines	61.3	65.0	65.0	65.0		69.3	4.3
TOTAL PERMANENT WORKYEARS	61.3	65.0	65.0	65.0		69.3	4.3
TOTAL WORKYEARS							
Radiation Criteria, Standards & Guidelines	68.7	74.3	74.3	74.3		74.3	
TOTAL WORKYEARS	68.7	74.3	74.3	74.3		74.3	

RADIATION

Radiation Criteria, Standards, and Guidelines

Budget Request

The Agency requests a total of $5,642,000 supported by 74.3 total workyears for this program, of which $4,046,300 is for the Salaries and Expenses appropriation and $1,595,700 is for the Abatement, Control and Compliance appropriation, a decrease of $723,700 and no change in workyears. The request is an increase of $176,300 for Salaries and Expenses and a decrease of $900,000 for Abatement, Control and Compliance.

Program Description

Radiation environmental standards and guidelines are developed and promulgated under this subactivity. These standards and guidelines protect the public health and the environment by minimizing risk of radiation exposures from nuclear energy applications, naturally occurring radioactive materials, medical and occupational radiation exposure, and nonionizing radiation.

RADIATION CRITERIA, STANDARDS, AND GUIDELINES

1985 Program Request

The Agency requests a total of $5,642,000 supported by 74.3 total workyears for this program, of which $4,046,300 is for the Salaries and Expenses appropriation and $1,595,700 is for the Abatement, Control and Compliance appropriation. The request represents an increase of $176,300 for personnel and operating costs and a decrease of $900,000, respectively, from 1984. The decrease in Abatement, Control and Compliance results from completion of support needed for regulatory analyses related primarily to airborne radionuclide activities.

Work in 1985 will concentrate on three major areas of regulatory effort: airborne radionuclides, radioactive waste management, and Federal Guidance. Attention will also be devoted to the mandated review of the environmental standards for normal operations in the uranium fuel-cycle (40 CFR 190). Airborne radionuclides efforts will include examination of phosphogypsum piles, calciners, and iron pelletizers as candidates for inclusion as source categories under the standards written under section 112 of the Clean Air Act. The standard for uranium mills will also be proposed under that authority.

As part of programs addressing the problems of radioactive waste disposal, the Agency will hold public hearings on its proposal for generic standards for low-level waste, and move towards completion of the work necessary to propose a standard for residual radioactivity levels at decommissioned nuclear facilities in 1986. Technical criteria addressing site designation, packaging, and monitoring aspects of ocean disposal of radioactive waste will be completed to be available for review of any permit applications.

Final Federal Guidance for radiofrequency radiation will be published, and a determination will be made on the need for guidance for extremely low frequency radiation. The Agency will continue to work with other Federal agencies to implement existing standards for active and inactive mill tailings and for high level waste disposal.

1984 Program

In 1984, the Agency is allocating a total of $6,365,700 and 74.3 total workyears for this program, of which $3,870,000 is for the Salaries and Expenses appropriation and $2,495,700 is for the Abatement, Control and Compliance appropriation.

During 1984, efforts are concentrated in three areas: regulation of radionuclides under Section 112 of the Clean Air Act; management of radioactive waste under the generally applicable environmental standards authority of the Atomic Energy Act and the Nuclear Waste Policy Act; and development of Federal radiation guidance under the provisions of the Atomic Energy Act. Clean Air Act efforts are directed towards promulgating standards proposed in 1983, and towards developing a proposal for the regulation of uranium mills. Radioactive waste disposal program activities include: promulgation of the high level waste standard; initiation of the program to develop standards for residual radioactivity levels at decommissioned nuclear facilities; and continued development of generic waste standards for land disposal of low level waste. The Agency is also participating in international deliberations related to the ocean disposal of radioactive wastes, as well as maintaining a capability to review permit applications from domestic sources for this purpose. Final guidance for general occupational exposure to radiation is expected to be completed under the Federal Guidance authority, and guidance for exposure to nonionizing radiation in the radiofrequency range will be proposed. EPA and other Federal agencies will work together to assure adequate implementation of existing regulations.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $6,369,300 and 68.7 total workyears for this program, of which $3,351,300 was for the Salaries and Expenses appropriation and $3,018,000 was for the Abatement, Control and Compliance appropriation. Contract funds supported the gathering of data and analyses in support of standards setting, particularly in the areas of airborne radionuclides and radioactive waste disposal. This work led to the proposal of the high level radioactive waste standards and promulgation of uranium mill tailings standards for active and inactive sites. Standards were also proposed to regulate four source categories for airborne radionuclides. Progress was made on several other regulatory efforts, including disposal standards for low level wastes, guidance for general occupational radiation exposure, and guidance to limit exposure to radiofrequency radiation.

RADIATION

Radiation Program Implementation

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Radiation Program Implementation								
Salaries & Expenses		$611.9	$716.7	$710.4	$621.7		$654.5	$32.8
	TOTAL	$611.9	$716.7	$710.4	$621.7		$654.5	$32.8
TOTAL:								
Salaries & Expenses		$611.9	$716.7	$710.4	$621.7		$654.5	$32.8
Radiation Program Implementation	TOTAL	$611.9	$716.7	$710.4	$621.7		$654.5	$32.8
PERMANENT WORKYEARS								
Radiation Program Implementation		10.1	10.0	10.0	10.0		12.3	2.3
TOTAL PERMANENT WORKYEARS		10.1	10.0	10.0	10.0		12.3	2.3
TOTAL WORKYEARS								
Radiation Program Implementation		12.3	11.1	12.3	12.3		12.3	
TOTAL WORKYEARS		12.3	11.1	12.3	12.3		12.3	

Radiation Program Implementation

Budget Request

The Agency requests a total of $654,500, supported by 12.3 total workyears for this program, all of which is for the Salaries and Expenses appropriation, resulting in an increase of $32,800.

Program Description

This program supports activities of EPA's Regional offices and includes: participating in the review and testing of State radiological emergency response plans; reviewing environmental impact statements (e.g., light water reactors and uranium mining and milling); providing the public with technical information; providing direct assistance to State and local governments with special radiation problems of a short-term nature; and providing the radiological expertise needed by the Regions to manage radiological problems associated with the drinking water and hazardous waste programs.

RADIATION PROGRAM IMPLEMENTATION

1985 Program Request

The Agency requests a total of $654,500 supported by 12.3 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $32,800 from 1984 for personnel and operating costs.

A continued emphasis for the 1985 Regional program is technical assistance to States in the area of emergency response planning. EPA assists States in the development of radiological emergency response plans and formally reviews these plans along with other Federal agencies under the coordination of the Federal Emergency Management Agency. Regional Offices will continue to be involved in the characterization and identification of hazardous radioactive waste sites. This effort supports both the EPA Headquarter's hazardous waste programs and the requests from the States. The Regions will continue to be the primary reviewer of environmental impact statements for radiation facilities, such as commercial nuclear power plants, uranium mines and mills, and radioactive waste disposal facilities. Other areas of special concern to Regions will be assistance in the implementation of the uranium mill tailings standards in those Regions affected and continued support to the States, particularly for the management of radioactive wastes.

1984 Program

In 1984, the Agency is allocating a total of $621,700 and 12.3 total workyears for this program, all of which is for the Salaries and Expenses appropriation. In 1984, emergency preparedness and technical assistance to the States on radioactive waste problems remains the central focus of the EPA Regional radiation program. The Regional program is participating with the Headquarter's staff in developing a catalog of radiation contaminated sites that may require Superfund remedial actions.

1984 Explanation of Changes from the Amendment

The net decrease of -$88,700 results from the following actions:

-Reprogrammings. (-$1,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$1,800 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$86,900, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $611,900 and 12.3 total workyears for this program, all of which was for the Salaries and Expenses appropriation. Emergency preparedness and technical assistance to the States and other EPA Regional programs remained the central focus of the EPA Regional radiation program.

RADIATION

Radiation Environmental Impact Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Radiation Environmental Impact Assessment							
Salaries & Expenses	$2,422.1	$2,939.3	$2,939.3	$2,939.3		$3,072.6	$133.3
Abatement Control and Compliance	$824.8	$600.0	$600.0	$600.0		$600.0	
TOTAL	$3,246.9	$3,539.3	$3,539.3	$3,539.3		$3,672.6	$133.3
TOTAL:							
Salaries & Expenses	$2,422.1	$2,939.3	$2,939.3	$2,939.3		$3,072.6	$133.3
Abatement Control and Compliance	$824.8	$600.0	$600.0	$600.0		$600.0	
Radiation Environmental Impact Assessment TOTAL	$3,246.9	$3,539.3	$3,539.3	$3,539.3		$3,672.6	$133.3
PERMANENT WORKYEARS							
Radiation Environmental Impact Assessment	48.4	46.9	46.9	46.9		51.2	4.3
TOTAL PERMANENT WORKYEARS	48.4	46.9	46.9	46.9		51.2	4.3

RADIATION

Radiation Environmental Impact Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Radiation Environmental Impact Assessment	58.5	56.0	56.0	56.0		56.0	
TOTAL WORKYEARS	58.5	56.0	56.0	56.0		56.0	

Radiation Environmental Impact Assessment

Budget Request

The Agency requests a total of $3,672,600 supported by 56.0 total workyears for 1985, of which $3,072,600 is for the Salaries and Expenses appropriation and $600,000 is for the Abatement, Control and Compliance appropriation. This represents an increase of $133,300 in Salaries and Expenses reflecting increased personnel and operating costs and no change in workyears.

Program Description

Activities in this program provide the information necessary to identify and analyze potential radiological health problems having public health impacts and to support the development of standards and guidelines. Also included under this subactivity is the monitoring of environmental radiation, as well as laboratory analysis, technology assessments, emergency preparedness, and emergency response.

RADIATION ENVIRONMENTAL IMPACT ASSESSMENT

1985 Program Request

The Agency requests a total of $3,672,600 supported by a total of 56.0 workyears for this program. Of the request, $3,072,600 is for the Salaries and Expenses appropriation and $600,000 is for the Abatement, Control and Compliance appropriation. This request represents an increase of $133,300 in Salaries and Expenses reflecting increased payroll and operating costs.

In 1985, this program will continue to support development of standards under the Clean Air Act, the Atomic Energy Act, and the Nuclear Waste Policy Act. Fully equipped emergency response capabilities will be maintained at two field locations. Off-site monitoring of the Three Mile Island nuclear reactor cleanup will continue. The Environmental Radiation Ambient Monitoring System will collect and analyze samples of air, precipitation, and milk in its national network to determine ambient radiation levels and will maintain its preparedness to monitor the environment in the event of atmospheric testing of nuclear devices. The quality assurance program will be operated to ensure accuracy of all laboratory measurements and data analyses conducted either in-house or through program contracts. In addition, support to States, other Federal agencies, and other parts of EPA will continue in the form of radiochemical analyses, technical assistance, and EPA participation in the Conference of Radiation Control Program Directors.

1984 Program

In 1984, the Agency is allocating a total of $3,539,300 and 56.0 total workyears for this program, of which $2,939,300 is for the Salaries and Expenses appropriation and $600,000 is for the Abatement, Control and Compliance appropriation.

Program activities include: continued laboratory and technical support to standards-setting, maintenance of an emergency response capability, coordination of the Regional offices in their review and testing of State emergency response plans, assistance to other EPA offices and to State radiological programs, and support for the Environmental Radiation Ambient Monitoring System. Ocean disposal monitoring activities will continue with participation in the marketplace seafood surveys, and completion of the Massachusetts Bay survey and Ocean Dumping inventory reports.

The monitoring of off-site releases at Three Mile Island will also continue. Additional work will include completion of the measurement protocol derived from the Butte, Montana radon survey and continued operation of a program-wide quality assurance plan. The 1984 program reflects continuing emphasis on standards-setting activities, including resources for Clean Air Act work necessary to meet the proposed regulatory schedules, and further development of the standards for residual radioactivity at decommissioned nuclear facilities.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $3,246,900 and 58.5 total workyears for this program, of which $2,422,100 was for the Salaries and Expenses appropriation and $824,800 was for the Abatement, Control and Compliance appropriation. Contract funds provided partial support to monitoring activities at Three Mile Island with the American Association of Retired People and the ocean disposal survey of Massachusetts Bay. Activities in 1983 included: continued laboratory and technical support to standards-setting, maintenance of an emergency response capability, coordination of the Regional offices in their review and testing of State emergency response plans, and assistance to other EPA offices and to State radiological programs. The Environmental Radiation Ambient Monitoring System was maintained. Ocean disposal monitoring activities included participation in the Massachusetts Bay and marketplace seafood surveys. Field work on the Butte, Montana radon survey was completed, and the program-wide quality assurance program was continued.

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INTERDISCIPLINARY

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$21,648.0	$18,244.1	$20,781.3	$20,661.9		$23,705.7	$3,043.8
Abatement Control and Compliance	$10,608.4	$7,049.4	$7,864.4	$7,864.4		$8,718.9	$854.5
Research & Development	$5,770.2	$16,042.1	$17,242.1	$17,542.8		$16,528.2	-$1,014.6
TOTAL, Interdisciplinary	$38,026.6	$41,335.6	$45,887.8	$46,069.1		$48,952.8	$2,883.7
PERMANENT WORKYEARS	444.7	353.4	422.2	425.4		486.1	60.7
TOTAL WORKYEARS	509.4	396.5	469.1	472.7		514.3	41.6
OUTLAYS	$24,798.0	$20,098.0	$32,046.7	$32,077.1		$43,009.2	$10,932.1
AUTHORIZATION LEVELS	All except Research and Development is by virtue of Appropriation Act. R&D Act expired September 30, 1981 and reauthorization is pending.						

INTERDISCIPLINARY

OVERVIEW AND STRATEGY

The Environmental Protection Agency's (EPA) Interdisciplinary program is composed of several activities that cut across programmatic lines and are not readily assignable to a specific media. These programs address environmental concerns that affect several media and require an interdisciplinary approach. The Interdisciplinary program includes the Intermedia research program within the Research and Development function, the Federal Agencies Compliance program and the National Environmental Policy Act (NEPA) Compliance program within the Abatement and Control function, and the legal aspects of the Agency's enforcement efforts.

The intermedia research program encompasses four major activities: exploratory research, technical information and liaison, scientific assessments, and quality assurance management. The exploratory research program is EPA's principal means of conducting long-range exploratory research. The research is conducted primarily through grants and the academic research centers. It also includes the Mussel Watch Toxics Trend Monitoring program and the Senior Visiting Scientist program which will be instituted to strengthen science policy and the research program. The technical information and liaison program communicates technical and scientific information of the Office of Research and Development (ORD). The scientific assessment program has responsibility for developing uniform risk assessment guidelines for Agencywide application, assuring consistency of approach to guidelines, and coordinating with other agencies. The quality assurance program provides centralized management for the Agencywide quality assurance program and develops quality assurance policy.

The NEPA Compliance program is responsible for preparing EPA's Environmental Impact Statements (EISs) or, alternatively, determining Findings of No Significant Impact, on (1) National Pollutant Discharge Elimination System (NPDES) permits for new sources in States where the NPDES program is Federally managed and (2) Federally funded municipal wastewater treatment projects to assure that new facilities with Federal involvement are planned, constructed, and operated pursuant to Section 511(c) of the Clean Water Act and NEPA. In addition, this program is developing a cooperating agency role for EPA by providing intermedia information to assist in the preparation of other agencies' EISs.

The Federal Agencies Compliance program accomplishes statutory objectives under the authority of the National Environmental Policy Act (NEPA); Section 309 of the Clean Air Act; and Executive Order 12088 - Federal Compliance with Pollution Control Standards. These laws require EPA to review and comment on proposed actions of other Federal agencies to ensure that public health and the environment are protected. In addition, Executive Order 12088 directs the Agency to: (1) provide technical advice and assistance to Federal agencies to ensure that their facilities comply with pollution control requirements in a cost-effective and timely manner; (2) monitor all Federal facilities compliance with applicable pollution control requirements; (3) assist Federal agencies and the Office of Management and Budget (OMB) in developing budgetary plans for controlling pollution at Federal facilities; and (4) resolve disputes regarding Federal facilities' violation of pollution control requirements through the administrative mechanism provided by the Order.

Enforcement Policy and Operations provides consistent direction to EPA enforcement for all non-Superfund media to assure the overall quality of EPA enforcement. To accomplish these goals, it establishes compliance monitoring strategies, enforcement priorities, policies, and procedural guidelines so that enforcement actions are properly selected and prepared; continually evaluates and refines compliance strategies and enforcement priorities; and assures that policies and procedures are correctly implemented by the media enforcement programs and Regional

offices. It conducts all legal case development, litigation, and adjudicatory hearing activities for media enforcement programs, including oversight of evidence gathering, preparation and management of cases, and referral of cases to the Department of Justice for litigation. In addition, this program contains the Agency's criminal investigations effort which entails investigation, preparation, and referral of cases involving criminal violations of environmental statutes. Investigators and attorneys will provide support to the Department of Justice during subsequent investigation and litigation of these cases.

The National Enforcement Investigations Center (NEIC) in Denver provides specialized technical expertise in support of EPA enforcement case preparation activities. NEIC serves as a point of coordination and support for complex investigations that have a national impact on EPA and State regulatory programs. In addition, while the resources for the criminal investigation program are included in Enforcement Policy and Operations, the NEIC is responsible for providing program management and direction. In 1985, NEIC will provide increased support to the Agency's legal case preparation by managing the new evidence audit program. Evidence audits will ensure that crucial data and information supporting enforcement case development is fully accurate and complete from both a technical and legal standpoint.

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INTERDISCIPLINARY

Intermedia Programs

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Scientific Assessment							
Salaries & Expenses			$600.0	$600.0		$821.3	$221.3
TOTAL			$600.0	$600.0		$821.3	$221.3
Technical Information & Liaison							
Salaries & Expenses	$1,837.7	$1,727.2	$1,727.2	$1,727.2		$1,765.3	$38.1
Research & Development	$860.0	$868.2	$868.2	$867.0		$868.2	$1.2
TOTAL	$2,697.7	$2,595.4	$2,595.4	$2,594.2		$2,633.5	$39.3
Exploratory Research Core Program							
Salaries & Expenses	$1,595.9	$374.3	$441.3	$441.3		$578.5	$137.2
Research & Development	$4,910.2	$15,173.9	$16,373.9	$16,512.3		$15,160.0	-$1,352.3
TOTAL	$6,506.1	$15,548.2	$16,815.2	$16,953.6		$15,738.5	-$1,215.1
Quality Assurance Management							
Salaries & Expenses			$330.7	$560.4		$724.8	$164.4
Research & Development				$163.5		$500.0	$336.5
TOTAL			$330.7	$723.9		$1,224.8	$500.9

INTERDISCIPLINARY

Intermedia Programs

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Salaries & Expenses	$3,433.6	$2,101.5	$3,099.2	$3,328.9		$3,889.9	$561.0
Research & Development	$5,770.2	$16,042.1	$17,242.1	$17,542.8		$16,528.2	-$1,014.6
Intermedia Programs TOTAL	$9,203.8	$18,143.6	$20,341.3	$20,871.7		$20,418.1	-$453.6
PERMANENT WORKYEARS							
Scientific Assessment			12.0	12.0		16.0	4.0
Technical Information & Liaison	25.5	17.0	17.0	17.0		17.0	
Exploratory Research Core Program	22.5	5.5	9.5	9.5		10.0	.5
Quality Assurance Management			9.1	12.3		13.2	.9
TOTAL PERMANENT WORKYEARS	48.0	22.5	47.6	50.8		56.2	5.4
TOTAL WORKYEARS							
Scientific Assessment			12.0	12.0		16.0	4.0
Technical Information & Liaison	37.5	28.6	28.6	28.6		28.6	

INTERDISCIPLINARY

Intermedia Programs

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Exploratory Research Core Program	29.0	7.4	10.0	10.0		10.0	
Quality Assurance Management			10.0	13.6		13.6	
TOTAL WORKYEARS	66.5	36.0	60.6	64.2		68.2	4.0

INTERDISCIPLINARY

Intermedia Programs

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Disseminate Technical Information/ Technology to States and Localities			
- Conference: Thermal Conversion of Municipal Sludge	3/83		
- Manual: Managing Asbestos in Schools and Other Public Buildings	3/83		
- Manual: Groundwater Management of Public Water Supplies Threatened by Groundwater Contamination		6/84	
- Capsule Reports: Post-Construction Evaluations of Innovative Technology Projects		9/84	
- User Guide: Emergency Action at Hazardous Material Incidents			9/85
- Handbook: Assessing Human Exposure to Toxic Substances			9/85
Manage/Implement the Exploratory Research Grants and Centers Program			
- Exploratory Research Program: Report to Congress		2/84	
- Long-Range Research Strategy		6/84	6/85
- Issue Grants Program Solicitation		2/84	1/85
Manage Quality Assurance Program			
- Agencywide implementation plan and management strategy		6/84	6/85
- Data quality audit protocol and conducting audits		9/84	6/85
- Annual Report to Administrator		9/84	6/85

Intermedia Programs

Budget Request

The Agency requests a total of $20,418,100 supported by 68.2 total workyears, a decrease of $453,600 and an increase of 4.0 workyears from 1984. Included in this total is $3,889,900 for Salaries and Expenses and $16,528,200 for Research and Development, an increase of $561,000 and a decrease of $1,014,600 respectively. The net decrease is a result of several actions, primarily the transfer of the Economic Benefits Program from the Office of Research and Development (ORD) to the Office of Policy, Planning and Evaluation and an increase in the exploratory research, risk assessment guidelines, and quality assurance management programs.

Program Description

The Intermedia Program contains those ORD activities which by nature encompass all media. These are Exploratory Research, Technical Information and Liaison, Integrated Risk Assessment, and Quality Assurance Management. The objectives of these programs are as follows:

Objective 1. Manage/Implement the Exploratory Research Grants and Centers Program. The grants program funds individual investigator initiated ideas in areas of concern to the Agency through an open, competitive, peer-reviewed evaluation process. The long-term exploratory research centers focus on multi-disciplinary research in eight topic areas. In addition, the Small Business Innovative Research program, the Senior Environmental Employment Program and the Minority Institutions Support Program are managed under this objective.

Objective 2. Manage/Implement the Scientific Forecasting and Trends Program. This activity involves the development of biomonitoring techniques, such as Mussel Watch, to identify environmental trends in order to determine long-term research and development needs.

Objective 3. Manage Technical Information Products. The purpose of this objective is to control, review, produce and distribute ORD information products in the most cost-effective manner and develop special reports as needed.

Objective 4. Manage Administrative Review Systems. This activity provides guidance and procedures to improve the quality of ORD's scientific and technical information products in order to enable ORD to effectively communicate the latest available information and technology.

Objective 5. Disseminate Technical Information/Technology to States and Localities. These activities provide State and local officials with the technical data necessary to meet regulatory responsibilities and enable EPA to satisfy the requirements of the Stevenson-Wydler Technical Innovation Act (PL-96-480).

Objective 6. Manage the Agencywide Mandatory Quality Assurance (QA) Program. This objective involves policy direction, management systems, and technical guidelines for the Agencywide mandatory quality assurance program, which all program offices, regional offices, and Agency laboratories must implement for all in-house and extramural environmentally related monitoring projects.

Objective 7. Assure Integrated Risk Assessment. This activity provides Agencywide guidance to perform exposure assessments and carcinogenicity, reproductive effects, and other chronic health effects risk assessments. These guidelines are intended to insure uniform assessments that rely on sound scientific principles and information.

Objective 8. Manage/Implement Visiting Scientists Program: This objective involves the development and implementation of programs to enhance the quality of the Agency's research programs through the exchange of scientists and the granting of awards for scientific achievement, the major activity being the establishment and operation of a senior visiting scientists program.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $821,300 and 16 total workyears for this program, all of which is for Salaries and Expenses. The increase of 4.0 workyears and $221,300 reflects greater support for development of uniform risk assessment methodologies.

Assure Integrated Risk Assessment. In 1985, the uniform risk assessment effort will be increased to produce uniform guidelines, to review assessments for uniformity, and to coordinate with other Federal agencies on risk assessment developments. The approach is to expand the assessment groups within the Office of Health and Environmental Assessment to develop technical assessment guidance and to increase efforts to review assessments conducted by other program offices within the Agency. Coordination of assessments among offices will be increased by expanding efforts devoted to Agency work groups and committees. A revised set of exposure, carcinogenicity, mutagenicity, and reproductive effects assessment guidelines that reflect state-of-the-art science will be completed. Guidance for development of chronic health effects assessments and environmental risk assessments will also be developed.

1984 Program

In 1984, the Agency is allocating a total of $600,000 and 12 total workyears to this program, all of which is for Salaries and Expenses.

Assure Integrated Risk Assessment. During 1984, the Agency is strengthening its risk assessment base. As a result, this new activity is involved in the development of uniform risk assessment guidelines. The objective of this effort is to provide consistent quality assessments based on sound scientific principles in a timely fashion to assure an adequate scientific basis for the Agency's regulatory decisions involving toxic chemicals. Regulatory decisions increasingly rely on risk assessments. Currently, guidelines to assure that risk assessments are conducted consistently and in accordance with sound scientific principles are incomplete. Oversight of risk assessments are conducted only on a limited basis. During 1984, risk assessment guidelines in the areas of carcinogenicity, reproductive effects, other chronic effects and exposure assessment are being reviewed. Where necessary, these guidelines will be revised to reflect advances in the state-of-the-art.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

This activity did not exist as a separate program element in 1983.

TECHNICAL INFORMATION AND LIAISON

1985 Program Request

The Agency requests a total of $2,633,500 supported by 28.6 total workyears for this program, of which $1,765,300 is for Salaries and Expenses and $868,200 is for Research and Development, an increase of $38,100 and $1,200, respectively. This request reflects basically the same program levels as 1984.

Manage Technical Information Products. The Center for Environmental Research Information (CERI) is and will continue to be the central point for all ORD information products. CERI will track, process, and distribute all ORD reports, develop special reports as needed, and produce all ORD project summaries and reports. CERI's product management activities will fall into four major areas: (1) processing reports and journal articles for submission to the National Technical Information Service (NTIS); (2) reviewing and producing project summaries; (3) printing, warehousing and distributing ORD information products, and (4) responding to requests for ORD products. In 1985, CERI plans to process approximately 850 Project Reports and 500 journal articles to NTIS. It will also process approximately 400 project summaries and 80 other reports. CERI will continue to process special requests for reports, respond to telephone inquiries for publications, and manage development of the Congressionally mandated Research Outlook.

Disseminate Technical Information/Technology to States and Localities. In response to requests from the EPA program offices and the needs expressed by the Regions and the States, ORD continually disseminates the available technology to States and localities to enable them to meet their regulatory responsibilities.

There are two primary tools used by the Technology Transfer Program to carry out its mission: seminars and publications. Seminars are developed by a team headed by a CERI staff member. This team normally includes both EPA and private industry personnel who have expertise in the particular technical discipline being addressed. The seminar presentations discuss the applicable regulations, the multimedia pollution control technology available to meet the regulations and the management/financial consideration in choosing optimum pollution control stategies.

The publications prepared and disseminated by the program include design manuals, technical capsule reports, seminar proceedings, user's guides, and handbooks.

Specific technology transfer activities will be carried out in support of several programs including Oxidants, Water Quality, Municipal Wastewater, Drinking Water, Hazardous Waste, and Superfund.

Manage Administrative Review Systems. EPA has instituted a review process for scientific information and educational documents to ensure that they are based on the best scientific and technical evidence available. This process provides a clearly defined route for the review and approval of the publications before their public release. The goal is to establish clear Agency responsibility for literature published in its name and by its employees when they are acting in an official capacity.

Within ORD, CERI has the responsibility for administering and coordinating the peer review process to insure that it is responsive and effective. It is anticipated that 1,500 to 2,000 peer reviews will be processed in 1985.

1984 Program

In 1984, the Agency is allocating a total of $2,594,200 and 28.6 total workyears to this program, of which $1,727,200 is under the Salaries and Expenses appropriation and $867,000 is for extramural purposes under the Research and Development appropriation.

Manage Technical Information Products. In 1984, CERI is processing publications to NTIS, as well as processing and distributing project summaries and other reports. These activities ensure that ORD's scientific and technical information products are produced cost-effectively, controlled for quality, and distributed uniformly. Inquiries for reports are being answered, and the Congressionally-mandated Research Outlook is being produced.

Disseminate Technical Information/Technology to States and Localities. Various technology transfer products are being developed, such as design manuals, user's guides, handbooks, training seminars, and workshops. These are being produced in close cooperation with the program offices and the Regions (and often involve participants from industry) and generally include discussion of regulations, best available pollution control technologies, management and financial considerations, and case histories of actual operations.

Manage Administrative Review Systems. Currently, the implementation of ORD's technical information policy, peer review policy, and public information policy is being coordinated and monitored by CERI. The Director of CERI advises the Director of the Office of Research Program Management and the Assistant Administrator for ORD on particular issues related to the above policies.

1984 Explanation of Changes from the Amendment

The net decrease of -$1,200 results from the following action:

-Reprogramming. (-$1,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$1,200 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,697,700 and 37.5 total workyears for this program, of which $1,837,700 was under the Salaries and Expenses appropriation and $860,000 was for extramural purposes under the Research and Development appropriation.

Manage Technical Information Products. In 1983, CERI was the central point for all ORD information products. CERI tracked, processed, and distributed all ORD reports, developed special reports, produced all ORD project summaries and reviewed the project summaries for policy implications. CERI processed 906 documents to NTIS. It also produced the Research Outlook, 285 project summaries and 78 other reports. CERI responded to 31,913 written requests for ORD publications, 14,040 telephone requests for publications and distributed about 363,000 information products.

Disseminate Technical Information/Technology to States and Localities. In 1983, CERI was involved in the development of various technology transfer tools, especially handbooks and seminars. Examples of the subjects for design manuals and seminars completed in 1983 were: Managing Asbestos in Schools and Other Public Buildings, which provided school officials with a tool for evaluating their facilities, and a seminar on Protection of Public Water Supplies from Groundwater Contamination.

Manage Administrative Review Systems. CERI managed the coordination and implementation of ORD's peer review policy. It continued its work on ORD's technical information and public information policies.

EXPLORATORY RESEARCH CORE PROGRAM

1985 Program Request

The Agency requests a total of $15,738,500 supported by 10.0 total workyears for this program, of which $578,500 is for Salaries and Expenses and $15,160,000 is for Research and Development. This reflects an increase of $137,200 and a decrease of $1,352,300 respectively. The decrease results primarily from the transfer of the Economic Benefits program from the Office of Research and Development to the Office of Policy, Planning, and Evaluation. This is offset somewhat by an increase in funding for the Visiting Scientists Program.

Manage/Implement the Exploratory Research Grants and Centers Program. During 1985, the focus for the program will continue to be research grants and our eight academic Research Centers. However, the Agency will institute management changes to improve the Exploratory Research program. These changes should result in an Exploratory Research program that is better focused on our long-range needs in a way that more effectively meets these priorities. The Agency will (1) concentrate on developing a long-term research strategy; (2) strengthen our management of, and the role of, the Centers to assure that they are meeting our needs. The Agency feels that it must clearly tie both the Grants and the Centers programs to a long-range strategy in order for the programs to be effective. In the future, we want to assure that both of these programs are clearly connected to a long-term strategy.

In 1985, the Agency will use the Grants program to support research that will advance the state-of-the-art in critical areas identified in the long-range strategy.

The Agency will institute changes to the management of the Research Centers based on the results of the 1984 evaluations of the Centers. Additionally, the Agency will conduct a comprehensive review of the four centers which are completing their first five years of operation. For all of the Centers, the program will emphasize increased interaction with ORD laboratories and the Agency program offices and dissemination of the results of research initiated during 1982-1984. The eight centers and their principal research areas are:

(1) Industrial Waste Elimination Center (Illinois Institute of Technology and the University of Notre Dame) conducts research on innovative/cost-effective process modifications to reduce industrial pollutants.

(2) Intermedia Transport Center (University of California at Los Angeles) is working on the definition of chemical/physical processes governing pollutant exchange at air-land and air-water boundaries.

(3) Ecosystem Center (Cornell University) is identifying and applying ecosystem principles to environmental management problems.

(4) Marine Center (University of Rhode Island) is conducting research on measurement and assessment of marine ecosystem health, emphasizing exposure of marine organisms to toxics.

(5) Advanced Control Technology Center (University of Illinois, Urbana) conducts research in the areas of separation technology, thermal destruction, biological separation, and chemical detoxification.

(6) Groundwater Center (a consortium of the University of Oklahoma, Oklahoma State University, and Rice University) conducts research on subsurface characterization, transport and fate, and groundwater horizon modeling.

(7) Epidemiology Center (University of Pittsburg) conducts research on basic epidemiology methods and airborne particulate health effects.

(8) Hazardous Waste Center (Louisiana State University) conducts research on the design, construction, maintenance, operation, and closure of hazardous waste landfills.

The minority institutions, small business innovation, and national environmental workforce programs are the responsibility of this program. They will continue at the same level of effort in 1985 as in 1984.

Manage/Implement the Scientific Forecasting and Trends Program. During 1985, this program will complete a comprehensive survey of Agency needs for biological monitoring. This information will be used to conduct a workshop to examine the feasibility of establishing a national biomonitoring system. Projects will also be completed summarizing Mussel Watch data obtained through 1983 and progress of the National Specimen Bank.

Manage/Implement the Visiting Scientists Program. Resources for the Visiting Scientists Program will be increased in 1985 to allow additional scientists to work at EPA laboratories. This program will be coordinated with the Environmental Studies Board of the National Academy of Sciences. It is expected that this influx of new talent and ideas will have a significant impact on the research program in 1985 and subsequent years.

1984 Program

In 1984, the Agency is allocating a total of $16,953,600 and 10.0 total workyears to this program, of which $441,300 is under the Salaries and Expenses appropriation and $16,512,300 is for extramural purposes under the Research and Development appropriation.

Manage/Implement the Exploratory Research Grants and Centers Program. The program will complete a long range research strategy early in 1984 which will provide the focus for the program in 1985. The Centers program continues to provide coordination of the Agency's eight Exploratory Research Centers. Activities include promoting increased Agency involvement in Center program planning, insuring appropriate interaction among Centers, and communicating results. The main Center program activities in 1984 include completing a reassessment of Agency priorities for the Centers and a review of three centers completing their fifth year of research.

The minority institutions research support program which promotes the participation of minority institutions in the grants program, and the national environmental workforce program which provides support to the Agency through the senior environmental employment program and other programs in support of state environmental workforce needs will continue to be managed.

Manage/Implement the Scientific Forecasting and Trends Program. This new program area for 1984 is involved in the development of biomonitoring techniques including the Mussel Watch and the National Specimen Bank programs. The major projects are a survey of Agency needs for biological monitoring programs and coordination of Mussel Watch with the National Atmospheric and Oceanographic Administration.

Manage/Implement the Visiting Scientists Program. In 1984, we will initiate a program to bring distinguished senior scientists into ORD laboratories to assist the Agency in strengthening its science policy and research program. The purpose of the program is to bring creative new ideas to our research program through a resident fellowship program.

1984 Explanation of Changes from the Amendment

The net increase of +$138,400 results from the following action:

-Reprogramming. (+$138,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$138,400 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $6,506,100 and 29.0 total workyears for this program, of which $1,595,900 was for Salaries and Expenses and $4,910,200 was for extramural purposes under the Research and Development appropriation.

Manage/Implement the Exploratory Research Grants and Centers Program. In 1983, the Agency continued its management of the Exploratory Grants program. A formal solicitation for grants was issued. Proposals were reviewed and funded based on scientific merit and relevance to Agency objectives. A series of seminars was conducted where grantees presented their project results to peers, Agency specialists, and interested public.

Based on policy and procedures guidelines, management improvements were instituted for both the Grants and the Centers programs. Preliminary guidelines were developed to conduct the Agency review of center themes and evaluate the Centers completing five years of operation.

QUALITY ASSURANCE MANAGEMENT

1985 Program Request

The Agency requests a total of $1,224,800 supported by 13.6 total workyears for this program, of which $724,800 is for Salaries and Expenses and $500,000 is for Research and Development. This reflects increases of $164,400 and $336,500 in Salaries and Expenses and Research and Development, respectively. These increases are needed to develop and implement the policy and technical guidance required for an effective and efficient Agencywide quality assurance program.

Manage the Agencywide Mandatory Quality Assurance (QA) Program. In 1985, through both in-house activities and extramural support, this program will: establish needed Agencywide QA policy; identify QA program requirements for 42 implementing offices; conduct audits of data sets to determine whether data being produced or used are of known quality; coordinate the development of Agencywide and program-specific QA technical requirements; prepare reports to the Administrator on the quality of EPA data and the status of QA implementation.

1984 Program

In 1984, the Agency is allocating a total of $723,900 and 13.6 total workyears to this program, of which $560,400 is under the Salaries and Expenses appropriation and $163,500 is for extramural purposes under the Research and Development appropriation.

Manage the Agencywide Mandatory Quality Assurance (QA) Program. In 1984, EPA is continuing its efforts towards full implementation of a quality assurance program that will ensure generation of data of known quality in all EPA data collection activities under a management consolidation in this new program element. Initiatives will include the publication of the following reports: QA Implementation Plan and Management Strategy, Data Quality Audit Protocol, Calculation of Data Quality Indicators - Revision #2, Quality Assurance Workload Model, Annual QA Report to the Administrator, and specific technical guidelines on laboratory analyses.

1984 Explanation of Changes from the Amendment

The net increase of +$393,200 results from the following actions:

-Reprogrammings. (+$393,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$229,700 to the Salaries and Expenses appropriation and a net increase of +$163,500 to the Research and Development appropriation.

1983 Accomplishments

This activity did not exist as a separate program element in 1983.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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INTERDISCIPLINARY

NEPA Compliance and Federal Agencies Compliance

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
NEPA Compliance								
Salaries & Expenses		$2,624.9	$3,090.7	$3,019.9	$2,746.3		$2,915.7	$169.4
Abatement Control and Compliance		$8,033.4	$6,563.9	$6,563.9	$6,563.9		$6,353.9	-$210.0
	TOTAL	$10,658.3	$9,654.6	$9,583.8	$9,310.2		$9,269.6	-$40.6
Federal Agencies Compliance								
Salaries & Expenses		$1,706.8	$1,881.5	$1,982.2	$1,956.4		$2,227.7	$271.3
	TOTAL	$1,706.8	$1,881.5	$1,982.2	$1,956.4		$2,227.7	$271.3
TOTAL:								
Salaries & Expenses		$4,331.7	$4,972.2	$5,002.1	$4,702.7		$5,143.4	$440.7
Abatement Control and Compliance		$8,033.4	$6,563.9	$6,563.9	$6,563.9		$6,353.9	-$210.0
NEPA Compliance and Federal Agencies Compliance	TOTAL	$12,365.1	$11,536.1	$11,566.0	$11,266.6		$11,497.3	$230.7
PERMANENT WORKYEARS								
NEPA Compliance		71.9	69.7	69.7	69.7		69.7	
Federal Agencies Compliance		43.5	46.8	46.8	46.8		51.8	5.0
TOTAL PERMANENT WORKYEARS		115.4	116.5	116.5	116.5		121.5	5.0

INTERDISCIPLINARY

NEPA Compliance and Federal Agencies Compliance

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
NEPA Compliance	74.5	72.2	72.2	72.2		72.2	
Federal Agencies Compliance	43.9	48.0	48.0	48.0		53.0	5.0
TOTAL WORKYEARS	118.4	120.2	120.2	120.2		125.2	5.0

NEPA Compliance and Federal Agencies Compliance

Budget Request

The Agency requests a total of $11,497,300 supported by 125.2 total workyears for this program, of which $5,143,400 is for the Salaries and Expenses appropriation and $6,353,900 is for the Abatement, Control and Compliance appropriation. This represents an increase of $230,700 and 5.0 workyears from 1984 levels.

Program Description

This sub-activity includes two programs: (1) Federal Agencies Compliance, under which the actions of Federal agencies are reviewed to assure that they carry out their activities in an environmentally sound manner; and (2) NEPA Compliance, under which environmental assessments and Environmental Impact Statements (EISs) are prepared for National Pollutant Discharge Elimination System permits for new sources and for Federally funded municipal wastewater treatment projects.

NEPA Compliance -- This program element contains resources for: (1) preparing EPA Environmental Impact Statements or, alternatively, determining Findings of No Significant Impact on National Pollutant Discharge Elimination System new source permits and municipal wastewater treatment grant actions to assure that new facilities with Federal involvement comply with Section 511(c) of the Clean Water Act and NEPA; (2) conducting generic studies which directly support and increase the efficiency of meeting site-specific NEPA requirements; and (3) supporting a cooperating agency role for EPA in providing inter-media information to assist in the preparation of EISs by other Federal agencies.

Federal Agencies Compliance -- Under the mandates of the National Environmental Policy Act, Section 309 of the Clean Air Act, and Executive Order 12088 (Federal Compliance with Pollution Control Standards), activities for this program element include review and comment on EISs and on the environmental impact of any major legislation, regulations or other actions proposed by other Federal agencies. In addition, under Executive Order 12088 and OMB Circular A-106, resources in this program assist Federal agencies in: (1) identifying facilities needing pollution control mechanisms; (2) determining the most cost-effective control; (3) developing fiscal plans for installing needed abatement control technology; and (4) resolving disputes surrounding facilities which are out of compliance.

NEPA COMPLIANCE

1985 Program Request

The Agency requests a total of $9,269,600 supported by 72.2 total workyears for this program, of which $2,915,700 is for the Salaries and Expenses appropriation and $6,353,900 is for the Abatement, Control, and Compliance appropriation. This represents a decrease of $40,600 and no workyears from 1984 levels. The decrease reflects cost-savings from increased use of generic EISs. In 1985, increased effort will be directed toward generic studies to support NEPA requirements and toward developing a cooperating agency role to provide advice and assistance to other Federal agencies on their EISs and other projects of environmental concern.

1984 Program

In 1984, the Agency is allocating a total of $9,310,200 and 72.2 total workyears to this program, of which $2,746,300 is for the Salaries and Expenses appropriation and $6,563,900 is for the Abatement, Control and Compliance appropriation.

In 1984, the program is significantly increasing emphasis on generic studies and assessments (both area-wide and project types) while continuing necessary work on site-specific assessments and EISs. Approximately 49 EISs will be prepared.

1984 Explanation of Changes from the Amendment

The net decrease of -$273,600 results from the following action:

-Reprogramming. (-$273,600) A reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$273,600, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $10,658,300 and 74.5 total workyears for this program, of which $2,624,900 was for the Salaries and Expenses appropriation and $8,033,400 was for the Abatement, Control, and Compliance appropriation. In 1983, EPA prepared 40 EISs.

FEDERAL AGENCIES COMPLIANCE

1985 Program Request

The Agency requests a total of $2,227,700 supported by 53.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $271,300 and 5.0 workyears from 1984 levels. Increased resources will enable the Agency to place additional emphasis on advice to Federal agencies on control methods and requirements, compliance monitoring, and dispute resolution under Executive Order 12088. In addition, this program expects to review and comment on other Federal agencies' draft and final EISs, as well as other agency actions requiring compliance with environmental laws and regulations.

1984 Program

In 1984, the Agency is allocating a total of $1,956,400 and 48.0 total workyears to this program, all of which is for the Salaries and Expenses appropriation. EPA will continue to identify and resolve environmental concerns at an early stage in other agencies' project development processes. The program expects to review over 800 draft and final EISs. In addition, the Agency will be developing updated program guidance both for environmental review of other agency actions and for increased emphasis on Federal facilities compliance with environmental laws and regulations.

1984 Explanation of Changes from the Amendment

The net decrease of -$25,800 results from the following actions:

-Reprogrammings. (-$25,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$300 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional support program element. This reprogramming to Salaries and Expenses, totaling -$25,500, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,706,800 and 43.9 total workyears to this program, all of which was for the Salaries and Expenses appropriation. The program placed emphasis on identifying and resolving environmental concerns at an early stage in the project development process, including review and comment on over 800 draft and final Environmental Impact Statements.

INTERDISCIPLINARY

Accelerated Review & Permitting

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Accelerated Review & Permitting							
Salaries & Expenses		$1,289.9					
Abatement Control and Compliance		$1,743.2					
TOTAL		$3,033.1					
TOTAL:							
Salaries & Expenses		$1,289.9					
Abatement Control and Compliance		$1,743.2					
Accelerated Review & Permitting TOTAL		$3,033.1					
PERMANENT WORKYEARS							
Accelerated Review & Permitting		28.1					
TOTAL PERMANENT WORKYEARS		28.1					

INTERDISCIPLINARY

Accelerated Review & Permitting

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Accelerated Review & Permitting	37.8						
TOTAL WORKYEARS	37.8						

INTERDISCIPLINARY

Accelerated Review and Permitting

Budget Request

The Agency requests no resources for this activity in 1985.

Program Description

This program contained the resources for the Accelerated Review and Permitting program. It expedited development of energy-related and other important projects in an environmentally sound manner. It augmented the resources of EPA's permitting, Environmental Impact Statement (EIS) review, and EIS preparation programs.

ACCELERATED REVIEW AND PERMITTING

1985 Program Request

The Agency is not requesting funding for this activity in 1985.

1984 Program

In 1984, the Agency did not allocate resources to this program because the anticpated workload for accelerated permitting did not materialize.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,033,100 and 37.8 total workyears for this program, of which $1,289,900 was for the Salaries and Expenses appropriation and $1,743,200 was for the Abatement, Control and Compliance appropriation. The program emphasized development of streamlined permit review procedures and environmental assessment at an early stage in project development.

INTERDISCIPLINARY

Interdisciplinary Training Grants

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Interdisciplinary Training Grants								
Abatement Control and Compliance		$547.5		$415.0	$415.0			-$415.0
	TOTAL	$547.5		$415.0	$415.0			-$415.0
TOTAL:								
Abatement Control and Compliance		$547.5		$415.0	$415.0			-$415.0
Interdisciplinary Training Grants	TOTAL	$547.5		$415.0	$415.0			-$415.0

INTERDISCIPLINARY

Interdisciplinary Training Grants

Budget Request

The Agency requests no resources for this program in 1985.

Program Description

This program encourages academic training in the environmental sciences by providing economic support, through fellowships and training grants, to students who are interested in entering this field.

INTERDISCIPLINARY TRAINING GRANTS

1985 Program Request

The Agency requests no resources for this program in 1985. We feel that the program has accomplished its objectives. Many academic institutions have now established environmental science programs; and, the number of students trained in this discipline has substantially increased.

1984 Program

In 1984, the Agency is allocating a total of $415,000 to this program within the Office of Research and Development (ORD), all of which is under the Abatement, Control and Compliance appropriation. The program continues to support academic training through fellowships and training grants.

1983 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $547,500 to this program within ORD, all of which was under the Abatement, Control and Compliance appropriation. The program funded 20 minority fellowships.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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INTERDISCIPLINARY

Enforcement Policy & Technical Support

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Technical Support - Office of Enforcement & Compliance Monitoring								
Salaries & Expenses		$3,250.3	$3,041.7	$3,085.9	$3,085.9		$3,162.6	$76.7
Abatement Control and Compliance		$40.0	$285.5	$685.5	$685.5		$2,015.0	$1,329.5
	TOTAL	$3,290.3	$3,327.2	$3,771.4	$3,771.4		$5,177.6	$1,406.2
Enforcement Policy & Operations								
Salaries & Expenses		$9,326.3	$8,128.7	$9,594.1	$9,544.4		$11,509.8	$1,965.4
Abatement Control and Compliance		$244.3	$200.0	$200.0	$200.0		$350.0	$150.0
	TOTAL	$9,570.6	$8,328.7	$9,794.1	$9,744.4		$11,859.8	$2,115.4
TOTAL:								
Salaries & Expenses		$12,576.6	$11,170.4	$12,680.0	$12,630.3		$14,672.4	$2,042.1
Abatement Control and Compliance		$284.3	$485.5	$885.5	$885.5		$2,365.0	$1,479.5
Enforcement Policy & Technical Support	TOTAL	$12,860.9	$11,655.9	$13,565.5	$13,515.8		$17,037.4	$3,521.6

INTERDISCIPLINARY

Enforcement Policy & Technical Support

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Technical Support - Office of Enforcement & Compliance Monitoring	54.7	51.0	53.8	53.8		66.4	12.6
Enforcement Policy & Operations	198.1	163.4	204.3	204.3		242.0	37.7
TOTAL PERMANENT WORKYEARS	252.8	214.4	258.1	258.1		308.4	50.3
TOTAL WORKYEARS							
Technical Support - Office of Enforcement & Compliance Monitoring	65.1	63.4	66.4	66.4		66.4	
Enforcement Policy & Operations	221.2	176.9	221.9	221.9		254.5	32.6
TOTAL WORKYEARS	286.3	240.3	288.3	288.3		320.9	32.6

INTERDISCIPLINARY

Enforcement Policy and Technical Support

Budget Request

The Agency requests a total of $17,037,400 supported by 320.9 total workyears for this subactivity of which $14,672,400 will be for the Salaries and Expenses appropriation and $2,365,000 will be for the Abatement, Control, and Compliance appropriation, an increase of $3,521,600 and 32.6 total workyears. The increase funds Enforcement Policy and Operations' new compliance monitoring functions and an increasing level of compliance and enforcement activities.

Program Description

Technical Support - Office of Enforcement and Compliance Monitoring -- The National Enforcement Investigations Center (NEIC) is the primary source of specialized technical support for the Office of Enforcement and Compliance Monitoring (OECM) for specific case development activities for all media. NEIC provides Headquarters and Regional offices with technical support for litigation development in nationally managed cases; cases with precedential implications; criminal cases; cases with multi-regional impacts; cases involving unique technological requirements and complexity; and cases which exceed a Region's capability and resources. The NEIC also plans, develops, and provides technical assistance, information, and interpretations for civil and criminal case preparations.

Enforcement Policy and Operations -- This program element comprises the legal aspects of Agency enforcement programs in all non-Superfund media. It is comprised of a Headquarters component which provides for the development of legal enforcement policy and procedures as well as a Regional program to provide program and policy implementation. This entails the direction of legal enforcement activities of the Agency including the initiation and conduct of civil and criminal litigation as appropriate. Full legal enforcement support services are provided to media compliance programs in accordance with specific media priorities and compliance monitoring activities.

In addition, Enforcement Policy and Operations will be responsible for overseeing the Agency's compliance efforts, including establishment of Agencywide criteria for use in the development of media-specific compliance strategies, the design of management systems, the negotiation of compliance and enforcement commitments, and the overview of the implementation of strategies and program objectives. Through this program element, OECM conducts cross-media analyses of Agency compliance and enforcement activities, including the conduct of program evaluations. OECM also acts as a leader in fostering new compliance and enforcement approaches.

TECHNICAL SUPPORT - OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

1985 Program Request

The Agency requests a total of $5,177,600 supported by 66.4 total workyears for this program, of which $3,162,600 will be for the Salaries and Expenses appropriation and $2,015,000 for the Abatement, Control, and Compliance appropriation, representing an increase of $1,406,200 and no change in total workyears. Of this amount there is an increase of $76,700 in the Salaries and Expenses appropriation and an increase of $1,329,500 in the Abatement, Control, and Compliance appropriation. The increase reflects increases in personnel and support costs as well as additional contract funds to support needs of the Agency's legal case preparation in the form of evidence audit activities.

This program comprises the activities of the National Enforcement Investigations Center (NEIC) at Denver, Colorado. The NEIC provides support for the Agency's enforcement efforts in all media. In 1985, it will respond to Headquarters, Regional, and State requests for assistance in instances where specialized technical resources are required. In addition, NEIC will manage the new evidence audit program. Evidence audits will ensure that crucial data and information supporting enforcement case development is fully accurate and complete from both a legal and technical standpoint.

In the air enforcement program, NEIC will support civil litigation activity resulting from significant violators of the December 31, 1982 Clean Air Act deadlines, and of compliance dates contained in existing consent decrees. Support will also be provided to litigation regarding noncompliance with National Emissions Standards for Hazardous Air Pollutants (NESHAPS) and New Source Performance Standards (NSPS), and standards for volatile organic compounds (VOCs).

In the water program, the NEIC will assist in the evaluation of operations and maintenance problems preparatory to litigation against significant violators where complex technological factors require intensive or prolonged evaluation or where precedents are involved. As resources permit, NEIC will provide technical support to adjudicatory hearings on National Pollutant Discharge Elimination System and Best Available Technology permits.

The Center's assistance in the hazardous waste program will emphasize case preparations at the larger or more complex sites where significant violations are identified through Regional media compliance monitoring. Priority will be given to case preparations of precedential or deterrent value. Increasingly, these cases involve highly complex networks of groundwater monitoring wells and highly sophisticated organic and inorganic analyses of large numbers of samples.

In support of litigation case development in the pesticides enforcement program, NEIC will conduct major application misuse investigations exceeding State and Regional resource capabilities. NEIC's activity in the toxics enforcement program will involve cases arising from violations in reporting, recordkeeping, storage, handling, testing, and violations of chemical control rules for toxic substances.

The NEIC will also direct the criminal investigators staff of the Criminal Enforcement program. This staff conducts preliminary inquiries and investigations and provides referral and post-referral support. While the NEIC will provide program direction and administrative support, the resources will continue to be carried in Enforcement Policy and Operations. The NEIC management of investigative staff will provide more effective and efficient support to this field investigation effort and will seek to integrate the activities of the criminal investigative staff with the priorities and operations of EPA regional offices.

In the Abatement, Control, and Compliance appropriation, $2,015,000 will support litigation by providing technical and laboratory expertise, evidence audit activities, and evidence preservation activities.

1984 Program

In 1984, the Agency is allocating $3,771,400 and 66.4 total workyears to this program, of which $3,085,900 is for the Salaries and Expenses appropriation and $685,500 is for extramural purposes under the Abatement, Control, and Compliance appropriation.

In the Stationary and Mobile air programs, case preparation activities and technical support to enforcement actions against significant violators are provided. Sample permits and emissions monitoring protocols and requirements are being developed and testing for violations of National Emission Standards for Hazardous Air

Pollutants (NESHAP) is continuing. Tampering and defect surveys are also continuing. In the Water program the NEIC is providing compliance evaluations and performance audit inspections, multi-media inspections and evaluations of major publicly owned treatment works suspected of noncompliance as well as case support. Support for Section 7003 of the Resource Conservation and Recovery Act (RCRA) and radiological hazardous waste problems includes technical evaluation, case preparation, participation in negotiations to consent decrees, and evidence audit, quality assurance, and case follow-up functions.

Assistance is being provided to conduct pesticide field investigations, evidence gathering, case preparations, use observations, overview monitoring for Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 18 exemptions, and technical assistance and training of State pesticide inspectors. Technical and analytical support continues for case development under the Toxic Substances Control Act (TSCA), as well as quality assurance, evidence audit, emergency response, criminal investigations, and development of TSCA procedures for inclusion in multi-media inspection doctrines.

Also during 1984, the NEIC is providing direction, management, and administrative support for the criminal investigation program although the investigator resources are contained in Enforcement Policy and Operations.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983 the Agency obligated $3,290,300 and 65.1 total workyears for this program, of which $3,250,300 was for the Salaries and Expenses appropriation and $40,000 was for the Abatement, Control, and Compliance appropriation.

This program provided technical consultation and assistance in case preparation by performing background, reconnaissance, and file review; field investigations; laboratory analysis; data evaluation; report preparation; permit writing expertise; technical testimony; and negotiation of technical aspects of consent decrees. Specialized technical assistance was provided to State and regional case development efforts in preparation and analysis of high hazard samples.

ENFORCEMENT POLICY AND OPERATIONS

1985 Program Request

The Agency requests $11,859,800 supported by 254.5 total workyears for this program of which $11,509,800 is for the Salaries and Expenses appropriation and $350,000 is for the Abatement, Control, and Compliance appropriation. This represents an increase of $2,115,400 and 32.6 total workyears. Of this amount, $1,965, 400 is for the Salaries and Expenses appropriation and $150,000 is for the Abatement, Control, and Compliance appropriation. The increases reflect a new compliance monitoring function in Headquarters, as well as legal support for all media for projected administrative enforcement activities and the anticipated civil and criminal litigation caseload.

This program's goal is to respond to instances of non-compliance in a consistent, timely, and effective fashion. In 1985, Headquarters will be responsible for direction and oversight of the Agency's national compliance and enforcement efforts for all media, and for design and implementation of mangement systems that will assure the success of these key functions. To this end, OECM will manage the Agencywide strategic planning process for national compliance and enforcement programs; participate in and conduct special in-depth analyses of enforcement

issues; promote multi-media approaches as appropriate; conduct in-depth program evaluations and cross-media analyses; exercise leadership in identifying and transmitting, within the Agency, information on successful approaches to achieving compliance across media; develop new initiatives and policies to promote improved compliance monitoring and enforcement programs; and provide analytical support to assure the quality of Agency compliance monitoring data. Analytic responsibilities will include assessment of resource needs and resource utilization for Agency-wide compliance and enforcement activities for all media.

Efforts will also include a centralized criminal investigations program under the direction of the National Enforcement Investigations Center (NEIC) at Denver, Colorado that includes preliminary inquiries, investigations, referrals and post-referral support. Enforcement policy and case support for the criminal program continues to be a Headquarters function. This responsibility is carried out in conjunction with the Department of Justice.

Regional enforcement operations will include legal review of administrative orders and notices of violation or noncompliance; provision of trial counsel to support administrative proceedings; and preparation and management of civil and criminal litigation. All of these efforts, supported by an automated docket and consent decree tracking system, are designed to achieve compliance by using the full array of enforcement responses including civil and criminal litigation. In 1985, efforts will focus on providing legal support to Agency efforts to bring significant violators into compliance.

In the Abatement, Control, and Compliance appropriation, $350,000 is requested for Headquarters to obtain expert witnesses for litigation and for development of enforcement manuals and guidance materials.

1984 Program

In 1984, the Agency is allocating $9,744,400 and 221.9 total workyears to this program, of which $9,544,400 is for the Salaries and Expenses appropriation and $200,000 is for the Abatement, Control, and Compliance appropriation.

In 1984 efforts are being made to improve the overall quality, consistency, and timeliness of Agency response to problems of noncompliance by implementing at Headquarters a new compliance monitoring role to provide leadership, analysis, and oversight of Agency and State compliance and enforcement activities. Management systems are being developed to foster accountability and consistency in Agency enforcement actions throughout the country. A prime management goal is to assure prompt resolution of identified cases of noncompliance by significant violators. Policies and procedures are reviewed as necessary to achieve this goal and to assure certainty and predictability of Agency enforcement responses. Automated docket and tracking systems aid in managing the enforcement activities of the Agency.

The Regional legal resources allocated for 1984 are being used to help select appropriate enforcement responses to instances of noncompliance that are identified in various State, local, and source reports, or through inspections or complaints. Legal personnel in the Regions initiate and provide trial counsel for administrative hearings under the various statutes. Throughout the enforcement process, legal personnel participate in or lead negotiations with sources to assure resolution of compliance problems that are consistent with statutory requirements and national enforcement policy. Resources provide for the legal review of and concurrence on certain administrative notices and enforcement orders and proposed administrative penalties. Regional resources are also used for the development, initiation, and conduct of civil and criminal litigation for all media.

1984 Explanation of Changes from the Amendment

The net decrease of -$49,700 results from the following actions:

-Reprogrammings. (-$49,700) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$49,700 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $9,570,600 and 221.2 total workyears for this program, of which $9,326,300 was for the Salaries and Expenses appropriation and $244,300 was for the Abatement, Control, and Compliance appropriation.

In 1983, this program emphasized the resolution of problems of noncompliance through the review of administrative actions and the referral of 92 civil actions and 17 criminal actions to DOJ. Legal support was provided to the active docket of 210 civil cases and 28 criminal cases. The Headquarters component also participated in the Agency's regulation development process and provided legal enforcement counsel to media program offices.

ENVIRONMENTAL PROTECTION AGENCY

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TOXIC SUBSTANCES

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
APPROPRIATION							
Salaries & Expenses	$33,306.5	$32,900.5	$33,780.1	$33,541.3		$38,327.1	$4,785.8
Abatement Control and Compliance	$22,506.4	$21,970.3	$23,032.8	$23,032.8		$26,850.2	$3,817.4
Research & Development	$14,166.2	$11,804.9	$12,304.9	$12,275.4		$14,464.8	$2,189.4
TOTAL, Toxic Substances	$69,979.1	$66,675.7	$69,117.8	$68,849.5		$79,642.1	$10,792.6
PERMANENT WORKYEARS	618.8	606.2	634.6	632.6		740.0	107.4
TOTAL WORKYEARS	712.1	683.2	717.0	716.0		799.5	83.5
OUTLAYS	$79,797.0	$71,368.0	$67,349.6	$67,481.6		$74,896.6	$7,415.0
AUTHORIZATION LEVELS	Authorization in the amount of $62,000,000 for 1983 for the Toxic Substances Control Act expired September 30, 1983. Reauthorization pending.						

OVERVIEW AND STRATEGY

The Toxic Substances Control Act (TSCA), enacted in 1976, confers to the Environmental Protection Agency the authority and responsibility to protect human health and the environment by requiring testing and necessary use restrictions on certain chemical substances. The Agency's mandate under TSCA is designed to encompass gaps in existing public health and environmental laws. In addition, the Agency's jurisdiction under TSCA extends to cover over 60,000 industrial chemicals currently in use in the United States, in an almost unlimited number of products. Most of these products entered the marketplace before the statute was enacted, and EPA is tasked with reviewing these existing chemicals to ensure that their uses pose no unreasonable risks. At the same time, the Agency is also responsible for conducting reviews of all new chemicals before they enter the marketplace.

In 1985, the Toxic Substances program strategy emphasizes programs aimed (1) at protecting the quality of the environment, (2) preventing future problems, and (3) addressing emerging or overlooked problems. Under TSCA, EPA is authorized to evaluate the health and environmental effects of existing chemicals, by requiring testing and reporting. The Agency can also control unreasonable risks of existing chemicals through regulatory actions. TSCA addresses future problems by giving EPA the authority to evaluate new chemicals before commercialization. TSCA is also the front end of the toxic waste disposal program and can prevent potential problems by dealing with problematic chemicals early in their life cycle.

Because TSCA confers very broad authorities, coordination among EPA programs--and with other Federal agencies--is essential and is mandated by the Act itself. In 1985, the Toxic Substances program strategy emphasizes several management goals aimed at improving TSCA operations. The first of these goals is to ensure the integrity of data used in TSCA regulatory processes across all programs. To maintain data integrity, we will work with national and international organizations to ensure the use of acceptable testing procedures, we will publish and update test guidelines, as well as good laboratory practices, and we will conduct audits of facilities and studies where data are being produced as a result of TSCA action.

The second goal is to improve the balance between the diverse programs authorized by TSCA. The 1985 program will be more responsive to both the new and the existing authorities of TSCA without impeding our ability to meet statutory deadlines. TSCA establishes a statutory response time for the review of new chemicals.

The third goal addresses the need for flexibility in our approach to solving chemical problems. TSCA gives EPA various options for controlling risks attributed to toxic substances. In order to resolve identified problems quickly and effectively, several strategies will be pursued in 1985: close coordination within EPA and with other regulatory programs where responsibilities overlap, early publication of advance notices of proposed rulemaking before the details of various regulatory approaches are completely worked out, and the use of non-regulatory mechanisms, such as chemical advisories, to bring problems to the public's attention. We will use a negotiated approach to rulemaking to solve exposure problems or obtain information when this approach can achieve the same public protection more quickly than formal rulemaking.

A final management goal is to improve compliance with TSCA actions. Recently, certain industrial sectors have demonstrated unacceptable rates of compliance with toxic substance regulations, particularly polychlorinated biphenyls (PCBs) and asbestos. Improved compliance will be emphasized in 1985, through State involvement as well as Federal resources.

TOXICS INTEGRATION

The Toxics Integration program has been realigned to reflect the Agency's interest in intermedia chemical problems. An Agencywide process will be implemented which will allow the Agency to identify and address chemical issues of concern and to ensure consistent and rapid attention is given these problems. EPA will also develop strategies on chemicals of special interest to both the Toxic Substances program and other Agency programs which address cross-media issues and identify cost-effective control mechanisms. An information sharing program among EPA offices and among Federal and State programs will be implemented in 1985, enabling the interchange of chemical data and technical expertise on unique toxic problems.

EXISTING CHEMICALS

The 1985 program reflects a new emphasis on the evaluation and control of risks from existing chemicals. This new emphasis is also a necessary result of the existing chemicals process initially implemented in 1983, which has enabled the Agency to deal more effectively with existing chemical concerns. As a result of this recently implemented process, in 1985 EPA will be in some stage of rulemaking on eight existing chemicals previously identified as in some way problematic. Once a problem has been identified, the Agency is responsible for following through with appropriate and expeditious risk reduction action. The Agency will also use TSCA to address remaining gaps in control of existing chemicals. For example, EPA is currently pursuing the use of TSCA authorities to solve the health and environmental problems caused by leaking underground gasoline and chemical storage tanks.

The 1985 existing chemicals program also recognizes that the Agency must be responsive to the increased amount of test data now being produced. Many testing programs are now producing toxicity data that must be assessed and acted upon when appropriate.

NEW CHEMICALS

The Agency expects to receive 1,650 new chemical notices in 1985. We will continue to place a high priority on subjecting all new chemicals to a meaningful review, taking action to control risks where necessary, and protecting society from risks after commercialization through a strong followup program. The 1985 new chemical program has been expanded to cover new genetically engineered organisms which are not covered under other Federal regulations. Significant risks may be associated with some uses of these substances, which present very different health and environmental concerns than do industrial chemicals. Coverage of these substances under TSCA, which gives EPA authority to evaluate and control chemicals before they are marketed, provides the best protection to health and the environment. It also demonstrates the "gap filling" concept Congress envisioned when TSCA was passed in 1976.

CHEMICAL TESTING

In 1985, the testing program will no longer be under the intense pressure of responding to both court-ordered deadlines on the backlogs. Because our court-ordered deadlines will have been met, the emphasis will be on finalizing testing actions taken in previous years and on responding to the Interagency Testing Committee's designations within the statutory timeframe. This will ensure that testing required by proposed rules is initiated more quickly. In 1985, additional emphasis will also be placed on test data integrity. Each year the number of test studies initiated under the Section 4 program increases, and it is critical that EPA take an aggressive role in ensuring these data are of high quality and suitable for regulatory purposes.

ENFORCEMENT

The major objectives of the toxic substances compliance and enforcement program in 1985 are to improve rates of compliance with toxic substances control regulations and to maintain the toxic substances cooperative enforcement agreement program, which was resumed in 1984.

To accommodate these objectives, workyear resources will be increased significantly in 1985. The bulk of the increase will be used to conduct additional PCB inspections, since PCB rule violation rates have been higher than anticipated. The number of Section 4, 5, and 8 inspections will be increased, as will the asbestos-in-schools enforcement program.

The program of toxic substances cooperative enforcement agreements provides financial assistance to selected States to develop and operate toxic substances compliance monitoring programs, in cooperation with EPA, especially in the area of control of existing chemicals. In 1985, this cooperative program, which permits wider coverage of the regulated community without requiring additional Federal personnel, will be continued at the 1984 level.

RESEARCH AND DEVELOPMENT

The toxic substances research program provides the scientific basis necessary to implement TSCA through a combination of health, engineering, monitoring of environmental processes, and risk assessment activities. Scientific data and methods developed through these efforts enable the Agency, through TSCA actions, to protect human health and the environment from unreasonable risk while minimizing the impact on industry.

In 1985, the program will continue to develop, evaluate, and validate test methods for inclusion in TSCA test guidelines. Additionally, new efforts in biotechnology, environmental engineering, and structure-activity assessment will provide necessary information to support the New Chemical Review program.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
TOXICS INTEGRATION					
Intermedia Priority Pollutants Documents Produced	3	6	3	3	-
Multi-media Chemical Strategies Completed	2	4	4	4	-
CHEMICAL TESTING					
Decisions not to Test/Proposed Negotiated Agreements/ANPR or Proposed Rules (ITC & Non-ITC)	23	28	30	17	-13
Final Test Rules/Negotiated Agreements	4	6	10	20	+10
Test Guidelines Published	6	12	10	5	-5
Test Study Audits	93	125[1]	130	200	+70
EXISTING CHEMICAL REVIEW					
Substantial Risk Notices Reviewed	35	50	50	50	-
Test Data Studies/NTP Data Received	226	200	225	330	+105
Negotiated Rulemaking/Chemical Advisories	0	5	1	4	+3
ANPR/Proposed §6 Rules	2	-	4	6	+2
Final §6 Rules	4	2	3	4	+1
SNUR/§8 Rules Proposed/Final	10	6	8	12	+4
PCB Disposal Permits Reviewed	2	40	13	15	+2
Exemption Requests (Section 6) Reviewed	1	60	172	150	-22
NEW CHEMICAL REVIEW					
PMN Notices Processed	1301	660	1450	1650	+200
PMN Risk Assessments	120	60	150	180	+30
PMN Notice Withdrawals/Negotiated Agreements/§5(e)/(f) Orders	179	40	100	120	+20
§ 5(h)(4) Exemption Rules Proposed/ Final	0	3	3	0	-3
SNUR/§8 Rules Proposed/Final (No. of Chemicals)	5	5	20	30	+10
Biotechnical PMNs	*	*	0	10	+10

* New budget category for 1984.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
TOXICS ENFORCEMENT					
Laboratory Inspections	13	17[1]	40	50	+10
Inspections under § 5	126	295	241	320	+79
Inspections under § 6					
PCB inspections	1633[2]	735	1072[2]	1900[2]	+828
Asbestos inspections	207	125	814[3]	1525[3]	+711
Other inspections	74	100	86	60	-26
Inspections under § 8	83	175	147	340	+193
Inspections under § 12	8	15	14	15	+1
Inspections under § 13	0	700	581	700	+119

[1]Original "Budget Estimate" of 125 included both laboratory inspections and data audits.

[2]Includes State inspections: 400 in 1983, 450 in 1984 and 1985.

[3]Includes 700 asbestos-in-schools inspections in 1984 and 1,400 asbestos-in-schools inspections in 1985 performed using extramural funds.

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TOXIC SUBSTANCES

Chemical Testing & Assessment

PROGRAM	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
Scientific Assessment							
Salaries & Expenses	$102.1	$170.3	$170.3	$170.3		$225.3	$55.0
Research & Development	$319.9	$75.0	$75.0	$75.0		$51.0	-$24.0
TOTAL	$422.0	$245.3	$245.3	$245.3		$276.3	$31.0
Monitoring Systems & Quality Assurance							
Salaries & Expenses	$1,634.9	$1,716.0	$1,716.0	$1,705.0		$1,872.9	$167.9
Research & Development	$3,580.8	$2,856.1	$2,856.1	$2,856.1		$3,726.1	$870.0
TOTAL	$5,215.7	$4,572.1	$4,572.1	$4,561.1		$5,599.0	$1,037.9
Health Effects							
Salaries & Expenses	$4,206.4	$3,657.2	$3,857.2	$3,857.2		$3,813.0	-$44.2
Research & Development	$3,707.8	$6,191.4	$6,691.4	$6,662.9		$7,022.0	$359.1
TOTAL	$7,914.2	$9,848.6	$10,548.6	$10,520.1		$10,835.0	$314.9
Environmental Engineering & Technology							
Salaries & Expenses	$359.5		$267.1	$197.1		$478.0	$280.9
Research & Development	$197.4					$200.0	$200.0
TOTAL	$556.9		$267.1	$197.1		$678.0	$480.9

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Environmental Processes & Effects							
Salaries & Expenses	$6,254.0	$6,288.3	$6,088.3	$6,088.3		$6,114.1	$25.8
Research & Development	$3,564.0	$1,940.0	$1,940.0	$1,940.0		$2,723.3	$783.3
TOTAL	$9,818.0	$8,228.3	$8,028.3	$8,028.3		$8,837.4	$809.1
Stratospheric Modification							
Salaries & Expenses	$75.9	$132.7	$132.7	$132.7		$135.1	$2.4
Research & Development	$736.7	$742.4	$742.4	$741.4		$742.4	$1.0
TOTAL	$812.6	$875.1	$875.1	$874.1		$877.5	$3.4
National Center For Toxicological Research							
Research & Development	$2,059.6						
TOTAL	$2,059.6						
TOTAL:							
Salaries & Expenses	$12,632.8	$11,964.5	$12,231.6	$12,150.6		$12,638.4	$487.8
Research & Development	$14,166.2	$11,804.9	$12,304.9	$12,275.4		$14,464.8	$2,189.4
Chemical Testing & Assessment TOTAL	$26,799.0	$23,769.4	$24,536.5	$24,426.0		$27,103.2	$2,677.2

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Scientific Assessment	1.5	2.5	2.5	2.5		3.0	.5
Monitoring Systems & Quality Assurance	23.8	23.2	23.2	23.2		24.1	.9
Health Effects	47.0	49.1	52.7	52.7		54.1	1.4
Environmental Engineering & Technology	6.7		8.0	6.0		8.0	2.0
Environmental Processes & Effects	87.4	68.5	67.7	67.7		86.1	18.4
Stratospheric Modification	2.0	1.8	1.8	1.8		1.8	
TOTAL PERMANENT WORKYEARS	168.4	145.1	155.9	153.9		177.1	23.2

TOXIC SUBSTANCES

Chemical Testing & Assessment

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Scientific Assessment	1.9	4.0	4.0	4.0		4.0	
Monitoring Systems & Quality Assurance	27.1	27.1	27.1	27.1		27.1	
Health Effects	53.9	55.1	59.1	59.1		59.1	
Environmental Engineering & Technology	7.7		8.0	6.0		8.0	2.0
Environmental Processes & Effects	103.5	87.2	90.9	90.9		93.3	2.4
Stratospheric Modification	2.0	1.8	1.8	1.8		1.8	
TOTAL WORKYEARS	196.1	175.2	190.9	188.9		193.3	4.4

Chemical Testing and Assessment

Major Output/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Develop and Validate Test Methods			
- Provide a testing protocol for rapid assessment of reproductive damage (Health)	10/86	10/86	10/86
- Provide testing protocols to screen and evaluate chemicals for immunotoxic effects (Health)	9/86	9/86	9/86
- Provide reports on comparison of hazard rankings of chemicals based on model ecosystems and single species effects (Environmental Processes)	10/85	10/85	10/85
- Provide report on improved system-level process tests to indicate potential effects of chemicals in freshwater (Environmental Processes)	12/86	12/86	12/86
- Provide report on laboratory-to-field extrapolation of toxic stress on estuarine macrobenthic communities (Environmental Processes)	6/85	6/85	6/85
Develop and Validate Methods to Predict and Monitor Exposure			
- Complete final report on Phase II of TEAM study of exposure to toxic organics in three cities (Monitoring)	3/85	3/85	3/85
- Develop a cancer test battery for human risk estimation (Health)	9/87	9/87	9/87
- Provide report on exposure assessment in estuarine systems (Environmental Processes)	4/85	4/85	4/85

Major Output/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Provide report on biodegradation predictions from microcosm screening and eco-core systems (Environmental Processes)	4/85	4/85	4/85
- Provide report on atmospheric pollutant field tracer (Environmental Processes)	5/85	5/85	5/85
Develop and Validate Risk Assessment Methods			
- Provide improved mathematical models of pollutant deposition in the lung (Health)	10/84	10/84	10/84
Perform Engineering and Scientific Evaluations and Assessments			
- Submit draft exposure guidelines to SAB (Scientific Assessment)	9/83		
- Complete draft of biomonitoring guidelines (Scientific Assessment)	12/84	12/84	12/84
- Provide workshop report on biodegradation of toxic chemicals (Environmental Processes)	6/84	6/84	
Develop Predictive Techniques in Support of Premanufacture Notice Reviews			
- Provide a combined data management system for genotoxic chemicals (Health)	9/86	9/86	9/86
- Provide report on a comprehensive structure-toxicity method to estimate toxicity of chemicals to aquatic organisms (Environmental Processes)	9/85	9/85	9/85
- Provide report on the chemicals release and exposure from unit operations and unit processes (Environmental Engineering)		9/84	9/85
- Report on the treatability of azo dyes (Env. Engineering)		9/84	9/85
Evaluation of Environmental Control Measures for Existing Chemicals			
- Provide report on the causes, controls and detection of leaks in underground storage tanks (Env. Engineering)		12/84	12/85

Chemical Testing and Assessment

Budget Request

The Agency requests a total of $27,103,200 supported by 193.3 total workyears for 1985, an increase of $2,677,200 and 4.4 total workyears from 1984. Included in this is $12,638,400 for Salaries and Expenses and $14,464,800 for Research and Development, with an increase of $487,800 and $2,189,400 respectively. The major increases occur in the development of exposure monitoring methods, quality assurance and in the initiation of methodologies for evaluating environmental risks associated with bioengineered organisms.

Program Description

The Chemical Testing and Assessment research and development program supports the Office of Toxic Substances (OTS) by providing the scientific tools to implement the Toxic Substances Control Act (TSCA). The major needs and objectives of EPA's toxic substances research efforts which support TSCA activities are as follows:

Objective 1. Develop and Validate Test Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. The purpose of this objective is to develop and validate environmental and human health effects tests. OTS publishes test guidance to assure that industry test data will adequately identify and assess potential environmental and health hazards due to exposure from chemicals.

Objective 2. Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. The research identifies major transport and transformation processes and develops validated models and monitoring methods and data bases so that the Agency can document and estimate human and environmental exposures to chemicals.

Objective 3. Develop and Validate Improved Risk Assessment Methods for TSCA Studies. The effort develops health risk assessment methods that are more reliable and economical than existing methods and develops methods necessary to evaluate major health effects for which no adequate assessment methods exist.

Objective 4. Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. This objective provides scientific evaluations and assessments to OTS on monitoring and risk assessment problems and develops defensible methods to estimate the value of adverse health and environmental impacts related to the production, use and disposal of chemicals.

Objective 5. Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. The purpose of this research is to develop predictive methods including structure-activity relationships (SAR) to provide a tool to determine whether a new chemical poses unreasonable risk or needs additional testing.

Objective 6. Develop Methods and Provide Quality Assurance for TSCA Data and Analytical Activities. This objective supports research to improve measurement methods, field monitoring systems and associated quality assurance protocols. Reference banks and audit programs to assess laboratory and field performance are also maintained to assure the quality of data.

Objective 7. Evaluation of Environmental Control Measures for Existing Chemicals. This effort evaluates the release of chemicals in the workplace and to the environment and assesses measures to limit the release of and exposure to chemicals.

Objective 8. Assess Stratospheric Modification. The purpose of this effort is to investigate the health and environmental consequences of lower levels of ozone and anticipated increased exposure to ultra-violet radiation. The Clean Air Act Amendments of 1977 require assessment of the environmental and health effects of stratospheric modification due to changes in the ozone layer.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $276,300 supported by 4.0 total workyears for this program, of which $225,300 is for Salaries and Expenses and $51,000 is for Research and Development. This represents an increase of $55,000 in Salaries and Expenses and a decrease of $24,000 in Research and Development. The overall increase of $31,000 reflects additional efforts to evaluate the use of metabolism studies for exposure assessment.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. Methods will be defined to compare metabolism pathways in test animals and humans. Exposure and risk assessments will continue to be reviewed and portions of assessments will be conducted where specialized expertise is required. Assessment methods will be reviewed and modified to address program specific problems.

1984 Program

In 1984, the Agency is allocating a total of $245,300 and 4.0 total workyears to this program of which $170,300 is under the Salaries and Expenses appropriation and $75,000 is for extramural purposes under the Research and Development appropriation.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. Exposure and risk assessments are being reviewed to assure that program specific problems are adequately addressed. Portions of assessments are being conducted where specialized expertise is required. Exposure and risk assessment methods are being reviewed and modified.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $422,000 for this program, of which $102,100 was under the Salaries and Expenses appropriation and $319,900 was for extramural purposes under the Research and Development appropriation.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. Exposure assessment guidelines and handbooks were revised in accordance with Science Advisory Board review comments. Further changes in the exposure handbook were recommended by an extramural peer panel. The guidelines were resubmitted for final disposition to the Science Advisory Board.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $5,599,000 supported by 27.1 total workyears for this program, of which $1,872,900 is for Salaries and Expenses and $3,726,100 is for Research and Development. The increases of $167,900 and $870,000, respectively, reflect initiatives in the areas of quality assurance in support of PCB regulations and methods development for measuring organics, particularly azo dyes.

Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. Methods to measure human exposure and food chain pollutant concentrations will be tested at a field site to be established in an urban area. Initial design work to establish a World Health Organization Health Exposure Assessment Laboratory (WHO/HEAL) will begin. Improved statistical tools to aid in spatial/temporal analysis will continue to be developed. This research supports OTS in its assessment and regulations of existing chemicals.

Develop Methods and Provide Quality Assurance for TSCA Data and Analytical Activities. The Agency continues to foster new and improved measurement methods and quality assurance. Additional resources in this area will be used to adapt High Performance Liquid Chromatography (HPLC) and coupled mass spectrometers (MS/MS) to measure atmospheric organics, particularly azo dyes, a class of chemicals with which there is concern about potential high toxicity. Methods are also being developed and evaluated for sampling and analyzing volatile organic compounds which are currently difficult to isolate.

The increase in the quality assurance (QA) area will be used to initiate a QA program in support of PCB regulations. Other activities include development of quality assurance protocols and guidelines for chemical and biological measurements.

1984 Program

In 1984, the Agency is allocating a total of $4,561,100 and 27.1 total workyears to this program of which $1,705,000 is for Salaries and Expenses and $2,856,100 is for extramural purposes under Research and Development.

Develop and Validate Methods to Predict and Monitor Human and Environmental Environmental Exposure to Chemicals Under TSCA. The exposure monitoring research effort emphasizes developing (1) monitoring data directly related to exposure measurements to corroborate the limited laboratory and model data used in risk assessment, and (2) monitoring systems and approaches capable of linking environmental concentrations of chemicals to human exposure. A field test to evaluate exposure monitors, sampling protocols and data analysis techniques developed in prior years is being initiated. The program is developing improved statistical tools to aid in the design and analyses of exposure monitoring programs.

Develop Methods and Provide Quality Assurance for TSCA Data and Analytical Activities. We are continuing research on various cryogenic approaches and new collector materials for sampling heavier compounds in air; and a number of direct methods for analysis of organic compounds contained in particulate matter are being examined. The quality assurance area is emphasizing protocols for biological measurements, and field work is being conducted to develop guidelines that will be used in validating soil models. Finally, a protocol and report on assessing asbestos fiber reduction techniques is being published and laboratory audits are being conducted as needed and a standard reference bank for material spectra is being maintained.

1984 Explanation of Changes from the Amendment

The net decrease of -$11,000 results from the following action:

-Reprogramming. (-$11,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$11,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency allocated a total of $5,215,700 and 27.1 total workyears to this program, of which $1,634,900 was under the Salaries and Expenses appropriation and $3,580,800 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. The Agency collected data from the second city of the two city Total Exposure Assessment Methodology (TEAM) Study. The data will be used to evaluate the effectiveness of using personal dosimeters, biological samples, and population activity questionnaires to obtain improved exposure data in humans. The Agency initiated development work on a number of improved statistical approaches and data handling techniques for predicting and monitoring human and environmental exposure to chemicals. In addition technical assistance for a number of Agency exposure assessments was provided.

Develop Methods and Provide Quality Assurance for TSCA Data and Analytical Activities. Methods for sampling and analyzing volatile organic compounds were tested. Guidelines that will be used in the field validations of stream models that predict fate and transport of chemical compounds also were completed. The audit program for the asbestos in schools program continued, and quality assurance protocols and standard reference materials were provided for a number of studies and field activities.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $10,835,000 supported by 59.1 total workyears for this program, of which $3,813,000 is for Salaries and Expenses and $7,022,000 is for Research and Development. This reflects a decrease of $44,200 in Salaries and Expenses and an increase of $359,100 for Research and Development for an overall increase of $314,900. The increase will focus on identifying areas to which epidemiology studies may be applied as well as development of risk methods for new chemicals.

Develop and Validate Testing Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. Health effects test guidelines are needed for test rules specified under Section 4 of TSCA to define testing data deficiencies under Section 5, and to meet the statutory requirements of Section 10(e). Existing guidelines contain deficiencies and gaps that must be addressed if we are to provide reliable, scientific guidance to industry for test rule development. Laboratory animal, tissue, and organ culture methodologies will be developed to provide more sensitive, reliable and efficient procedures to assess biomedical endpoints. Work will focus on two areas of concern to OTS: inexpensive and short-term screening tests, and longer-term tests and systems for the tier-testing matrix. This research includes emphasis on the relationship of animal test data to human systems.

Develop and Validate Improved Risk Assessment Methods for TSCA Studies. Additional resources in 1985 will be used to address some of the significant gaps in the risk assessment methodologies. Current methodologies, for the most part, have been essentially limited to cancer risk and many of the existing methodologies are incompletely validated. Both qualitative and quantitative procedures need to be improved to extrapolate data from animal studies to human risk. Epidemiology research will also be expanded to assess areas where epidemiology data may be applied.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. OTS performs evaluations of exposure to chemicals and assesses the risk that can result from such exposure. Scientific assessments and data collection support this process. This research will provide data on the adverse effects of inhaled asbestos and asbestos like fibers including the correlation of short-term tests with in vivo carcinogenesis studies. In addition, EPA will investigate the health effects of specific commerical mineral fibers such as those coming from automotive brake pads.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. Estimates of health effects are part of the PMN reviews under Section 5 of TSCA. We will continue to emphasize development of structure-activity relationship (SAR) models. SAR will also improve OTS's ability to limit testing of existing chemicals to the necessary tests. The objective of this research is to develop a method which can use data on molecular descriptors or combinations as a screening tool to predict genetic and carcinogenic activities and prioritize chemicals for further testing; and to construct a chemical data base in several areas of toxicological response related to individual organ systems. Work will also begin on computer assisted predictive metabolism and hazard estimation of toxic chemicals using the Gene-Tox computerized data base. This effort will provide quantitative health hazard assessments together with quantitative in vitro and animal test data suitable for use by OTS in health risk assessment.

1984 Program

In 1984 the Agency is allocating a total of $10,520,100 and 59.1 total workyears to this program of which $3,857,200 is under the Salaries and Expenses appropriations and $6,662,900 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. The test method development program focuses on development of inexpensive and short-term screening tests and of longer-term tests and systems for tier-testing to a variety of biomedical indices. This research includes emphasis on the relations of animal test data to human systems.

Develop and Validate Improved Risk Assessment Methods for TSCA Studies. Risk assessment methodologies are being developed and validated for improved qualitative and quantitative extrapolation of animal data to human risk in the areas of mutagenicity, carcinogenticity, neurotoxicity, adverse reproductive effects and teratology.

Perform Engineering and Scientific Evaluations and Assessment and Control Quality of Agency Risk Assessments. Work is continuing on the data base for asbestos and asbestos like fibers, including the correlation of short-term tests with in vivo carcinogenesis studies. We are also providing technical and logistic support to the Interagency Task Force on Environmental Cancer and Heart and Lung Disease.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. Structure-Activity Relationships (SAR) research continues on the development of toxicological data bases to develop models for predicting carcinogenic, mutagenic, reproductive, neurotoxic, pulmonary, renal, hepatic, and cardiovascular effects. Mathematical and computer modeling work is also being conducted in support of this objective.

1984 Explanation of Changes from Budget Estimate

The net decrease of -$28,500 results from the following action:

-Reprogramming. (-$28,500) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$28,500 to the Research and Development appropriation.

1983 Accomplishments

In 1983 the Agency obligated a total of $7,914,200 for this program, of which $4,206,400 was under the Salaries and Expenses appropriation and $3,707,800 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. In 1983, the Agency's accomplishments included publication of a series of papers on the use of short-term test systems using human cells as the targets and a series on the use of short-term tests to evaluate the effects of combinations of pollutants.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. In 1983 the Agency's accomplishments included publication of a study on occupational exposure to formaldehyde.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. In 1983 the Agency's accomplishments included publication of studies on structure-activity relationships for two types of chemicals.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $678,000 supported by 8.0 total workyears for this program, of which $478,000 is for Salaries and Expenses, and $200,000 is for Research and Development. This reflects an increase of $280,900 for Salaries and Expenses, and an increase of $200,000 for Research and Development, for an overall increase of $480,900. The increased resources will improve the Agency's ability to predict the potential for release of and exposure to new chemicals and evaluate control measures for existing chemicals.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. Two types of assessments will be conducted to support the efforts of OTS in the premanufacturing notice review of genetically engineered organisms. First, an assessment of the potential for environmental contamination will be conducted. Also to be undertaken is an assessment of the physical, chemical, and biological techniques and devices for the containment and destruction of genetically engineered organisms.

Develop Predictive Techniques in Support of Premanufacture Notice Reviews. Models to predict the release and exposure of different classes of chemicals will be developed. This will meet the Agency's needs for predictive capabilities in assessing release and exposure of chemicals in the review of premanufacture notice for new chemicals as required by the Toxic Substances Control Act. Pilot scale evaluations of the treatability of classes of potentially toxic substances by waste treatment systems will be conducted to verify the developed predictive models. The chemicals studied will be chosen from the classes which appear frequently in the premanufacturing notice (PMN) process.

Evaluation of Environmental Control Measures for Existing Chemicals. Ways to mitigate the release of and exposure to specific existing chemicals will be initiated. This will be accomplished by evaluating and adapting control measures related to the release in the work place and into the environment of the chemicals during their life cycles. Techniques, management practices, and personal protection equipment to limit the release and exposure of chemicals will be evaluated.

1984 Program

In 1984, the Agency is allocating a total of $197,100 and 6.0 total workyears to this program, all of which the is under the Salaries and Expenses Appropriation.

Develop Predictive Techniques in Support of Premanufacture Notice Reviews. The development of models to predict the release and exposure of new chemicals is being undertaken. Pilot scale evaluation of the treatability of new potentially toxic substances such as azo dyes by waste treatment systems are being conducted. The results from these evaluations will be utilized to verify the developed predictive models.

Evaluation of Environmental Control Measures for Existing Chemicals. Evaluations of environmental control measures for existing chemicals are being conducted. An engineering assessment of the amount of release and contamination of groundwater from underground storage tanks has been started. A model to predict the effectiveness of chemical protective clothing materials is being developed.

1984 Explanation of Changes from the Amendment

The net decrease of -$70,000 results from the following action:

-Reprogramming. (-$70,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$70,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $556,900 and 7.7 total workyears for this program, of which $359,500 was under the Salaries and Expenses appropriation and $197,400 was for extramural purposes under the Research and Development appropriation.

Perform Engineering and Scientific Evaluations and Assessments and Control Quality of Agency Risk Assessments. Process specific information and engineering assessments have been provided to estimate release and exposure of new toxic substances in the pre-manufacture notice review process. The life cycle emissions and release studies of dye stuffs have been conducted and scheduled for publication in 1985.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $8,837,400 supported by 93.3 total workyears for this program, of which $6,114,100 is for Salaries and Expenses and $2,723,300 is for Research and Development. This represents a decrease of $25,800 in the Salaries and Expenses appropriation and an increase of $783,300 in the Research and Development appropriation. The increased resources will initiate a new research program on biotechnology which is concerned with the development of methodologies for evaluating environmental risks associated with bioengineered organisms.

Develop and Validate Test Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. The environmental hazards assessment program is designed to develop, improve, and validate single-and multiple-species toxicity testing methods. Focus will be on the acceleration of benthic assays development, development of culturing techniques, and initiation of work on hazard ranking of chemicals based on single-species and ecosystem effects. Terrestrial toxicology research will continue to focus on the effects of chemicals on both plant and avian species, with emphasis on validation of test methods. The comparative toxicology program is designed to define how much testing is needed for an adequate risk assessment when one species can be used to test and predict adverse effects for other species. Comparative toxicology relationships on a diverse phyla of marine organisms as well as on avian vs. wild species will be developed. System-level research, conducted on the effects of toxic chemicals on aquatic and terrestrial ecosystem processes and functions, will focus on tests related to freshwater as well as for benthic marine species. There will be a continuing effort to develop the criteria for determining the limits of applicability of toxicological data obtained in the laboratory to field situations.

Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. The environmental exposure assessment program will focus on development, improvement, and validation of mathematical models for exposure assessments in air, water, and terrestrial systems, in food chains, and in multi-media environments. Basic scientific understandings, concepts, and data will be acquired on transport and fate mechanisms to develop defensible laboratory test methods and exposure models for evaluating the environmental fate and multimedia distribution of chemicals. Emphasis will be placed on evaluating mathematical models under various simulated and actual field conditions to estimate their precision, accuracy, and confidence limits in real-world environments.

Develop and Validate Improved Risk Assessment Methods for TSCA Studies. In 1985, the environmental processes and effects program will initiate a new program on biotechnology aimed at providing tools to OTS for evaluating the environmental risk associated with genetically engineered organisms under PMN review. Work will focus on developing scientific rationales and procedures for evaluating transport and survivability of genetically manipulated organisms (microbes, plants, or animals).

Perform Engineering and Scientific Evaluations and Assessments, and Control Quality of Agency Risk Assessments. Technical studies will be conducted for OTS on environmental fate, exposure, effects, hazard, and environmental risk of chemicals. Specific examples include: review and screening of new chemicals for Section 5 of TSCA; development and revision of test rules; and management of workshops on technical issues of particular importance to OTS.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews: In 1985, work on the development of SAR models for predicting the environmental fate and toxicity of chemicals will continue with emphasis on validating of models and improving the precision and reliability of methods. Specifically, the program will: 1) develop data sets and correlation models for the prediction/estimation of fate and effects based on chemical structure; 2) determine the feasibility of using chemical similarity indices to identify potentially hazardous PMN chemicals; and 3) develop methods for the possible estimation of acute and chronic effects on organisms SAR.

1984 Program

In 1984, the Agency is allocating a total of $8,028,300 and 90.9 total workyears to this program, of which $6,088,300 is under the Salaries and Expenses appropriation and $1,940,000 is for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods That Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. The environmental hazards assessment program is designed to develop, improve, and validate test methods, for defining hazards to ecosystems. Work on terrestrial plant uptake and metabolism will be completed. Tests will be developed on a diverse phyla of marine organisms to develop comparative toxicological relationships. System-level research, necessary because effects estimates based upon single species data may not accurately define the hazard to larger ecosystems, is continuing. Work on defining critically sensitive terrestrial/forest ecosystems which are vulnerable to toxic chemicals will be completed. Laboratory-scale simulated environmental systems will be used to validate effects methods. This will be the first attempt to develop the criteria for determining limits of applicability of laboratory-derived toxicological data for certain kinds of aquatic communities and the first step in defining a quantitative relationship between the data obtained in the laboratory with field situations.

Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. Work continues to identify transport and transformation processes and to develop mathematical models and data bases needed to estimate ambient concentrations of toxic substances in various environmental media. The main emphasis on this topic, however, has shifted to microcosms and field validation of previously developed methodologies to determine applicability in real situations.

Perform Engineering and Scientific Evaluations and Assessments, and Control Quality of Agency Risk Assessments. ORD scientists continue to respond to technical assistance requests from OTS. It is expected that these requests, as in previous years, will include: toxicity screening and evaluation of newly introduced chemicals; development of test guidelines for specific chemicals of concern; development of additional sets of support documents for new test guidelines; and management of technical workshops on newly emerging topics of interest to OTS.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. Efforts continue in developing structure-activity models as a means for estimating toxicity and fate of PMN chemicals in the environment. This research includes development of models for defining bioaccumulation, toxicity, distribution coefficient, thermodynamic properities, and data bases on plant uptake, fate and reactivity of chemicals, and toxicity to freshwater and marine species.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $9,818,000 for this program, of which $6,254,000 was under the Salaries and Expenses appropriation and $3,564,000 was for extramural purposes under the Research and Development appropriation.

Develop and Validate Test Methods that Identify and Assess Health and Environmental Hazards of Chemicals Under TSCA. Test methods development projects completed in 1983 provided both single-species and microcosm testing results, final data on the isolated root uptake of chemicals, and information on the comparative toxicity of 10 chemicals to selected species of aquatic organisms.

Develop and Validate Methods to Predict and Monitor Human and Environmental Exposure to Chemicals Under TSCA. In 1983 the following outputs were produced: a user's manual for EXAMS II; an organic, multi-media environmental exposure screening model; and a heavy metal transport, fate, and exposure model. Studies were also completed on the accumulation of toxic substances in estuarine food chains and microbial degradation rates; and atmospheric pollutant tracer field experiments.

Perform Engineering and Scientific Evaluations and Assessments, and Control Quality of Agency Risk Assessments. Major technical assistance was provided to OTS by expert reviews of testing guidelines, Section 4 test rule determinations, and other documents.

Develop Predictive Techniques in Support of Premanufacturing and New Use Reviews. The structure-activity program completed a generic classification of chemicals in the TSCA inventory list based upon structural characteristics. Also completed were models for several classes of chemicals to evaluate potential toxicity to fish; applicability of freshwater SAR models to indicate bioaccumulation and toxicity to marine species; and models to define and evaluate potential microbial degradation of chemicals in aquatic ecosystems and reaction kinetics of airborne toxicants.

STRATOSPHERIC MODIFICATION

1985 Program Request

The Agency requests a total of $877,500 supported by 1.8 total workyears for this program, of which $135,100 is for Salaries and Expenses and $742,400 is for Research and Development. This reflects an increase of $2,400 for Salaries and Expenses and $1,000 for Research and Development, approximately the same levels as 1984.

Assess Stratospheric Modification. The 1985 Stratospheric Modification program will include the following: continuation of research on the adaptability of plants to enhanced ultraviolet-B radiation and its effects on various key life forms; coordination of Federal research in this area; and continuation of support to the National Academy of Sciences for updating a comprehensive assessment on the state of knowledge.

1984 Program

In 1984, the Agency is allocating a total of $874,100 and 1.8 total workyears to this program, of which $132,700 is under Salaries and Expenses appropriation and $741,400 is for extramural purposes under the Research and Development appropriation.

Assess Stratospheric Modification. The 1984 Stratospheric Modification research program is currently: working closely with the National Academy of Sciences to assess current state of-the-art knowledge and research needs and to provide an updated report in 1984; preparing the fourth biennial research report to the Congress, which will be delivered in February, 1984; continuing research to provide more definitive quantitative data on the effects to and the adaptability of plants to enhanced ultraviolet-B radiation under field conditions; and studying the effects of ultraviolet-B radiation on key marine life; and coordination of Federal research in this area.

1984 Explanantion of Change from Budget Estimate

The net decrease of -$1,000 results from the following action:

-Reprogramming. (-$1,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$1,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated at total of $812,600 for this program, of which $75,900 was under the Salaries and Expenses appropriation and $736,700 was for extramural purposes under the Research and Development appropriation.

Assess Stratospheric Modification. The Stratospheric Modification program had the following accomplishments in 1983. Computation of solar ultraviolet radiation fluxes to the earth's surface as a function of latitude, season, radiation wavelength, natural total ozone column, and percentage changes in ozone concentrations was completed. A handbook of tables containing computations for use in health, ecological effects, and assessment studies was also completed. The program obtained preliminary definitive data on the effects of enhanced UV-B radiation on crops in the field.

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

1985 Request

The Agency is not requesting resources for pass-through funding to the National Center for Toxicological Research in 1985.

1984 Program

Resources were not requested for this program in 1984.

1983 Program

In 1983, the Agency obligated a total of $2,059,600, all of which was in the Research and Development appropriation.

Activities under this program were not funded until late 1983. As a result, major scientific outputs will not be available in this reporting period.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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TOXIC SUBSTANCES

Toxic Substances Strategies

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Toxics Integration								
Salaries & Expenses		$1,390.1	$972.7	$782.3	$782.3		$814.1	$31.8
Abatement Control and Compliance		$1,819.3	$1,938.1	$1,938.1	$1,938.1		$1,256.1	-$682.0
	TOTAL	$3,209.4	$2,910.8	$2,720.4	$2,720.4		$2,070.2	-$650.2
Chemical Testing								
Salaries & Expenses		$3,959.2	$4,202.8	$4,202.8	$4,202.8		$4,696.2	$493.4
Abatement Control and Compliance		$8,463.4	$8,361.7	$8,361.7	$8,361.7		$9,801.8	$1,440.1
	TOTAL	$12,422.6	$12,564.5	$12,564.5	$12,564.5		$14,498.0	$1,933.5
Existing Chemical Review								
Salaries & Expenses		$4,782.6	$4,609.7	$4,609.7	$4,609.7		$5,824.5	$1,214.8
Abatement Control and Compliance		$6,149.1	$6,078.8	$6,078.8	$6,078.8		$7,885.1	$1,806.3
	TOTAL	$10,931.7	$10,688.5	$10,688.5	$10,688.5		$13,709.6	$3,021.1
New Chemical Review								
Salaries & Expenses		$7,664.6	$7,571.6	$8,272.9	$8,272.9		$9,002.7	$729.8
Abatement Control and Compliance		$5,867.6	$5,384.7	$5,384.7	$5,384.7		$6,137.7	$753.0
	TOTAL	$13,532.2	$12,956.3	$13,657.6	$13,657.6		$15,140.4	$1,482.8
TOTAL:								
Salaries & Expenses		$17,796.5	$17,356.8	$17,867.7	$17,867.7		$20,337.5	$2,469.8
Abatement Control and Compliance		$22,299.4	$21,763.3	$21,763.3	$21,763.3		$25,080.7	$3,317.4
Toxic Substances Strategies	TOTAL	$40,095.9	$39,120.1	$39,631.0	$39,631.0		$45,418.2	$5,787.2

TOXIC SUBSTANCES

Toxic Substances Strategies

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Toxics Integration	19.0	16.0	12.5	12.5		13.0	.5
Chemical Testing	79.4	93.9	93.9	93.9		103.0	9.1
Existing Chemical Review	109.8	93.0	93.0	93.0		120.6	27.6
New Chemical Review	172.1	171.1	187.7	187.7		196.6	8.9
TOTAL PERMANENT WORKYEARS	380.3	374.0	387.1	387.1		433.2	46.1
TOTAL WORKYEARS							
Toxics Integration	30.0	22.8	17.8	17.8		17.8	
Chemical Testing	92.0	103.7	103.7	104.7		112.0	7.3
Existing Chemical Review	114.5	103.0	103.0	103.0		125.0	22.0
New Chemical Review	201.2	189.5	207.8	207.8		216.6	8.8
TOTAL WORKYEARS	437.7	419.0	432.3	433.3		471.4	38.1

Toxic Substances Strategies

Budget Request

The Agency requests a total of $45,418,200 supported by 471.4 total workyears for 1985. Of these resources $20,337,500 is for the Salaries and Expenses appropriation and $25,080,700 is for the Abatement, Control and Compliance appropriation. This represents an increase of 38.1 total workyears over 1984, and increases of $2,469,800 for the Salaries and Expenses appropriation, and $3,317,400 for the Abatement, Control and Compliance appropriation. These increases are requested to support new initiatives and expansions of existing efforts in four areas: Toxics Integration, Chemical Testing, Existing Chemical Review, and New Chemical Review.

Program Description

The four programs which make up the Toxic Substances Strategies subactivity--Toxics Integration, Chemical Testing, Existing Chemical Review, and New Chemical Review--are the core of the Agency's capacity to evaluate the potential effects of chemicals and regulate harmful chemicals through strategies based on a coordinated approach. These separate program activities conjoin in enabling the Agency to meet its mandate under TSCA.

Toxics Integration -- The major emphasis of the Toxics Integration program has been changed to reflect the Agency's interest in intermedia chemical problems and in better communication with other Federal agencies, States, and Regions on toxic problems. In addition, the Agency will continue to promote a cohesive, coordinated Agency, interagency, and international approach to solving chemical problems.

Chemical Testing -- The goal of the Chemical Testing program is to make accurate decisions about the need for additional testing of high priority chemicals. These decisions result in the generation of data that will allow EPA to make reasoned, scientific judgments leading to both regulatory and nonregulatory actions in its Existing Chemical Review program.

Existing Chemical Review -- The goal of the Existing Chemical Review program is to reduce unreasonable risks to health or the environment caused by chemicals already in commerce. EPA plans to use a coordinated and flexible inter- and intra-agency approach to achieve a comprehensive risk reduction. EPA will take maximum advantage of opportunities to influence industry or user groups to reach negotiated agreements for risk reduction so that risks can be reduced in a more timely manner.

The Existing Chemical Review program also includes information collection and risk management activities needed to develop TSCA regulations and otherwise implement the program. Computer systems are maintained to ensure the confidential handling of business information, the collection and statistical analysis of health and environmental monitoring data, and the development and implementation of record-keeping under TSCA Sections 8 and 12. The Chemical Inventory, which defines the universe of existing chemicals, includes data on over 60,000 chemicals and is maintained for both the new and existing chemical programs.

New Chemical Review -- EPA's new chemical premanufacture review program reflects the general preventive philosophy of TSCA. Its goal is to protect human health and the environment from unreasonable chemical risks before the chemical

enters into commerce. Without imposing undue regulatory burden, EPA will conduct a program that subjects all new chemicals to a comprehensive premanufacture review to ensure that risks associated with intended uses are adequately characterized and, where necessary, controlled. A new function of the New Chemical Review program is the review and evaluation of living, genetically engineered organisms to ensure that society is protected from any adverse health or environmental effects caused by the use of these substances. Using the "significant new use" authorities of Section 5(a)(2) or the reporting authorities of Section 8, the New Chemical Review program closely tracks the commercial development of selected new chemicals after they have entered commerce.

TOXICS INTEGRATION

1985 Program Request

The Agency requests $2,070,200 supported by 17.8 total workyears for this program, of which $814,100 is for the Salaries and Expenses appropriation and $1,256,100 is for the Abatement, Control and Compliance appropriation. The 1985 Salaries and Expenses appropriation is increased by $31,800 to cover increases in personnel costs. The 1985 request for the Abatement, Control and Compliance appropriation is reduced by $682,000 as a result of the transfer of resources to the Office of Policy, Planning and Evaluation. The emphasis of the Toxics Integration program has been changed to reflect the Agency's interest in intermedia chemical problems and the development of cross-media chemical strategies, and in fostering better communication with States and Regions on toxic substances information sharing and chemical problems.

In 1985, the Agency will fully implement the new intermedia chemical problem identification program piloted in 1984. This program will ensure that the Agency identifies and assigns responsibility for chemical problems in a consistent and rapid manner. High quality public interaction will be stressed. In a related effort, the Agency will develop strategies for chemicals of special interest both to the Toxics Substances program and to the other Agency programs. These strategies will address cross-media issues and identify the most cost-effective approaches to total control of the chemical problem.

A second prototype program initiated in 1984 to assist other EPA, Federal, and State programs in using TSCA information and/or the information gathering and regulatory authorities under TSCA will result in a fully implemented information sharing program in 1985. This program will provide chemical data and technical know-how to Regions and States to strengthen their capabilities to deal with unique toxics problems.

In addition to these expanded integration activities, we will continue already established integration activities. These activities focus on creating and sharing data bases which contain toxic chemical regulatory and scientific information. The existence of these data sources encourages consistent decision-making and efficient use of work already completed. The EPA Chemical Activity Status Report will be updated and Consumer Product Safety Commission data added. This report, available through an on-line ADP system, currently includes chemical assessment and regulatory status information on over 3,800 chemicals of interest to EPA.

Twenty-five more organizations will be added as users of the Chemical Substances Information Network (CSIN), and one additional organizational network will be added. CSIN provides easy access to a library of systems through a central access point. We will update existing Intermedia Priority Pollutant (IPP) documents and add three new pollutants. These IPP documents contain policy, technical, and regulatory guidance and are used throughout the Agency. In addition, we will maintain the Industry File Information System and the Industry Interaction Matrix. The Industry File Information System, indexed by chemical, includes information on 83 industry categories which are affected by EPA regulations. The Industry Interaction Matrix identifies EPA staff involved in toxics-oriented work in every regulated industry category.

1984 Program

In 1984 the Agency is allocating $2,720,400 supported by 17.8 total workyears for this program, of which $782,300 is for the Salaries and Expenses appropriation and $1,938,100 is for extramural purposes under the Abatement, Control and Compliance appropriation.

In 1984, the Agency will begin a pilot program to identify systematically intermedia chemical problems. In addition, we will focus on fully utilizing TSCA's broad authorities to address cross-media problems and on coordinated media approaches. We will pursue a program of intensive interaction with other EPA programs to make them aware of TSCA's flexible information gathering and control authorities. This could result in several pilot rulemaking efforts in which TSCA authorities are used by these offices to solve a problem they are facing.

In another pilot effort, the Agency will begin to explore ways to share more widely information received as a result of TSCA action under Sections 4 and 8, as well as the technical and scientific knowledge gained over the years of TSCA implementation. In developing TSCA, Congress clearly recognized the need for broad public access to data on commercial chemicals and chemical hazards. It charged EPA with the responsibility for sharing data obtained under the Act with all interested parties, including Federal, State, and local agencies responsible for the protection of health and the environment. This sharing of information is limited only by the the Confidential Business Information protection guaranteed by TSCA. Significant amounts of data are now available, and through this program we hope to develop an efficient way to make data widely available to all interested parties in a manner consistent with the mandates of the Act.

The Chemical Activity Status Report will be maintained and used to perform analyses to identify duplicative efforts on chemicals and evaluate the Agency's regulatory behavior. Eight of the 22 Intermedia Priority Pollutant (IPP) documents will be updated in 1984 and three new IPP's developed. We will continue to maintain the Extramural Activity Report which is designed to reduce duplicative work by EPA grantees and contractors; two updates are scheduled for publication in 1984. The Industry File Information System and Industry Interaction Matrix will be updated.

Policy studies on such topics as the feasibility of cross-agency sharing of confidential data and the pervasiveness of problems of intermedia transfer of toxic pollutants will be completed in 1984. Implementation steps will begin in several of the subject areas in 1984, and new studies will begin. Candidate subjects include issuance of a comprehensive EPA "State of the Chemicals" report and developing a mechanism for EPA (as an Agency) to publicly "close out" its interests in a chemical.

The principal efforts in the CSIN program are directed toward enhancing the system to make its management technology more attractive to potential subscribers and toward adding additional subscribers and data resources. In 1984, plans are to add four new data and information resources such as HAZARDLINE and the Ford Motor Company chemical data base, and 50 more user organizations. One organizational data system will also be added, and current CSIN capabilities will be made available to this same organization. Finally, in 1984 we will evaluate the results of the Section 28 State grant programs closed out in 1983 and 1984.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $3,209,400 supported by 30.0 total workyears for this program, of which $1,390,100 was for the Salaries and Expenses appropriation and $1,819,300 for the Abatement, Control and Compliance appropriation. In 1983 we issued the report on lead contamination in Dallas. This report was the culmination of a study coordinated by the Chemical Coordination Staff using resources from EPA Region VI, the city of Dallas, and the Centers for Disease Control. The study provided a new scientific benchmark in terms of the quality and integrity of its design and provided definitive information on the tenuous relationship between soil lead contamination and children's blood-lead levels.

In 1983, the State assistance effort focused on establishing an information clearinghouse and peer exchange opportunities for States, plus assessing States' information needs for decision-making on toxics and offering support as appropriate. Under the State assistance program in 1983, profiles of toxics capabilities of 20 States were prepared, and on-site aid was provided. Two grants were awarded in 1983. One grant resulted in a report prepared by the National Conference of State Legislators, which described toxic substances control trends in State legislation. The second grant was awarded to the Association of State and Territorial Health Officials/Conference of State and Territorial Epidemiologists (ASTHO/CSTE) to identify problems in conducting environmental epidemiological investigations, and to sponsor a conference on environmental epidemiology and toxicology for State officials. A compendium of environmental epidemiological investigations by States will be produced.

Also in 1983, we initiated efforts to add new data and information resources, as well as 50 new organizations to the Chemical Substances Information Network (CSIN) program. CSIN is designed to serve the data and information management needs of private and public sector administrators, engineers, and scientists involved in the development, production, transportation, use, disposal, and regulation of chemical substances. We have added the following to CSIN: two major commercial information vendors, Lockheed's Dialog and the Bibliographic Retrieval Service, and one system specializing in mathematical modeling, the U. S. Coast Guard's Hazard Assessment Chemical System. This expanded the total to seven information services or over 400 data bases accessible through CSIN. Over 160 individuals from 52 private and public organizations were trained to use CSIN during 1983. A total of 104 organizations and over 400 individuals are now trained in CSIN.

CHEMICAL TESTING

1985 Program Request

The Agency requests $14,498,000 supported by 112.0 total workyears for this program: $4,696,200 is for the Salaries and Expenses appropriation, and $9,801,800 is for the Abatement, Control and Compliance appropriation. This represents increases of 7.3 total workyears and $493,400 for the Salaries and Expenses appropriation and $1,440,100 in extramural dollars under the Abatement, Control and Compliance appropriation to finalize testing actions proposed in previous years. The increase also expands the test data audit program to keep pace with the increases in test studies now underway.

In 1985, the Agency will continue to place primary emphasis on responding to the Interagency Testing Committee's (ITC's) most recent chemical designations within the required 12-month period. The Agency's response to the 13th and 14th ITC lists, which we expect to include a total of nine chemicals, will be published in November, 1984 and May, 1985, respectively. EPA will receive and initiate data development activities for chemicals designated on the 15th and 16th ITC lists. During the data development phase, EPA will contact chemical manufacturers and processors, public interest groups, and other parties potentially affected by the

ITC's recommendations. An extensive effort will then be mounted to gather information necessary for the analysis and evaluation of the ITC recommendations, leading to decisions on the need for testing. The Agency will continue its commitment to obtain data as quickly as possible, using negotiated agreements when a mutually acceptable agreement can be reached with industry to perform the required testing. EPA will always pursue formal rulemaking when necessary.

In the past three years the Agency has concentrated efforts on clearing the backlog of chemicals on the schedule established by court order and on meeting the statutory deadlines for new ITC designations. The backlog was eliminated in 1984. In order to meet these deadlines, testing decisions were issued as proposals. In 1985, EPA will concentrate on finalizing past testing actions and put into place a process for finalizing future testing actions more quickly.

The Agency will continue test data development activities on chemical categories identified through the new and existing chemicals programs. Although this work was started in 1984, the first testing actions resulting from this non-ITC component of the program will occur in 1985. Testing on those chemicals will provide the Agency with data necessary to reach a regulatory decision.

In 1985 EPA expects to receive and process 100 applications for exemption from testing to avoid duplicative efforts when other persons are already performing the tests. TSCA requires the Administrator to order those persons who have been granted exemptions from test data submission requirements, but have failed to reach agreement on reimbursement, to provide fair and equitable reimbursement to those persons who have previously provided test data on an equivalent chemical substance or mixture for which the exemption is being sought.

A critical level of test guideline development work will continue in 1985. This work will focus on chronic health screening tests and higher tier environmental tests. New guidelines will be coordinated within EPA, with other government agencies, and with the international community to ensure harmonization with other testing procedures. EPA will perform the required annual review of all published test guidelines to ensure their adequacy. This level of effort will vary depending on the level of public comment and advances made in testing methodologies.

Another critical component of the 1985 Chemical Testing program is the data audit program. The objective of the data audit program is to ensure that all data produced, whether a negotiated agreement or a test rule, are adequate for regulatory purposes. The validity of these test data will be confirmed through audits of test studies to ensure testing is conducted pursuant to specified testing protocols, TSCA/FIFRA testing procedures, and good laboratory practices. EPA will expand its test data audit program to keep pace with increases in the number of tests being performed. In addition, we will refine our health and environmental data audit procedures and begin to develop procedures covering biological testing and exposure monitoring. These are areas where EPA is just beginning to impose testing requirements. Audit procedures enable EPA to conduct thorough and consistent data audits on a greater number of studies and further minimize the potential for invalid data being generated.

EPA will continue to participate in international information exchange programs. The most visible international effort will be the Agency's participation in the Organization for Economic Cooperation and Development (OECD). The OECD Switchboard project, piloted in 1984, will be evaluated and fully implemented. Member countries need information on particular chemicals expeditiously and at minimal cost. Unpublished data of importance to the assessment of these chemicals may be in the possession of manufacturers, governments, and academia. The Switchboard project establishes an international referral system to facilitate access by member countries to unpublished information held in other member countries. EPA chairs the Switchboard project and will provide scientific and information management expertise to facilitate full-scale implementation of the project.

EPA will also develop bilateral and multilateral agreements between OECD member countries involved in testing programs. These agreements will establish laboratory and data audit requirements for all testing performed by these countries, even if the data will be submitted to another country. This will facilitate acceptance of data and also ensure that the OECD good laboratory practice compliance scheme is implemented.

1984 Program

In 1984, the Agency is allocating $12,564,500 supported by 104.7 total workyears to this program. Of this total $4,202,800 is for the Salaries and Expenses appropriation and $8,361,700 is for the Abatement, Control and Compliance appropriation. EPA completed action on the backlog of ITC designations prior to the court-ordered deadline of December 31, 1983. Testing decisions on the 11th and 12th lists will be issued in November 1983 and in May 1984 and data development will begin on the 13th and 14th ITC lists. The 13th list was received in November 1983 and designated four chemicals for testing consideration by EPA. As the backlog is completed, the Agency will begin to finalize actions taken in past years and begin data development on three to four chemicals identified through the TSCA new and existing chemical program reviews. Testing on these EPA-identified chemicals will provide information needed to reach a regulatory decision.

The Agency will maintain a critical level of guideline development work in 1984 and will publish seven new guidelines. These new guidelines will cover environmental effects and chemical fate tests. EPA will conduct an annual review and update of published guidelines as required by TSCA and will republish any guidelines which require major revision. One significant guideline update will address the controversial LD50 (acute lethality) test, which will be updated to reduce on average the number of animals used in the test. In addition, EPA has published a rule specifying good laboratory practices that must be observed by laboratories conducting tests in compliance with TSCA. The work on this rule was completed in 1983; it was published on November 28, 1983.

A comprehensive test data audit program will be a high priority in 1984 as the number of tests being conducted as a result of TSCA actions will continue to increase. The Agency is committed to ensuring that data produced by these studies are of high quality.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $12,422,600 supported by 92.0 total workyears, of which $3,959,200 was for the Salaries and Expenses appropriation and $8,463,400 was for the Abatement, Control and Compliance appropriation. The Agency responded to a total of 23 ITC designations in 1983; 16 were backlog designations and seven were designations from the 9th and 10th ITC lists. Both the December 1982 court-imposed schedule on the backlog chemicals and the statutory timeframe on the 9th and 10th lists were met. The Agency published a final data reimbursement rule pursuant to Section 4(c)(3)(A) of TSCA to ensure fair distribution among chemical manufacturers of costs associated with performing required testing under Section 4.

The Agency published six new guidelines for conducting basic health and environmental effects and environmental fate testing. In addition, EPA performed the required annual review and update of published test guidelines to ensure that they were adequate. As a result EPA revised 40 of the 80 guidelines published in 1982 after determining that technical areas of the guidelines needed updating. All but one of the revisions was minor.

This was the first year in which the Agency saw the results of its negotiated testing program under Section 4 of TSCA. In 1983, the Agency received nearly 200 test studies performed on chemicals subject to past testing actions under these negotiated agreements. These data are a key component in the risk identification activities carried out under the TSCA Existing Chemical Review program and would not yet be available if it were not for the Agency's negotiated testing approach.

EXISTING CHEMICAL REVIEW

1985 Program Request

The Agency requests a total of $13,709,600 supported by 125.0 total workyears for this program, of which $5,824,500 is for the Salaries and Expenses appropriation and $7,885,100 is for the Abatement, Control and Compliance appropriation. This represents an increase of 22.0 total workyears and increases under the Salaries and Expenses and Abatement, Control and Compliance appropriations of $1,214,800 and $1,806,300 respectively. The increases will allow the Agency to undertake risk management action, primarily under Section 6, on the eight chemicals now in some stage of regulatory development and maintain a risk management program which can continue to deal with identified existing chemicals problems. It will also allow EPA to keep pace with the amount of test data being produced as a result of Congressionally mandated testing programs, such as the TSCA Section 4 Program and the National Toxicology Program (NTP). The 1985 program strikes a balance between new and existing chemical responsibilities, allowing EPA to respond appropriately on new chemicals while maintaining our responsibility to environmental quality by controlling or reducing the risks from existing chemicals.

In the last few years, in recognition of the need for assessment of toxic chemical risks to humans and the environment, the Congress has supported a number of programs to generate the toxicity data needed for risk assessment. Congress established the testing program under Section 4 of TSCA for this purpose. Similarly, it has created the NTP and supported testing under other Federal agencies' programs. This Federal activity has, in turn, prompted industry to do more testing, sponsored both by individual companies and by industry consortia. These various programs are now producing data and identifying candidates for risk assessment. These test results must be analyzed first to put in priority order those chemicals for which data indicate significant potential risk and then to perform in-depth risk assessments on those for which controls may be needed.

With 60,000 chemicals currently in commercial use it is important to establish priorities. TSCA has a series of natural screening mechanisms. Section 8(e) notices of substantial risk, Section 21 petitions, Section 4 test data, as well as Section 8 reporting rules all feed data on existing chemicals into the risk identification process. The new chemicals program is also a screening mechanism in that new chemical categories are usually minor variants of existing chemicals; i.e., chemicals that surface as problems in the new chemical review process often point to problems with existing chemicals. NTP testing and broad-based monitoring studies also identify existing chemical problems. These programs identify chemicals which are a high priority for data development or which have adequate hazard data to support assessment. Once necessary data are available, the Agency must act quickly to evaluate this information and take action where necessary. These mechanisms identify 50-60 chemicals per year for evaluation.

The Agency's risk evaluation efforts will continue to focus on specific areas of concern. Chemicals will proceed through a series of information-gathering stages designed to enable rational decisions as to whether additional data or regulatory actions are needed. Chemicals will be dropped from review if no significant risk is found. All decisions will be documented. Chemical-specific monitoring studies will be conducted on chemicals when exposure data are needed to support regulatory decisions. EPA will use the information-gathering authorities of TSCA to require industry to report additional information on existing chemicals about which there is concern.

The major Section 8(a) Preliminary Assessment Rule and Section 8(d) Health and Safety Study Rule promulgated in previous years will be amended to add chemicals designated for testing by the Interagency Testing Committee (ITC). By amending these broad information-gathering rules to include chemicals on each new ITC list, EPA assures a steady flow of information into its existing chemicals program. The Agency will begin to use Section 8(c) records of alleged adverse reactions as a significant source of data for the existing chemicals program. Section 8 will also be used to update production information on a selected segment of existing chemicals on the TSCA inventory.

In 1985, EPA will be involved in risk management actions on eight existing chemicals: asbestos, PCBs, MBOCA, MDA, 1-3 butadiene, glycol ethers, cutting fluids, and toluenediamines (TDA). Asbestos has been subject to regulatory investigations for several years. EPA now has adequate data for major rulemaking on this very hazardous and widely used substance. We plan to issue a final rule on several asbestos product categories that account for over 50 percent of the asbestos fiber consumption; we also plan to issue a proposed Section 6 rule imposing a staged production cap on all remaining uses of asbestos.

EPA also plans to issue final Section 6 rules on two chemicals, 4,4'-methylene Bis (2-Chloraniline), commonly known as MBOCA, and 4,4'-methylenedianiline, commonly known as MDA. We will begin development of a rule to reduce the risks posed by glycol ether solvents, with proposal expected in early 1986. EPA will also propose rules on 1,3-butadiene and on cutting fluids. The Agency will also issue a final rule on PCBs, addressing the hazards posed by fires evolving from electrical transformers that contain PCBs. A negotiated rulemaking on toluenediamines should be completed this year.

The Agency also is responsible for assisting the industry and the public in understanding what the rule requires (i.e., the exemption provisions of the PCB, CFC, and dioxin rules). The 1985 activities in this area will include the review of requests for permits to dispose of PCBs in mobile incinerators or by other means, as well as review of requests for exemptions to Section 6 rules on PCBs and CFCs. Participation on the Federal Asbestos Task Force and the provision of assistance and information on asbestos through the Asbestos Technical Assistance Program will also continue.

1984 Program

In 1984, the Agency is allocating a total of $10,688,500 supported by 103.0 total workyears to this program. Of this total, $4,609,700 is for the Salaries and Expenses appropriation and $6,078,800 is for the Abatement, Control and Compliance appropriation. In 1984, the Agency will maintain the momentum gained in 1983 when it put in place an integrated existing chemicals risk evaluation and control program. The assessment of existing chemicals is a five-phase process designed to focus on specific effects of concern. In the first phase, EPA uses TSCA's basic screening mechanisms to choose the chemicals that should be further evaluated.

Approximately 60 chemicals are in one of the evaluation stages (phases 2-4) at any given time. The risk evaluation phases of the process include characterization of the problem by looking at hazard and exposure information. Risk reduction analyses focus on switching to substitutes, changing chemical handling practices, required labeling, and the cost of implementing the various controls. The final phase is risk management; when TSCA does not provide clear authority we will work with other EPA offices and Federal agencies for risk reduction actions.

In 1984, the Agency will gather information on existing chemicals of concern by triggering existing Section 8(a) and 8(d) rules upon receipt of each ITC list. We will consider the use of Section 8 to update the TSCA inventory, as well as the need for some broader Section 8(a) rules for chemicals being considered for Section 6 control. We will begin developing these strategies in 1984.

The Agency will complete rulemaking on PCB issues relating to the Environmental Defense Fund suit on the 50 ppm cutoff for purposes of defining the presence of PCBs. As a result, EPA will work on four rules in 1984 which deal with PCBs. The third part of the PCB rule, which addresses uncontrolled uses of PCBs, will be proposed and finalized by July 1984. In addition, EPA will begin development of a regulation covering the risks posed by fires evolving from electrical transformers that contain PCBs, finalize the reauthorization of PCBs in research and development and microscopy, and finalize the PCB exemption rule.

In addition to the work on PCBs, EPA will begin work on Section 6 rules for asbestos, MBOCA, and MDA. EPA will coordinate its rulemaking activities on asbestos with other agencies through the Federal Asbestos Task Force. We will also be analyzing comments recieved on the advance notices for MBOCA and MDA and begin formulating our regulatory strategies.

The Agency will continue to assist industry and the public in understanding and responding to existing chemical actions by continuing programs such as the Asbestos-in-Schools Technical Assistance Program, the Brake Mechanics Program, and the PCB Disposal Permitting program.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $10,931,700 supported by 114.5 total workyears, of which $4,782,600 was for the Salaries and Expenses appropriation and $6,149,100 was for the Abatement, Control and Compliance appropriation. The Agency's approach to existing chemical control changed dramatically in 1983. EPA set up the Existing Chemicals Task Force with responsibility for developing and puting into place a project management system for evaluation and decision making on risks from existing chemicals.

During 1983 the existing chemicals program received and reviewed a substantial amount of data on existing chemicals. The Section 4 negotiated testing program resulted in submission of 200 completed test studies by industry. Section 8(a) and Section 8(d) rules resulted in submission by the chemical industry of over 3,000 studies and reports on existing chemicals. Under the Section 8(e) substantial risk notification program, EPA received 35 initial reports, 59 "for-your-information" submissions, and 94 supplements related to previous initial reports. Twenty-six NTP studies were also received and reviewed. Chemical Hazard Identification Profile documents (CHIPs) were prepared for 20 of the chemicals.

The screening resulted in over 60 chemical evaluations. Approximately 30 chemicals were targeted for further analyses and decisions in 1984; eight chemicals were moved into development of Section 5 or Section 8 rules; one chemical, MDA, was identified as a Section 4(f) candidate; and five chemicals were moved into regulatory development under Section 6. About 20 chemicals dropped from review.

In 1983, we amended the Section 8(a) Preliminary Assessment Reporting rule to add chemicals from the 6th through the 9th and the 11th and 12th ITC lists (the 10th ITC list was included as part of the initial Section 8(a) rule). We also amended the Section 8(d) Health and Safety rule to include chemicals from the 6th through 12th lists. EPA implemented another major TSCA information authority by promulgating the Section 8(c) rule requiring that records be kept for 30 years on allegations of significant adverse reactions.

During 1983 four final rules regarding PCBs were promulgated. The first rule set numerical cutoffs (parts per million) for purposes of defining the absence of PCBs in releases from closed and controlled waste processes. This rule also adds

additional disposal mechanisms to the list of acceptable mechanisms for the disposal of controlled waste containing PCBs up to 50 parts per million. The second rule pertained to PCB concentration in railroad transformers; the third, to approval of disposal facilities; and the fourth to testing methods. Other risk management actions include Advance Notices of Proposed Rulemaking on MDA and MBOCA.

EPA also proposed its first followup actions on existing chemicals. Chlorinated napthalenes (CNs) and chlorinated terphenyls (CTs) were designated for Section 4 testing consideration by the ITC. However, the use of CNs has declined to low levels, and CTs are no longer used in the United States. As a result, EPA concluded that test rules were not justified at this point. To ensure against renewed production or expansion of current uses without adequate review, the Agency will track these chemicals through followup rules. A Section 8(a) rule was proposed to require manufacturers or importers of CTs to report certain information on existing or proposed production; a proposed rule under Section 5(a)(2) was published. Under this rule any domestic manufacture of CN or any cumulative manufacture or import over 100,000 pounds a year is considered a "significant new use" and subject to EPA review under Section 5.

NEW CHEMICAL REVIEW

1985 Program Request

The Agency requests a total of $15,140,400 supported by 216.6 total workyears for this program, of which $9,002,700 is for the Salaries and Expenses appropriation and $6,137,700 is for the Abatement, Control and Compliance appropriation. This represents an increase of 8.8 total workyears and increases of $729,800 in Salaries and Expenses, and $753,000 in Abatement, Control and Compliance. These increases will enable EPA to initiate a program addressing the coverage under TSCA of genetically engineered materials. Commercial use of biotechnical substances is not covered under any other Federal regulation, and significant risk may be associated with some of the uses of these substances, particularly as a result of their release into the environment.

In 1985, the review of new chemicals continues to be a high Agency priority. All new chemicals will be subjected to a thorough review to ensure that health and environmental risks are adequately controlled. This includes premanufacture notices, test market exemption applications, and, if applicable, Section 5(h)(4) exemption notices. Conservative estimates suggest that about 1,650 new chemicals will be submitted for review in 1985; this reflects an increase over past years. About 180 chemicals will raise sufficient health or environmental concerns to require a detailed review to characterize their risk; about 120 new chemicals will require some control action by the Agency. Agency control actions include voluntary actions such as testing, exposure controls, or withdrawal of the PMN by the manufacturer, the use of Section 5(e) consent orders which allow some commercialization with tight controls while data are developed, a ban on chemical production pending data development, or the development of controlled use regulations on the chemical.

In addition, EPA expects to receive 80 test marketing exemption (TME) applications. These applications are reviewed to determine that the substance will not present an unreasonable risk to human health or the environment under the test marketing conditions. The burden is on the exemption applicant to provide sufficient information to make the "no unreasonable risk" finding or EPA will deny the request. In the past, EPA has denied or modified approximately 10 percent of incoming TMEs.

Since the number of new chemicals being introduced and requiring some EPA control continues to grow, we must look for ways to expedite our reviews so that other aspects of the program, such as followup, PMN rule clarification, and biotechnology, also receive adequate attention. One of the major deterrents to expeditious review is lack of adequate information with the premanufacture notice. In 1985, EPA will look for ways to address this problem. One of the approaches

being considered is pre-notice communication with past submitters to discuss their new product line and to clarify EPA's PMN data requirements. This should result in more adequate PMN data submissions and enable more PMN reviews. Eventually, this approach is also expected to reduce the number of detailed reviews and control actions.

We will continue our case-by-case followup program using the significant new use authority of Section 5(a)(2) and the Section 8(a) information gathering authority. We will issue "significant new use" rules for new chemicals on which a Section 5(e) order is issued. This will impose on all manufacturers and processors the same restrictions which have been imposed on the premanufacture notice submitter. We also plan to finalize a general Section 8(a) reporting rule that would require companies to submit reports on new chemicals when they reach a given annual production volume. Additional options will be examined for obtaining more data as chemicals prove to be commercially viable. This broad approach to followup will provide added protection to public health and the environment.

EPA will develop a rule under Section 5(b)(4) of TSCA, which authorizes EPA to create a list of chemical substances or categories of chemicals that have been determined to present (or may present) unreasonable risks during manufacture, processing, distribution in commerce, use, or disposal. If a PMN is submitted for a chemical category which has been included on the "risk list," this rule would require the PMN submitter to furnish data which shows that the substance does not present an unreasonable risk.

In 1985, EPA will explore ways to more effectively communicate to industry and the public the technical rationale for its decisions on new chemicals. Along these lines, the Agency will begin to prepare advisory circulars on new chemicals. These advisories will summarize data requirements or controls needed on specific categories of new chemicals, describe the rationale for specific decisions on controversial cases, and announce decisions or legal interpretations related to new chemical reviews. To the extent that EPA can articulate its decisions and concerns, it can provide the chemical industry with important insight into how the Agency has dealt with specific issues and promote greater public oversight of new chemical reviews.

In 1985, we will be evaluating living, genetically engineered organisms (biotechnology) under Section 5 of TSCA. Biotechnology has until very recently been a laboratory-scale phenomenon; however, commercial uses potentially subject to TSCA regulation are now under development. Significant risk may be associated with some of the uses of these organisms, particularly as a result of their release into the environment.

We will proceed to develop appropriate risk assessment techniques and testing protocols applicable to reviewing these biotechnical materials within the statutory 90-day period. However, we must develop the appropriate techniques and models for analyzing the hazards of these unique substances, change our current modeling approach from physical-chemical properties to predicting fate in the environment, and deal with the unique cost/benefit issues which these substances will raise. As with the PMN review process, the process for reviewing biotechnical materials will be refined as we gain experience and establish operating policies for addressing the risks posed by these materials.

1984 Program

In 1984 the Agency is allocating a total of $13,657,600 supported by 207.8 total workyears to this program. Of this $8,272,900 is for the Salaries and Expenses appropriation and $5,384,700 is for the Abatement, Control and Compliance appropriation. With these resources, the Agency will maintain aggressive new chemical review and followup programs. We will act quickly to identify potential problems or data gaps using the authority of Section 5(e) flexibly to induce data

development and to control exposure. In 1984, we anticipate receiving 1,450 premanufacture notices, of which about 100 will require some form of Agency control, either voluntary or formal. We will review 80 test market exemption requests submitted to the Agency pursuant to Section 5(h)(1), either granting or denying the request within the 45 days mandated by TSCA. As in the past the applicant must provide sufficient information to the Agency to support a finding of no unreasonable risk, or the application will be denied.

EPA will continue to implement its strategy to track new chemicals after commercialization, using both the Section 5(a)(2) significant new use rule and Section 8(a) provisions of TSCA. EPA will track new uses of chemicals with toxicity or exposure concerns, as well as new chemicals which are subject to consent or formal Section 5(e) orders. This extends the conditions of the Section 5(e) order to all manufacturers or processors of these chemicals, which otherwise could be marketed without restriction. We plan to supplement our case-by-case followup program with a broader approach by developing a general Section 8(a) reporting rule. This rule, to be proposed this year and finalized in 1985, will require companies to submit reports when production volume reaches a given annual rate.

EPA will continue to work toward promulgation of the three pending Section 5(h)(4) exemption rules proposed in 1983. These broad-based exemption categories include site-limited intermediates (chemicals that react with other chemicals at their plant site), chemicals that are produced in small amounts (i.e., less than 10,000 kg/yr.), and certain polymers. Once these rules are promulgated, about 36 percent of the new chemical submissions will be eligible for a shortened review under one of these rules.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $13,532,200 supported by 201.2 total workyears for this program, of which $7,664,600 was for the Salaries and Expenses appropriation and $5,867,600 was for the Abatement, Control and Compliance appropriation. EPA has taken major steps over the last year toward fully implementing the new chemicals program. The final PMN rule, together with a mandatory notice form, was issued in 1983. Most provisions of the rule became effective; however, provisions which cover exemptions for research and development activities, the definition of possession and control, and the data requirements on related chemicals were stayed by EPA pending further review. With its experience in new chemical review and regulation, EPA can now act more quickly to identify potential problems or gaps in data. This stems partly from the refinement of the program but also reflects better EPA data bases and more communication with submitters.

Since the beginning of the program, EPA has received more than 3,000 PMNs. During that time EPA has issued 14 Section 5(e) orders banning or controlling exposure to 27 chemicals pending the development of additional data (ten of these orders covering 16 chemicals were issued in 1983), and required testing on 53 substances in light of EPA concerns. Another 24 notices were withdrawn in light of EPA concerns. In 1983, EPA acted on 81 test market exemption applications of which 74 were granted, two denied, and five were withdrawn in anticipation of EPA action.

In one major new chemical action that year, EPA reviewed a notice submitted by Union Oil Company on a wide range of new synthetic fuels to be derived from oil shale in the nation's first oil shale project. EPA and Union Oil entered into a Section 5(e) consent agreement that requires controls on workplace exposure and environmental release and limits the overall production of shale oil until long-term toxicity testing is completed and reviewed.

Since the beginning of the PMN review program the Agency had identified approximately 275 chemicals as requiring followup. This backlog of chemicals was reviewed to determine whether toxicity and exposure warranted followup action. The Agency also prepared documentation explaining why no action was taken on chemicals for which it found no regulatory action was necessary. EPA also adopted a practice of issing significant new use rules, called SNURs, in conjunction with Section 5(e) orders, and proposed three significant new use rules covering five chemicals. One rule covers two chemicals which had been subject to Section 5(e) orders, and two rules cover three chemicals which were identified from the followup backlog. Another six rules (covering 12 chemicals) were developed with publication expected in early 1984.

EPA evaluated comments received from the public on its proposal to exempt broad categories of new chemicals from full PMN review. Three Section 5(h)(4) rules were proposed in 1983 covering site-limited intermediates, low volume chemicals, and certain polymers. EPA developed final rules based on comments received.

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TOXIC SUBSTANCES
Toxic Substances Enforcement

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Toxic Substances Enforcement								
Salaries & Expenses		$2,877.2	$3,579.2	$3,680.8	$3,523.0		$5,351.2	$1,828.2
Abatement Control and Compliance		$207.0	$207.0	$769.5	$769.5		$1,269.5	$500.0
	TOTAL	$3,084.2	$3,786.2	$4,450.3	$4,292.5		$6,620.7	$2,328.2
Toxic Substances Enforcement Grants								
Abatement Control and Compliance				$500.0	$500.0		$500.0	
	TOTAL			$500.0	$500.0		$500.0	
TOTAL:								
Salaries & Expenses		$2,877.2	$3,579.2	$3,680.8	$3,523.0		$5,351.2	$1,828.2
Abatement Control and Compliance		$207.0	$207.0	$1,269.5	$1,269.5		$1,769.5	$500.0
Toxic Substances Enforcement	TOTAL	$3,084.2	$3,786.2	$4,950.3	$4,792.5		$7,120.7	$2,328.2
PERMANENT WORKYEARS								
Toxic Substances Enforcement		70.1	87.1	91.6	91.6		129.7	38.1
TOTAL PERMANENT WORKYEARS		70.1	87.1	91.6	91.6		129.7	38.1

TOXIC SUBSTANCES

Toxic Substances Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Toxic Substances Enforcement	78.3	89.0	93.8	93.8		134.8	41.0
TOTAL WORKYEARS	78.3	89.0	93.8	93.8		134.8	41.0

Toxic Substances Enforcement

Budget Request

The Agency requests a total of $7,120,700 supported by 134.8 total workyears for 1985, an increase of $2,328,200 and 41.0 total workyears from 1984. Included in this total is $5,351,200 for the Salaries and Expenses appropriation, an increase of $1,828,200, and $1,769,500 for the Abatement, Control and Compliance appropriation, an increase of $500,000.

Program Description

This subactivity supports all compliance monitoring and compliance assistance activities under the Toxic Substances Control Act (TSCA), including support for regulation development, Regional compliance monitoring and case development, Regional PCB disposal permitting efforts, and management and oversight of State grant programs.

Toxic Substances Enforcement -- The Toxic Substances Enforcement program ensures compliance with TSCA and related rules and regulations. Headquarters and Regional offices play distinct but complementary roles in the program's operation. Headquarters provides enforcement support to the TSCA regulatory development process; designs, implements, and oversees compliance monitoring activities by developing guidance, strategies, and procedures; and provides technical compliance assistance and technical support to case development and prosecution activities.

Regional offices respond to special risk situations; inspect facilities that manufacture, process, distribute, or use new or specifically regulated chemicals; and monitor laboratories performing tests pursuant to TSCA testing rules or voluntary testing agreements. Regional offices also assist the regulated community in complying with all applicable TSCA regulations and seek voluntary remedial action in lieu of enforcement prosecution where appropriate. In cases where voluntary compliance is not achieved, Regional personnel prepare and issue notices of violation and administrative orders. The enforcement program assists and supports the Office of Enforcement and Compliance Monitoring (OECM) in the development of civil and criminal referrals.

Toxic Substances Enforcement Grants -- This program provides financial assistance to State agencies to develop and operate toxic substances compliance monitoring programs, in cooperation with the Environmental Protection Agency, especially in the area of control of existing chemicals. This program permits wider coverage of the regulated community without requiring additional Federal personnel.

TOXIC SUBSTANCES ENFORCEMENT

1985 Program Request

The Agency requests a total of $6,620,700 supported by 134.8 total workyears for this program, of which $5,351,200 is for the Salaries and Expenses appropriation and $1,269,500 is for the Abatement, Control and Compliance appropriation. These are increases of $1,828,200 and 41.0 total workyears for Salaries and Expenses and $500,000 for Abatement, Control and Compliance. These increases will enable the Regional offices to expand their activities in the areas of PCB and asbestos compliance monitoring and case development. Contract support includes data processing support for the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and TSCA Enforcement System (FATES), the computer system used to maintain compliance data.

In 1985, there will be an overall increase in the areas of PCB compliance monitoring and case development. Regional offices will increase inspections of facilities subject to regulations for PCB marking and disposal as well as the PCB ban. The increased effort will be targeted at those industries that have exhibited high violation rates of the PCB regulations. The personnel increase will also be directed toward increased case development activity.

The Regions will conduct followup or supplemental inspections in support of the asbestos-in-schools rule, although most asbestos-in-schools compliance monitoring inspections will be conducted using extramural funding. This funding, which will increase in 1985, will support reviews of records maintained by local education agencies to ensure inspections are conducted to detect friable asbestos. Also in the asbestos area, technical assistance and training in asbestos abatement efforts will be provided under contract for State and local government personnel and for owners and managers of public and commercial buildings.

The Regional offices will conduct 1) good laboratory practice (GLP) and test rule inspections, 2) inspections to determine compliance with new chemical regulations, 3) inspections under TSCA reporting requirements, 4) import inspections, 5) export inspections, and 6) inspections in support of the chlorofluorocarbon (CFC) ban and the dioxin regulation. The Regional offices will provide management and oversight of compliance monitoring activities of those States participating in the TSCA State grant program. The Regional offices will be responsible for the review and approval of PCB landfills and unique design stationary PCB incinerators, PCB disposal site monitoring and liaison activities (e.g., public hearings) associated with PCB disposal. Under the Existing Chemical Review Program, the Office of Toxic Substances will issue permits to all chemical and biological destruction systems, all mobile incinerators, and all stationary PCB incinerators that are not of a unique design.

Headquarters staff will participate in TSCA rulemaking activities and will develop compliance strategies and enforcement response policies for each new regulation. Headquarters will provide support for Regional compliance monitoring, voluntary compliance assistance, and case development activities under Sections 4, 5, 6, 8, 12, and 13. Headquarters will continue to manage the overall program through appropriate guidance and Regional reviews, including on-sight program evaluation. Headquarters will also be responsible for managing the extramural funding of compliance monitoring inspections in support of the asbestos-in-schools rule. The Toxic Substances Enforcement program will also prepare and issue notices of violation and administrative orders and will provide technical assistance and support to OECM in the prosecution of civil and criminal cases as warranted.

1984 Program

In 1984, the Agency is allocating a total of $4,292,500 supported by 93.8 total workyears, of which $3,523,000 is for the Salaries and Expenses appropriation and $769,500 is for the Abatement, Control and Compliance appropriation.

The Regional program will inspect for compliance and will provide direct assistance to firms seeking to voluntarily comply with TSCA requirements. Where violations are detected, EPA will encourage firms to take specific remedial actions to achieve compliance. If compliance is not achieved, Regional offices will prepare and issue notices of violation and administrative orders and will develop and prosecute cases, as warranted. The Agency will give priority to situations involving substantial threats to human health and the environment.

The Regional offices will conduct inspections to determine compliance with Section 4 testing; Section 5 new chemical regulations; Section 6 chemical control rules including PCB marking and disposal, the PCB ban, the CFC rule, asbestos-in-schools rule, and other enforceable rules; Section 8 reporting rules; Section 12

export requirements; and Section 13 import requirements. In the asbestos area, technical assistance and training in asbestos abatement efforts will be provided under contract for State and local government personnel and for owners and managers of public and commercial buildings. Regional offices will provide oversight and management for the State grant program. The Regional offices will also be responsible for PCB site disposal monitoring, liaison functions associated with PCB disposal, and the review and approval of PCB landfills and unique-design stationary PCB incinerators.

Headquarters will manage and execute national programs to monitor compliance with test rules and voluntary testing agreements under Section 4, new chemical regulations under Section 5, Section 6 chemical control rules, Section 8 reporting regulations, Section 12 export notice requirements, and Section 13 import requirements. Headquarters is responsible for managing the extramural funding of compliance monitoring inspections under the asbestos-in-schools program. Headquarters will also participate in regulation development directed by the Office of Toxic Substances.

1984 Explanation of Changes from the Amendment

The net decrease of -$157,800 results from the following actions:

-Reprogrammings. (-$157,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$500 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. This reprogramming to Salaries and Expenses, totaling -$157,300, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $3,084,200 supported by 78.3 total workyears, of which $2,877,200 was for the Salaries and Expenses appropriation and $207,000 was for the Abatement, Control and Compliance appropriation. Extramural funds provided compliance inspection support, chemical analysis of samples, and data processing support.

Regional office staff responded to special risk incidents, inspected PCB and CFC establishments, conducted compliance monitoring activities to support Section 5 premanufacture notification review and Section 8(e) substantial risk notification, and developed and prosecuted enforcement cases upon detection of serious violations, including those originating from State-conducted inspections. The Agency issued administrative orders in 294 cases and issued 372 notices of warning. The Agency also referred five criminal and three civil cases to the Department of Justice.

Headquarters assisted in developing new rules and regulations, including Section 4 GLPs; significant new use rules (SNURs) and the premanufacture notification (PMN) rule under Section 5; Section 5(e) orders; the PCB electrical equipment rule and the asbestos-in-schools rule under Section 6; the Level A chemical information rule and asbestos reporting rule under Section 8(a); Section 8(c) recordkeeping regulations; and Section 13 import regulations. Draft compliance monitoring strategies were completed for Sections 8(c), 8(d), and 8(e). The Headquarters compliance monitoring staff developed enforcement response policies for dioxin, asbestos-in-schools, and settlement with conditions for remittance of assessed penalties. Compliance monitoring staff developed inspection targeting guidance for compliance monitoring associated with Sections 5, 6, and 8 (including dioxins, CFCs, and asbestos-in-schools). Enforcement actions on seven PMN cases were taken resulting from cases being developed by Headquarters staff. Assistance was also provided to Regional offices in the development, and prosecution of, enforcement cases under Sections 6 and 8(e).

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ENERGY

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$4,720.7	$3,694.1	$4,122.7	$3,975.5		$4,183.5	$208.0
Research & Development	$21,996.2	$19,836.0	$26,367.0	$26,474.3	$5,500.0	$44,320.0	$17,845.7
TOTAL Energy	$26,716.9	$23,530.1	$30,489.7	$30,449.8	$5,500.0	$48,503.5	$18,053.7
PERMANENT WORKYEARS	57.8	36.8	44.1	44.1		52.0	7.9
TOTAL WORKYEARS	82.9	54.9	65.9	65.9		72.6	6.7
OUTLAYS	$64,779.0	$42,153.0	$35,718.5	$35,737.5	$1,100.0	$40,283.2	$4,545.7
AUTHORIZATION LEVELS	Authorization for Energy is under the R&D Act which expired September 30, 1981. Reauthorization pending.						

OVERVIEW AND STRATEGY

The overall goal of the Energy research and development program is to provide the scientific and technical information necessary to support the Agency's permitting and standard setting processes and allow for the development and utilization of energy sources in an environmentally acceptable manner. Research will be conducted to better understand the phenomena of acid deposition; provide acid deposition information upon which mitigation decisions may be made; expand EPA's knowledge of the performance, reliability, and cost of the limestone injection multistage burner (LIMB) control technology; enhance the Agency's knowledge of the potential health and environmental effects of emerging energy technologies; and, characterize and evaluate synthetic fuels discharges.

ACID RAIN

The Energy Security Act of 1980 (Title VII of P.L. 96-294) established the Interagency Task Force on Acid Precipitation to develop and implement a coordinated National Acid Precipitation Assessment Program (NAPAP). The purpose of the NAPAP is to increase the understanding of the causes and effects of acid deposition so that reliable information can be provided to policy-makers, and timely, cost-effective decisions formulated for managing acid deposition. EPA is one of three joint chairs of the Interagency Task Force which is responsible for NAPAP and has the lead role in several acid deposition research areas: aquatic effects, control technology, and policy assessment.

Many questions still remain unanswered about the causes, effects, and methods of mitigating or controlling acid deposition. The objective of our acid deposition research is to develop the necessary data to fully understand the sources and characteristics of acid deposition as well as the extent of damages or potential damage. This information is essential in developing effective, scientifically sound, regulatory policies.

For program purposes, acid deposition research activities can be described by five generic categories: man-made sources; atmospheric processes; deposition monitoring; environmental effects; and assessment and policy analysis. Research in the man-made sources area are designed to accurately estimate the emissions of major pollutants to acid deposition. Research efforts in the atmospheric processes area are designed to address the atmospheric transport, physical and chemical transformation, and deposition processes of acid deposition pollutants. In deposition monitoring, efforts are designed to quantify deposition of acid materials with sufficient accuracy to establish cause and effect relationships, and to provide information for the analysis of the effects of acid deposition. In the area of environmental effects, research projects are being conducted to define the impact of acid deposition on aquatic systems, crops, forests and soils, and man-made materials. Finally, the policy analysis research effort is designed to perform integrated assessments, linking all of the generic acid deposition research areas.

LIMB CONTROL TECHNOLOGY

A second major research area is the development of performance, reliability, and cost data to accelerate the commercialization of innovative or cost-effective energy-related pollution control technologies. The thrust in this area is the development of the limestone injection multistage burner (LIMB) emission reduction technology. The LIMB is a technology which combines SO_2 control with simultaneous NO_x control by mixing coal and limestone together, pulverizing the mixture and combusting the mixture in a low NO_x burner. This technology can potentially lower the capital cost to industry of SO_x control by a factor of 3 to 4 and annual operating costs of 50 percent.

SYNTHETIC FUELS

A third major research activity is the development and evaluation of data on the health and environmental impacts of pollutants associated with synthetic fuel processes; the characterization of discharges, and the assessment of emission reduction technology options for mitigating these impacts. These efforts will assist industry and permitting officials in identifying problems which might impede the commercialization of the industry, while at the same time, ensuring the quality of the environment.

ENERGY

Multi-Media Energy

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PROGRAM							
Acid Rain							
Salaries & Expenses	$820.4	$492.4	$590.5	$590.5		$952.5	$362.0
Research & Development	$12,250.3	$13,546.0	$14,796.0	$14,784.3	$5,500.0	$33,412.5	$18,628.2
TOTAL	$13,070.7	$14,038.4	$15,386.5	$15,374.8	$5,500.0	$34,365.0	$18,990.2
Health Effects							
Salaries & Expenses	$493.9	$662.1	$644.2	$644.2		$549.2	-$95.0
Research & Development	$1,584.8	$1,704.7	$1,704.7	$1,704.7		$1,654.7	-$50.0
TOTAL	$2,078.7	$2,366.8	$2,348.9	$2,348.9		$2,203.9	-$145.0
Environmental Engineering & Technology							
Salaries & Expenses	$3,406.4	$2,539.6	$2,888.0	$2,740.8		$2,681.8	-$59.0
Research & Development	$7,580.1	$4,585.3	$9,585.3	$9,585.3		$9,252.8	-$332.5
TOTAL	$10,986.5	$7,124.9	$12,473.3	$12,326.1		$11,934.6	-$391.5
Environmental Processes & Effects							
Research & Development	$581.0		$281.0	$400.0			-$400.0
TOTAL	$581.0		$281.0	$400.0			-$400.0
TOTAL:							
Salaries & Expenses	$4,720.7	$3,694.1	$4,122.7	$3,975.5		$4,183.5	$208.0
Research & Development	$21,996.2	$19,836.0	$26,367.0	$26,474.3	$5,500.0	$44,320.0	$17,845.7
Multi-Media Energy TOTAL	$26,716.9	$23,530.1	$30,489.7	$30,449.8	$5,500.0	$48,503.5	$18,053.7

ENERGY

Multi-Media Energy

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Acid Rain	10.3	7.0	8.7	8.7		15.7	7.0
Health Effects	4.6	3.1	1.9	1.9		3.1	1.2
Environmental Engineering & Technology	42.9	26.7	33.5	33.5		33.2	-.3
TOTAL PERMANENT WORKYEARS	57.8	36.8	44.1	44.1		52.0	7.9
TOTAL WORKYEARS							
Acid Rain	15.3	8.0	13.0	13.0		19.7	6.7
Health Effects	8.8	9.2	8.0	8.0		8.0	
Environmental Engineering & Technology	58.8	37.7	44.9	44.9		44.9	
TOTAL WORKYEARS	82.9	54.9	65.9	65.9		72.6	6.7

Multi-Media Energy

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Develop Understanding of Acid Rain Needed for Assessments and Policy Analysis			
- Report presenting the historic data base (SO_2, NO_x)	4/84	4/84	
- Report on data analysis technique to determine relative source contributions	6/84	6/84	
- Prototype industrial combustion emissions model		5/85	5/85
- Transport, chemistry and precipitation modules for nonlinear model	6/84		
- Ambient Air Monitoring Prototype Network to verify source/receptor models		6/85	6/85
- Develop improved dry deposition monitor	9/84	9/84	
- Full complement of wet deposition stations		8/85	8/85
- Procedures for determining the accuracy of acid precipitation measurements	9/84	9/84	
- Regional Sensitivity Geochemical Model	12/84	12/84	12/84
- Preliminary Report of National Lake Survey		4/85	4/85
- Report describing long-term changes in forest tree growth associated with acid deposition	10/84	10/84	10/84
- Report on effects of exposure to various environments	10/84	10/84	10/84
- Finalization of Materials Inventory Coefficients matrix for North America	8/84	8/84	

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
- Report on effects of acid rain on tree growth and soils		9/84	
Develop Health and Environmental Risk Analysis in Support of EIS and Permitting			
- Prepare a workshop report on chemical dosimetry		9/84	
- Report on upgraded health and environmental risk analysis for three synfuel technologies		3/85	3/85
- Complete user's guide for health and environmental risk analysis methodologies for complex mixtures		12/85	12/85
Develop and Evaluate LIMB Control Technology			
- Document sorbent-reaction kinetics	12/85	12/85	12/85
- Document LIMB wall-fired boilers, pilot-scaled development; and prototype scale testing	6/86	6/86	6/86
- Document scale-up criteria for retrofit burners for wall-fired boilers	3/85	3/85	3/85
- Document LIMB generic engineering design-analysis	9/85	9/85	9/85
- Select demonstration site and co-sponsor		1/85	1/85
- Fix design for wall-fired demonstration		6/85	6/85
Evaluate Impacts of Energy Development in Cold Climate			
- Evaluation of automotive CO emission control techniques at low temperatures		4/84	
- Users manual on the effects of oil and gas development on tundra wetlands		9/85	9/85
- Effects of turbidity in the water column resulting from placer mining operations		4/85	4/85

Multi-Media Energy

Budget Request

The Agency requests a total of $48,503,500 supported by 72.6 total workyears for 1985, an increase of $18,053,700 from 1984. Included in this total is $4,183,500 for Salaries and Expenses and $44,320,000 for Research and Development, with an increase of $208,000 and $17,845,700, respectively. This substantial increase reflects the Agency's efforts to better understand the acid rain phenomenon.

Program Description

The Multi-Media Energy program addresses those problems originating from energy sources which have the potential to adversely affect the environment in one or more media. The primary goal of this program is to provide the scientific information necessary to permit the development and utilization of this nation's natural resources in an environmentally acceptable manner. The Multi-Media Energy research program has eleven (11) major objectives which support this goal. The first seven of these objectives are in direct support of the Acid Deposition program.

Objective 1. Estimate Emissions from Man-Made Sources. This research will allow us to better understand and simulate the complex relationships among emissions resulting from man's activities, both historically and currently, to accurately estimate the emissions of major pollutants related to acid deposition.

Objective 2. Understand Atmospheric Processes. This work will provide a better understanding of the atmospheric transport, physical and chemical transformation, and deposition processes of pollutants emitted to the atmosphere.

Objective 3. Establish Deposition Monitoring Data Bases. This research will quantify wet and dry deposition of acid materials, both spatially and temporally, with sufficient resolution to establish cause and effect relationships. In addition, research will provide input to effects studies and to evaluate component models.

Objective 4. Understand and Quantify Aquatic Effects. This work will enable us to quantify the impacts of acidification on representative aquatic systems through the development of dose/response relationships and to apply these data to the development of appropriate mitigative measures.

Objective 5. Understand and Quantify Terrestrial Effects. We will develop acid deposition dose/response relationships for various wild and cultivated plant species and more accurately estimate material transport through soils to aquatic systems.

Objective 6. Understand and Quantify Effects on Materials and Cultural Resources. This research will determine how materials are damaged from acid deposition. This includes determining those materials and resources at risk and developing the information required to differentiate the effects of acid deposition from the effects of other natural and man-made sources.

Objective 7. Assess Research Results and Data to Provide Information for Policy Analysis. This work will enable us to integrate the acid deposition research program effort and to provide information to decision-makers to formulate appropriate actions for dealing with acid deposition issues on a timely and cost-beneficial basis. Work in this objective will result in the building of a better

framework for program decision-making; developing strategic policy and data systems to meet policy-maker needs; and providing the scientific basis for evaluating alternative systems of control and mitigation strategies.

Objective 8. Develop, Evaluate, and Document Limestone Injection Multi-Stage Burner (LIMB) Control Technology. This work will allow us to develop and evaluate an effective and inexpensive emission control technology that will simultaneously remove sulfur oxides (SO_x) and nitrogen oxides (NO_x) from boiler flue gases of pulverized coal boilers. This technology is based on the use of low-NO_x combustion techniques in combination with dry-sorbent (e.g., limestone) injection into the combustion zone.

Objective 9. Develop Health and Environmental Risk Analyses in Support of EIS and Permitting Activities. This research is to develop and validate a scientifically reliable risk analysis procedure for complex mixtures, to provide an evaluation of the potentially adverse effects of high priority synthetic fuel processes, and to assess the needs and benefits of pollution control.

Objective 10. Characterize and Evaluate Synfuels Discharges and Control Technologies. Research under this objective will characterize and quantify the emissions and effluents from a variety of coal-based and oil shale synthetic fuel processes; and identify and evaluate a variety of pollution control technologies for these same processes. The program provides engineering assessments of the cost, performance, and reliability of alternative control technologies for synthetic fuel processes.

Objective 11. Evaluate Impacts of Energy Development in Cold Climates. This work will provide information to better define the impacts of coal, oil and gas development and atmospheric pollution on arctic and sub-arctic ecosystems and propose mitigative measures. The program focuses on the State of Alaska where natural resource development, and expanding population, and the extreme climate pose unique environmental and health problems.

ACID RAIN

1985 Program Request

The Agency requests a total of $34,365,000 supported by 19.7 total workyears for this program, of which $952,500 is for Salaries and Expenses and $33,412,500 is for Research and Development. This reflects an increase over the enacted level of $362,000 and $18,628,200, respectively. This substantial increase, of 124 percent over the 1984 enacted level, will support several research initiatives including: 1) development of a comprehensive field study to better define the acidic deposition transport and transformation phenomenon; 2) establishment of monitoring stations to quantify air concentration levels for acid deposition precursors; 3) enhancement of the National Trends Network; 4) establishment and testing of a long-term monitoring system designed to provide advance warning of the acidification of aquatic and terrestrial ecosystems; 5) completion of a national survey of lake chemistry to develop baseline information on the current status of lake chemistry and, initiation of a similar survey for streams; 6) initiation of a survey of forest damage; and, 7) initiation of an acid fog study to determine the chemical and physical phenomenon of acid formation.

Estimate Emissions from Man-made Sources. Research projects will pursue the following questions: 1) What are the quantities and locations of sources of acid deposition precursors 2) How will sources respond to different government policy options? 3) What might be the levels of future emissions from major sources?

Detailed emissions inventories concentrating on SO_x and NO_x but expanding into volatile organic compounds (VOC's) will be compiled for use in advanced regional models. Use of the Advanced Utility Simulation Model (AUSM) for a range of policy options will begin. Industrial combustion emissions and industrial process emissions will be developed to project SO_x and NO_x in 10 and 20 year scenarios. This work will accelerate delivery of a complete emission inventory using a 1984 data base.

Understand Atmospheric Processes. Research in this area responds to such questions as: "What sources are most responsible for deposition in areas sensitive to acidification? and "Under what circumstances and in what proportions do local and remote sources contribute to acid deposition?" To help answer these questions, research will be designed to improve our capability to examine and predict the transport of pollutants. The data from the Cross Appalachian Tracer Experiment will be completed and new instruments for measuring inter-layer atmospheric transport in clouds will be field tested.

In 1985, we will plan an atmospheric field study using chemical tracers in emissions, recently developed gas measuring instruments, and extensive conventional monitoring in order to study empirically the movement and transformation of acids and precursors from sources to receptors. To further understand what substances in the atmosphere determine the rate of formation of acid substances, laboratory and field studies to investigate the complex chemical changes and physical scavenging that occur in the atmosphere, particularly in clouds, will be conducted. Modules to characterize the chemistry and wet scavenging will be developed for the advanced acid deposition regional model. New work in cloud chemistry, fog acidity and ambient measurements will begin. Work on a meso-scale model to determine urban influences on acid deposition will begin.

Establish Deposition Monitoring Data Base. In performing these monitoring activities EPA will respond to such questions as: (1) How much acid and other substances are being deposited in various regions of North America? (2) Is the acid rain problem getting better or worse? (3) What are the spatial and temporal variations in deposition? and (4) What is the relative importance of wet and dry deposition?

In 1985, our efforts to establish measurement techniques for dry deposition will be increased significantly. EPA will continue to provide quality assurance and to serve as a repository for the data from deposition monitoring networks in the United States. Efforts will continue to develop more reliable, accurate and precise methods for measuring the chemical composition of acid precipitation via a full deployment of the national trends network.

Understand and Quantify Aquatic Effects. The aquatic effects program responds to such questions as: (1) At what time (e.g., 5 years, 20 years, 25 years, etc.) if ever, will irreversible damage occur in aquatic ecosystems? (2) What specifically causes damage? (3) What are the magnitude and extent of the effects of acid deposition occurring today and in the future? and (4) To what extent does acid dep-deposition versus other types of acidification effect aquatic ecosystems?

In 1985, we will experimentally acidify a lake to study changes. Intensive ecological monitoring to give advance warning of the onset of acidification effects will begin. The second and third phases of the National Lake Survey to monitor aquatic chemistry and biota for selected water bodies will begin.

Understand and Quantify Terrestrial Effects. This program will seek to answer questions similar to those of the aquatic effects program. To help understand the magnitude and extent of acid deposition effects occurring today and in the future, a wide variety of field and laboratory studies attempting to estimate and predict the effects of acid precipitation on forests, rangelands, wetlands, wildlife and crops will be conducted.

In 1985, the effects of soil infiltration, soil chemistry, weathering, metal transport, exchange and depletion of nutrients and soil sensitivity will be addressed. Similarly, further research is needed to understand the factors which cause damages. Intensive ecological monitoring of terrestrial sites will have observation protocols designed to detect subtle changes in tree girth, seedling survival and other factors. This work will commence a national survey to detect subtle changes that would give advance warning of acidification effects.

Understand and Quantify the Effects on Materials and Cultural Resources. To respond to such questions as: "At what time, if ever, will irreversible damages occur to materials?" and "What specifically causes damages?" The effects of acid deposition on construction materials such as metals, masonry and some stone types will be studied in both field and laboratory observation programs. By developing an assay of materials at risk, the research program will have a better understanding of the magnitude and extent of acid deposition effects occurring today and in the future. In 1985, new work on damages to concrete and coatings will begin.

Integrate Research Assessment and Provide Information for Policy Analysis. This program responds to questions that cut across several research objectives and relate to the decision-making needs of policy makers. In 1985, the following projects will be supported: (1) development of advanced methods for performing the integrated assessment function; (2) assessment of possible NO_x control strategies relative to possible SO_2 control strategies; (3) operation of an assessment data system to include sources, effects and economic estimates; (4) an analysis of the effectiveness and costs of controlling damage at the receptor sites versus control of emissions at source sites; and, (5) application of integrated assessment methods for optimal mitigation solutions which combine a selection of strategies and technologies. We will complete the 1985 assessment of the physical damages related to acid deposition.

1984 Supplemental Request

The Agency requests a total of $5,500,000 for this program, all of which is for extramural purposes under the Research and Development appropriation.

The requested resources are for a National Lake Survey (1) to gain synoptic data on a statistically balanced group of U.S. water bodies (2) to begin a three phase survey that will sample a fraction of all lakes in the country. Data currently available focuses on problem water bodies that scientists have selectively chosen to study. There is no broad baseline of data from which to predict potential change in lake chemistry. These funds will survey approximately 3000 lakes throughout the country and include continuing study of some (100-500) lakes on a periodic basis. The workplan of the National Lake Survey contemplates a preliminary report of findings in March of 1985.

1984 Program

In 1984, the Agency is allocating a total of $15,374,800 and 13.0 total workyears to this program, of which $590,500 is under the Salaries and Expenses appropriation and $14,784,300 is for extramural purposes under the Research and Development appropriation.

Estimate Emissions from Man-Made Sources. Inventories of the man-made emissions of acid rain precursors such as SO_x and NO_x and oxidant precursors such as hydrocarbons are being analyzed and improved by EPA. In addition, models are in use in trial simulations for electric utilities. Other important industrial sectors will provide comprehensive costs and emission changes for alternative control strategies.

Understand Atmospheric Processes. Our capability to examine and predict the movement of air masses and pollutants through the use of tracer experiments and computer modeling will increase. Laboratory and field studies are being conducted to investigate the complex chemical and physical changes that occur in the atmosphere and the role of oxidants in acid formation. An Advanced Acid Deposition Eulerian model framework is being formulated to serve as the main integrating mechanism for the atmospheric processes program.

Establish Deposition Monitoring Data Base. Monitoring networks are being expanded, standardized and integrated into a well designed National Trends Network. EPA has the role of providing quality assurance and serving as a respository of data from which long-term trends will be documented and studied. EPA will test several methods to measure dry deposition accurately. We will evaluate and deploy new techniques at a limited number of National Trends Network stations so that the amount and composition of dry deposition can be estimated reliably.

Understand and Quantify Aquatic Effects. Research is being conducted on lakes, streams and wetlands to determine the factors controlling acidification. The impacts on foodchains and organisms ranging from fish to microscopic plants are being investigated. Surveys are being made of water resources, soils, geology and other factors to improve our knowledge of what areas and resources may be vulnerable to damage. The number of lakes, streams, and groundwaters that are susceptible to acidification is being documented and the problems and techniques associated with mitigating the effects are being investigated. Interim protocols for liming and mitigation steps are being written.

Understand and Quantify Terrestrial Effects. The potential impacts of acid deposition on forests, rangelands, wetlands, wildlife, crops and soils are being studied. Emphasis is being placed on developing methods to estimate the historical growth patterns in forests and to identify the significant parameters (e.g., precipitation, pH, plant age, climate) affecting growth.

Understand and Quantify the Effects on Materials and Cultural Resources. The effects of acid deposition on materials such as building stone, metals, and paints are being examined. Techniques to differentiate the effects of various pollutants are being developed, and the cost of damage to man-made structures and cultural resources is being estimated.

Integrate Research Assessments and Provide Information for Policy Analysis. An in-depth Critical Assessment Document of existing scientific information is being completed, and annual reports prepared by the Interagency Task Force on Acid Precipitation, will be used to continually update the scientific base. Analyses are being made of the effectiveness, costs and feasibility of controlling emissions of acidic components, precursors and oxidants. New technology and diverse strategies to control emissions are being examined and optimal solutions combining various technologies and strategies are being explored. EPA is developing an improved methodology for integrated assessment of the acid deposition phenomenon. This will allow cost/benefit comparisons of alternative mitigation measures.

1984 Explanation of Changes from the Amendment

The net decrease of -$11,700 results from the following action:

-Reprogramming. (-$11,700) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$11,700 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $13,070,700 and 15.3 total workyears for this program, of which $820,400 was under the Salaries and Expenses appropriation and $12,250,300 was for extramural purposes under the Research and Development appropriation.

Estimate Emissions from Man-Made Sources. Accomplishments under this objective included testing an Advanced Utilities Simulation Model, using an operational state level version of the model. The Agency completed an emissions inventory as well as an inventory of emissions from utilities.

Understand Atmospheric Processes. The plan for an advanced regional acid deposition model was completed and work begun on computer coding. The Cross Appalachian Tracer Experiment was run with successful releases and measurements of inert gases in the U.S. and Canada.

Establish Deposition Monitoring Data Bases. Efforts were concentrated in three areas: (1) determining the accuracy and precision of procedures at existing deposition monitoring sites; (2) expanding the number of stations in the National Trends Network; and (3) evaluating techniques for estimating dry deposition.

Understand and Quantify Aquatic Effects. Efforts in 1983 concentrated on the development of historical data as well as the production of a first approximation of an alkalinity map of surface waters. Efforts to develop an understanding of the effects of acid deposition on aquatic biota were continued and data from calibrated watersheds was analyzed.

Understand and Quantify Terrestrial Effects. Studies were initiated to inventory forest stands and species while selecting sites for a multi-year monitoring program aimed at estimating the long-term effects of acid deposition on natural terrestrial ecosystems. In addition, studies were initiated to determine which stage in the forest life cycle was most sensitive. Agricultural studies included harvesting the first series of crops at a prototype site and further examining the problems associated with extrapolation of laboratory and greenhouse data to field situations.

Understand and Quantify Effects on Materials and Cultural Resources. Agency efforts focused on field studies of materials deterioration conducted with the Bureau of Mines, and on developing the technology of static monitors for measuring gaseous deposition. A materials inventory was initiated to estimate the past air pollution levels at selected materials exposure sites.

Integrate Research Assessments and Provide Information for Policy Analysis. Models for estimating the relative significance of anthropogenic versus man-made emissions were evaluated. Cost/benefit aspects of control techniques were evaluated. In addition, drafts of the Critical Assessment Review Papers were completed and distributed for public review and technical evaluation. An Acid Deposition Assessment staff was organized to develop and implement research assessment methods and techniques.

HEALTH EFFECTS

1985 Program Request

The Agency requests a total of $2,203,900 supported by 8.0 total workyears for this program, of which $549,200 is for Salaries and Expenses and $1,654,700 is for Research and Development. This reflects a decrease of $95,000 in Salaries and Expenses and $50,000 in Research and Development. The net reduction reflects the completion of a data base on aquatic toxicity of synfuel related pollutants.

Develop Health and Environmental Risk Analyses in Support of EIS and Permitting Activities. The integrated health and environmental risk analysis program for synfuel industries provides a framework through which scientifically documented risk data can be utilized in making regulatory and enforcement decisions and for determining the degree to which pollution abatement processes and devices are required. Risk analysis methodologies for evaluating population level impacts of synfuel pollutants on health and the environment are developed and upgraded through the integration of exposure and effects assessments.

During 1985, research will focus on gathering new data and reducing uncertainties associated with the health and environmental effects of critical classes of synfuel pollutants. This includes refining risk analysis methodologies. Specific areas to be addressed are: 1) the refinement and application of models for evaluating exposure pathways in atmospheric, terrestrial and aquatic media; 2) the evaluation of synfuel pollutant uptake by key organisms in the human food chain; and 3) the evaluation of human exposure and effects data on synfuel pollutants to develop dose/response functions for cancer and reproductive risk analyses.

1984 Program

In 1984, the Agency is allocating a total of $2,348,900 and 8.0 total workyears to this program, of which $644,200 is under the Salaries and Expenses appropriation and $1,704,700 is for extramural purposes under the Research and Development appropriation.

Develop Health and Environmental Risk Analyses. The initial risk analyses have been peer reviewed, and revised. Chemical compounds associated with synfuel technologies have been categorized and grouped into 38 categories of chemical classes called Risk Analysis Categories (RACs). Data are being generated and evaluated in an effort to estimate the total exposure of humans and other organisms to specific synfuel related RACs through atmospheric, aquatic and foodchain routes. Toxicological data on health and environmental effects are also being assessed in an effort to demonstrate cause and effect relationships. The program is also applying previously developed risk assessment methodologies to various pollutant control technology processes and options to evaluate their relative efficacy and merit.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,078,700 and 8.8 total workyears for this program, of which $493,900 was under the Salaries and Expenses appropriation and $1,584,800 was for extramural purposes under the Research and Development appropriation.

Develop Health and Environmental Risk Analyses in Support of EIS and Permitting Activities. Chemical components or elements associated with synfuel technologies were recategorized and grouped into 38 Risk Assessment Categories (RAC's). Results of risk analysis, (conducted for a representative process for indirect liquefaction of coal, direct liquefaction of coal, and oil shale), identified data gaps and areas of weaknesses in risk methodologies. These findings are being used to prioritize research and data collection.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

In 1985, the Agency requests a total of $11,934,600 supported by 44.9 total workyears for this program, of which $2,681,800 is for Salaries and Expenses and $9,252,800 is for Research and Development. This reflects a decrease of $59,000 and $332,500 respectively. This reduction reflects the de-emphasis of synfuels research based on the slower commercialization of this industry.

Develop, Evaluate and Demonstrate Limestone Injection Multi-Stage Burner (LIMB) Control Technology. Existing pulverized coal-fired utility and large industrial boilers are the major source of SO_x and NO_x emissions. State-of-the-art control technology for SO_x is expensive and difficult to retrofit for existing boilers. Thus, the LIMB technology will be demonstrated in an attempt to acheive: (1) substantial reductions in SO_x and NO_x emissions at about 20-30 percent the capital cost of conventional flue-gas desulfurization systems; (2) 50-60 percent SO_x reduction from uncontrolled sources, and NO_x-emission levels of 0.3 lb/million Btu for retrofitting existing boilers; and (3) 70-90 percent SO_x reduction from uncontrolled sources, and NO_x-emission levels approaching 0.2 lb/million Btu for new boiler applications.

Systematic development and demonstration are necessary to bring the LIMB technology to the point where industry is willing to commercially accept it. To accomplish this, the 1985 program will continue the enhanced, accelerated R&D effort initiated in 1984 to develop information on the fundamentals of sorbent-reaction chemistry. This is especially important if SO_x/NO_x-removal performance is to be accurately predicted, and the design for the EPA/industry co-funded LIMB demonstration is to prove successful.

Developmental efforts for wall-fired and tangential boiler LIMB designs will continue at the bench and pilot scale for a wide range of U.S. coals. Emphasis will be placed on scale-up testing and process analysis to predict removal performances and to solve potential operability and reliability problems. Involvement with at least one full-scale foreign field-evaluation will be initiated to complement the existing LIMB technical data base for inclusion in a supplement to the LIMB generic engineering design-analysis manual.

For the full-scale wall-fired demonstration program: funding will be completed, the industrial partner will be selected, site studies will be finished and site preparation will be initiated. The objective is to fix the demonstration design by 1985.

Characterize and Evaluate Synfuel Discharges and Control Technologies. By the end of 1985, the Synthetic Fuels Corporation (SFC) will have committed nearly $15 billion in financial assistance agreements. With the planned start up and operation of several synthetic fuel plants, the Agency will continue to provide SFC, their applicants, EPA Regions and States engineering support. Consultation with the Agency on environmental monitoring by the SFC and their applicants is required by the 1980 Energy Security Act (P.L. 94-294, Section 131(e)). As SFC sponsored plants initiate operations, emphasis will be on data reporting, data management and data interpretation from active monitoring plans. Data evaluation will provide the basis for measuring the environmental impacts of the plants

and determining the adequacy of controls for environmentally sound replication of future plants.

Field testing will be conducted at synfuel facilities utilizing the Agency's mobile air and waste water pollution control systems. Multimedia control technology reports will be initiated on evaluation of controls for oil shale facilities.

1984 Program

In 1984, the Agency is allocating a total of $12,326,100 and 44.9 total workyears to this program, of which $2,740,800 is under the Salaries and Expenses appropriation and $9,585,300 is for extramural purposes under the Research and Development appropriation.

Develop, Evaluate and Demonstrate LIMB Control Technology. Fundamental studies will continue to develop and improve the basic understanding of the chemical kinetics of sorbent and coal reactions during the combustion process. Refinement and expansion of this information through additional research will be continued.

Efforts continue on research to determine and circumvent problems associated with flyash/sorbent interactions which have been shown to decrease sorbent utilization for certain bituminous coals. Also, evaluation of superactive sorbents will be continued; they offer promise of higher SO_2 removal efficiencies than is achievable with conventional sorbents.

The evaluation of hardware and the assessment of process variables to identify specific prototype testing necessary for establishing scaleup parameters and operational side effects will be continued. Pilot-scale evaluation of improved sorbent-injection techniques to guide prototype work for enhancing the performance of LIMB in difficult retrofit cases also continues. Developing an innovative system capable of 90+ percent SO_x/NO_x removal (and to extend LIMB technology to oil-fired and industrial-size coal boilers) is planned.

ORD will continue to conduct prototype burner-testing in experimental facilities to provide the basis for transferring commercial scale development information into design criteria for practical hardware. ORD will initiate the full-scale field evaluation of the Steinmuller 700MW boiler (with lime injection) at the Weiher III power plant in Saarbrucken, West Germany. Completion of a formal agreement for cooperation with the Electric Power Research Institute (EPRI) is anticipated.

Research continues on the development of a manual of design and engineering criteria for applying LIMB technology to existing wall and tangentially fired field-utility boilers and for developing effective new boilers/burners for integrated SO_x/NO_x clean-up. Emphasis is on the identification and analysis of potential problem areas. In addition, research continues to pursue the contractual and engineering-selection mechanisms that are associated with the initiation of the co-funded EPA/industry demonstration program.

Characterize and Evaluate Synfuel Discharges and Control Technologies. In 1984, the SFC plans to commit $10.3 billion in financial assistance for various coal, oil shale and other synfuel facilities. As the SFC continues to make decisions on their applicants' synfuel plant proposals, there will be additional need for Regional and State engineering support. Reviews of SFC required monitoring plans are expected to triple compared to 1983. Options for SFC monitoring data management/reporting will be prepared as a supplement to the EPA Monitoring Reference Manual. In addition, Agency participation will be initiated in SFC required Monitoring Review Committees.

Studies will be completed on synfuel combustion and cooling tower emissions. Research continues on identifying hazardous fugitive emissions and analysis of sulfur control processes. Research will be completed on raw and spent oil shale leaching characteristics.

1984 Explanation of Changes from the Amendment

The net decrease of -$147,200 results from the following actions:

-Reprogrammings. (-$147,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$147,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $10,986,500 and 58.8 total workyears to this program, of which $3,406,400 was under the Salaries and Expenses appropriation and $7,580,100 was for extramural purposes under the Research and Development appropriation.

Develop, Evaluate and Demonstrate LIMB Control Technology. In the fundamental research program, studies of rich-phase sulfation and limestone-calcination kinetics were completed. A process for producing a usable superactive sorbent was discovered. A previously unknown sorbent-deactivation mechanism associated with sorbent-flyash interactions in the furnace flame zone was also discovered. Based on the fundamental research program and pilot-scale experimentation, preliminary mathematical models for LIMB process simulation were developed. A commercially available prototype low-NO_x burner for LIMB was tested; evaluation of the results is currently underway. Tentative arrangements were initiated for a formal liaison with EPRI to cooperate in all aspects of LIMB research, development and demonstration activities.

Characterize and Evaluate Synfuel Discharges and Control Technologies. Regional and State engineering support included review of twenty-four draft SFC monitoring outlines, Toxic Substances Control Act Premanufacture Notifications, EPA and state permit applications, and Environmental Impact Statements. Pollution Control Technical Manuals were published on key synfuel processes and environmental control technologies. The Environmental Monitoring Reference Manual for Synthetic Fuel Facilities was published.

Several field characterization studies on synfuel plants were completed. A synfuel/petroleum combustion emission testing protocol for boilers was developed. Physical solvent testing for an acid gas removal system on a variety of coal types was completed at the Agency's coal gasification facility at North Carolina State University. A report was completed on the characterization of spent shale from the Geokinetics In-Situ oil shale retort.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests no resources for this program in 1985.

1984 Program

In 1984, the Agency is allocating $400,000, all for extramural purposes under the Research and Development appropriation.

Evaluate Impacts of Energy Development in Cold Climates. The cold climate program focuses on resource development issues which include the impacts of oil and gas development, the environmental effects of placer mining, and the evaluation of asbestos contamination of drinking waters. A review of toxicology and fate data of hydrocarbons in oil polluted waters will be used to identify the transformation and accumulation of hydrocarbons in marine waters in order to assess the adequacy of current processing procedures for oil contaminated waste waters and the consequences of increases in petroleum discharges. Research on tundra wetlands is also being conducted to characterize sensitive and biologically important organisms which are increasingly being influenced by oil and gas development. Results from this evaluation will be used to provide guidance on permissible levels of disturbances associated with oil and gas exploration and extraction.

The use of placer mining in the extraction of gold is increasing in Alaska. This procedure, which involves the dredging and washing of materials associated with aquatic ecosystems, causes an increase in suspended particles in the water column which may adversely effect aquatic biota. To evaluate the magnitude of this problem, field studies are being initiated to determine the effects of increased turbidity from placer mining operations. Results of the studies will be used by the State of Alaska and Region X in permitting actions.

The association of asbestos contamination of drinking waters in certain Alaskan communities with liver cancer will be explored through the sampling of water supplies. Data will be provided to the State of Alaska so that the State can begin more detailed health effects studies if necessary, and also alert individuals living along the areas of contamination.

1984 Explanation of Changes from the Amendment

The net increase of +$119,000 results from the following action:

-Reprogramming. (+$119,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$119,000 to the Research and Development appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $581,000 for this program, all of which was for extramural purposes under the Research and Development appropriation.

Evaluate Impacts of Energy Development in Cold Climates. Research, which has focused on carbon monoxide (CO) emissions from mobile sources in non-attainment areas of Alaska, has been completed. This research, conducted with the State of Alaska and EPA's Region X, has included the evaluation of vehicle inspection facilities, and automotive maintenance and retrofitting procedures for use in controlling CO pollution. The 1983 program also involved the completion of an assessment of environmental research priorities which covers research topics involving air, water, and solid waste pollution associated with cold climate regions.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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MANAGEMENT AND SUPPORT

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Salaries & Expenses	$231,225.3	$232,022.7	$242,900.9	$248,218.1		$277,285.4	$29,067.3
Operations, Research and Facilities	$125.3						
TOTAL, Management & Support	$231,350.6	$232,022.7	$242,900.9	$248,218.1		$277,285.4	$29,067.3
PERMANENT WORKYEARS	2,188.6	2,116.7	2,266.4	2,263.9		2,377.0	113.1
TOTAL WORKYEARS	2,685.9	2,627.4	2,794.9	2,788.9		2,819.9	31.0
OUTLAYS	$219,546.0	$225,901.0	$257,664.0	$258,466.0		$275,348.7	$16,882.7
AUTHORIZATION LEVELS	By virtue of Appropriation Act as authorized by Public Law 96-510.						

MANAGEMENT AND SUPPORT

OVERVIEW AND STRATEGY

Management and Support contains the staff and management activities to provide executive direction to all Agency programs as well as those Agencywide administrative and support services which cannot be assigned to a specific programmatic activity.

We will continue our efforts to implement Reform 88 and reduce duplicative functions, provide consistent Agency legal activities, promote technically and economically defensible regulatory and policy alternatives, ensure strong and coherent internal management control and fiscal integrity, enhance the defining of results-oriented environmental goals, and pursue the measure of Agency performance according to environmental results.

The major components of this medium are Program Management, Agency Management, Regional Management, and Support Costs.

Program Management includes policy development, program development and oversight, and the associated management activities for the Agency's environmental program offices. These include the Offices of Air and Radiation; Water; Enforcement and Compliance Monitoring; External Affairs; Pesticides and Toxic Substances; General Counsel; Research and Development; and Solid Waste and Emergency Response.

Agency Management includes Agencywide management functions and policy activities.

Policy Direction, through the Executive offices, in headquarters consists of the Administrator and Deputy Administrator, their immediate staffs, as well as the Offices of Regional Operations, Management Services, the Executive Secretariate, Regulatory Information, International Activities, Civil Rights, the Science Advisory Board, the Administrative Law Judges, and Small and Disadvantaged Business Utilization.

Policy, Planning and Evaluation is organized into four components: the Integrated Environmental Management Program (formerly named the Program Integration Project), Policy Analysis, Standards and Regulations, and Management Systems and Evaluation.

Legal services for litigation in which the Agency is a defendant are provided to Agency programs by the General Counsel in headquarters and by a Regional Counsel in each Regional office. The Office of General Counsel (OGC) provides legal services and advice to the Administrator and Agency managers. OGC, in cooperation with the Department of Justice, represents the Agency in all legal matters in which the Agency is a defendant. Additionally, OGC reviews proposed actions, decisions, and regulations to assure that they are legally defensible.

External Affairs activities are consolidated into five offices: Legislative Analysis, Congressional Liaison, Public Affairs, Intergovernmental Affairs and Federal Activities.

Inspector General activities include investigation and audit of Agency activities to promote economy, efficiency, and effectiveness and to prevent and detect fraud, waste, and abuse.

The Office of Administration and Resources Management (OARM) provides management activities in headquarters as well as administrative services to all program operations located in Cincinnati and Research Triangle Park, N.C. The OARM has several components: Financial Management, Comptroller, Personnel and Organization, Contracts and Grants, Facilities and Management Services, as well as Information Systems and Services.

Regional Management includes the centralized management and administrative functions performed in each Regional office. Regional elements cover the Regional and Deputy Regional Administrators, their immediate staffs, and Regional staff for public affairs, congressional and intergovernmental relations, and civil rights. Other activities include budget development and execution, preparation of Regional operating plans, legal services, program planning, regulatory and policy analysis, economic analysis, program evaluation, financial and personnel management, information management, and administrative services.

Support Costs includes the costs of basic and general services for all Agency programs. In this diverse category are:

- Office and building services, such as library services, commercial telephone use, electronic mail, utilities, guards, and custodial and maintenance services for programs located at headquarters, Research Triangle Park, and Cincinnati;

- Nationwide costs, such as facility rental costs, ADP technical support, centralized data processing, professional training, U.S. Postal Service charges, Federal Telecommunications System, unemployment and workman's compensation, and security clearances for all Agency programs in all locations;

- Office and building services for laboratories and field stations operated by the Offices of Air, Noise, and Radiation; Research and Development; and Pesticides and Toxic Substances; and

- Common services in Regional offices, such as supplies and equipment, commercial telephones, printing, facilities operations and maintenance, library services, and mini-computer operations.

Program Priorities

Priorities for the Executive Office in 1985 will continue to include improved relations with States and local governments to facilitate program delegation as well as other integrated approaches to environmental regulation; greater scientific credibility in regulatory decision-making through the increased emphasis on reviews by the Science Advisory Board, and improved coordination among major outreach staff offices to ensure that EPA's external activities reflect the interests and policies of the Administrator.

Policy, Planning and Evaluation will target resources to three major areas: managing for environmental results; developing and demonstrating integrated environmental management strategies; and developing improved methods to ascertain economic benefits of EPA's regulations. The common purpose of these efforts is the development of regulatory approaches that achieve environmental and health benefits in an efficient and cost-effective manner.

The Office of General Counsel will continue to direct efforts to assure consistent legal decisions and positions throughout the Agency.

The activities of the newly organized Office of External Affairs will focus on improving the public perception of EPA; increasing Agency effectiveness by improving congressional liaison; establishing outreach programs, public interest groups and citizen participation; reaffirming and strengthening Federal Agencies contacts; and providing a cross-media perspective in review of environmental problems.

The Inspector General will move toward building a more complete, balanced and comprehensive program where it can fulfill the mandate of the Inspector General Act of 1978. The IG will continue to direct resources to recover questioned costs in the wastewater treatment construction grant program. It will continue to conduct investigations of fraud against the government, perform audits of EPA con-

tracts and grants, support Agency suspension and debarment activities, and develop a proactive fraud prevention program. The IG will direct additional resources to antitrust activities and internal and management audits of Agency operations to identify weaknesses in EPA programs which provide the opportunity for fraud, waste, and abuse to occur.

Overall priorities for the Office of Administration and Resources Management for fiscal year 1985 are improving fiscal integrity at headquarters and in the Regions by strengthening our finance, grants, and contracts operations; improving our automated services in conjunction with the need to operate a new in-house payroll operation; and integration of major administrative systems.

In the Regional management areas, resources provide services consistent with Regional program workforce levels. With our continuing commitment to strengthen Regional environmental programs, we have maintained strong Regional planning, resources planning and analysis, and management efforts.

Several programs will be emphasized in the Support area. The National Computer Center will complete the modernization of EPA's mainframe computers, telecommunications network, and interactive software required to make central data bases accessible and useful to national, Regional, and State program managers. The Agency believes that with centralized budgeting and management we will improve our service capacity and modernize our computer facilities more efficiently. In Support, we expect local telecommunications and utilities costs to grow considerably. The Support program will also provide the additional space requirements accompanying the growing Agency.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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PROGRAM MANAGEMENT

Program Management

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Program Management - Air & Radiation								
Salaries & Expenses		$2,226.4	$2,163.0	$2,163.0	$2,139.5		$2,245.1	$105.6
	TOTAL	$2,226.4	$2,163.0	$2,163.0	$2,139.5		$2,245.1	$105.6
Program Management - Water								
Salaries & Expenses		$2,573.6	$2,411.4	$2,411.4	$2,389.9		$2,798.5	$408.6
	TOTAL	$2,573.6	$2,411.4	$2,411.4	$2,389.9		$2,798.5	$408.6
Program Management - Enforcement & Compliance Monitoring								
Salaries & Expenses		$298.8	$784.2	$381.8	$365.9		$382.8	$16.9
	TOTAL	$298.8	$784.2	$381.8	$365.9		$382.8	$16.9
Program Management - External Affairs								
Salaries & Expenses		$470.8		$994.3	$553.7		$539.5	-$14.2
	TOTAL	$470.8		$994.3	$553.7		$539.5	-$14.2
Program Management - Pesticides & Toxic Substances								
Salaries & Expenses		$2,168.1	$2,464.8	$2,464.8	$2,442.5		$2,557.3	$114.8
	TOTAL	$2,168.1	$2,464.8	$2,464.8	$2,442.5		$2,557.3	$114.8
Program Management - General Counsel								
Salaries & Expenses		$310.8		$402.4	$418.3		$446.5	$28.2
	TOTAL	$310.8		$402.4	$418.3		$446.5	$28.2

PROGRAM MANAGEMENT

Program Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Program Management - Research & Development								
Salaries & Expenses		$3,866.0	$3,949.3	$3,849.3	$3,830.3		$3,733.2	-$97.1
	TOTAL	$3,866.0	$3,949.3	$3,849.3	$3,830.3		$3,733.2	-$97.1
Program Management - Solid Waste & Emergency Response								
Salaries & Expenses		$1,024.4	$1,352.5	$1,517.9	$1,497.2		$1,676.4	$179.2
	TOTAL	$1,024.4	$1,352.5	$1,517.9	$1,497.2		$1,676.4	$179.2
TOTAL:								
Salaries & Expenses		$12,938.9	$13,125.2	$14,184.9	$13,637.3		$14,379.3	$742.0
Program Management	TOTAL	$12,938.9	$13,125.2	$14,184.9	$13,637.3		$14,379.3	$742.0
PERMANENT WORKYEARS								
Program Management - Air & Radiation		35.5	37.2	37.2	36.2		44.3	8.1
Program Management - Water		40.4	39.6	39.6	38.6		43.3	4.7
Program Management - Enforcement & Compliance Monitoring		5.3	15.0	7.2	6.8		9.0	2.2
Program Management - External Affairs		9.4		24.0	11.0		11.0	

PROGRAM MANAGEMENT

Program Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Program Management - Pesticides & Toxic Substances	40.4	40.0	40.0	39.0		44.0	5.0
Program Management - General Counsel	5.6		7.8	8.2		8.2	
Program Management - Research & Development	48.8	47.2	45.2	44.2		41.2	-3.0
Program Management - Solid Waste & Emergency Response	15.6	21.6	26.1	28.1		28.8	.7
TOTAL PERMANENT WORKYEARS	201.0	200.6	227.1	212.1		229.8	17.7
TOTAL WORKYEARS							
Program Management - Air & Radiation	41.9	47.8	47.8	46.8		46.8	
Program Management - Water	46.4	48.6	48.6	47.6		47.6	
Program Management - Enforcement & Compliance Monitoring	7.3	19.5	9.4	9.0		9.0	

PROGRAM MANAGEMENT

Program Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Program Management - External Affairs	12.1		27.0	13.2		13.2	
Program Management - Pesticides & Toxic Substances	45.3	56.3	56.3	54.3		55.3	1.0
Program Management - General Counsel	7.7		10.1	10.5		10.5	
Program Management - Research & Development	61.5	63.8	61.7	60.7		57.7	-3.0
Program Management - Solid Waste & Emergency Response	23.8	27.0	32.0	32.0		32.0	
TOTAL WORKYEARS	246.0	263.0	292.9	274.1		272.1	-2.0

Program Management

Budget Request

The Agency requests a total of $14,379,300 supported by 272.1 total workyears for this subactivity, all of which will be for the Salaries and Expenses appropriation, an increase of $742,000 and a decrease of 2.0 workyears.

Program Description

The Program Management component provides resources generally for Assistant Administrators, Office Directors and their immediate staffs for eight of EPA's major offices: Air and Radiation; Water; Enforcement and Compliance Monitoring; External Affairs; Pesticides and Toxics; General Counsel; Research and Development; and Solid Waste and Emergency Response. Resources provide for formulation of overall management and programmatic policy, and centralized planning and budgeting. Activities also include the coordination and integration of programs throughout the Agency as well as performing liaison activities with Congress, OMB and other Federal Agencies and States.

PROGRAM MANAGEMENT - AIR AND RADIATION

1985 Program Request

The Agency requests a total of $2,245,100 supported by 46.8 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $105,600 from 1984 to fund increased personnel and support costs and no change in workyears. Major program emphases will continue to be implementation of the Clean Air Act Amendments of 1977, the Atomic Energy Act, the Uranium Mill Tailings Radiation Control Act, and development of major decisions related to these acts. In 1985, key activities include: effective and efficient general management, strategic planning, and administrative and budget support.

1984 Program

In 1984, the Agency is allocating $2,139,500 and 46.8 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This program is providing management support for the Clean Air Act, Atomic Energy Act, and Uranium Mill Tailings Control Act. Key activities include: executive management direction, program planning and analysis, resource management, and budget development. Administrative support to OAR programs is also being provided.

1984 Explanation of Changes from the Amendment

The net decrease of -$23,500 results from the following action:

-Reprogramming. (-$23,500) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$23,500 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $2,226,400 for this program, all of which was for the Salaries and Expenses appropriation, and 41.9 total workyears. The program provided executive management, strategic planning and analysis, and budget and administrative support to OAR programs.

PROGRAM MANAGEMENT - WATER

1985 Program Request

The Agency requests $2,798,500 for the Salaries and Expenses appropriation supported by 47.6 total workyears, which is an increase of $408,600 and no change in workyears. The increase provides for additional personnel and support costs as well as $100,000 for program analysis and evaluation studies to improve overall management of the water quality and drinking water programs. The 1985 request supports national management; supervision of the Office of Water organizations; management of the Office of Water operating guidance and accountability system; development of program plans and budget for implementation of Agency policies and programs; tracking of budget execution; administrative management; analysis of policy issues; and monitoring of program performance from both a scientific and programmatic perspective.

1984 Program

In 1984, the Agency is allocating $2,389,900, all of which is for the Salaries and Expenses appropriation and 47.6 total workyears. The Agency continues to focus on the reauthorization process for the Clean Water Act and the accompanying process of strategies development to implement amendments.

1984 Explanation of Changes from the Amendment

The net decrease of -$21,500 results from the following action:

-Reprogramming. (-$21,500) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$21,500 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $2,573,600 and 46.4 total workyears, all of which was for Salaries and Expenses. These resources provided for executive management, policy planning and analysis, and budget and administrative support for programs within the Office of Water. Work also continued on the reauthorization of the Clean Water Act and Safe Drinking Water Act.

PROGRAM MANAGEMENT - ENFORCEMENT AND COMPLIANCE MONITORING

1985 Program Request

The Agency requests $382,800 supported by 9.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation and no change in workyears. This represents an increase of $16,900, due to additional personnel and support costs.

The request will provide the Office of Enforcement and Compliance Monitoring with executive management as well as program planning, management analysis, budgeting, financial management, personnel operations, and administrative support services. Consistent with the Agency's emphasis on establishing a coherent crossmedia approach to enforcement and compliance, the program will stress consolidation and integration to enable the Assistant Administrator to coordinate the Agency's legal enforcement functions and manage the legal enforcement resources of the Agency.

1984 Program

In 1984 the Agency is allocating a total of $365,900 and 9.0 total workyears to this program, all of which is for the Salaries and Expenses appropriation.

This program provides executive management as well as program planning, management analysis, budgeting, personnel operations, and fiscal and administrative management to the Office of Enforcement and Compliance Monitoring. Better fiscal and personnel management procedures are being instituted to manage resources more effectively in the Office of Enforcement and Compliance Monitoring.

1984 Explanation of Changes from the Amendment

The net decrease of -$15,900 results from the following action:

-Reprogramming. (-$15,900) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$15,900 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $298,800 and 7.3 total workyears for this program, all of which was for Salaries and Expenses. Reorganization of the Agency's enforcement efforts moved this program from the Office of Legal and Enforcement Counsel to the new Office of Enforcement and Compliance Monitoring.

Activities focused on providing executive management, planning, analytical support, budgeting, financial management, personnel operations, and administrative services to the Office of Enforcement and Compliance Monitoring.

PROGRAM MANAGEMENT - EXTERNAL AFFAIRS

1985 Program Request

The Agency requests a total of $539,500 supported by 13.2 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This represents a decrease of $14,200 and no change in workyears from 1984 levels. The decrease reflects lower personnel and support costs. In 1985, this office will require these resources to continue the full coordination of the staff offices within External Affairs; to provide the necessary oversight, management, planning, and support services to these staff offices; and to support the Administrator and Assistant Administrators in representing and communicating the Agency's programs and policies to the Congress, the public, other governmental entities, and the media.

1984 Program

In 1984, the Agency is allocating $553,700 and 13.2 total workyears to this office, all of which is for the Salaries and Expenses appropriation. Major emphasis will be placed on instituting strategies and procedures which enable the Agency to communicate better with outside groups involved with and affected by EPA decisions.

1984 Explanation of Changes from the Amendment

The net decrease of -$440,600 results from the following action:

-Reorganization. (-$440,600) A Congressionally approved reorganization to create the Office of External Affairs (OEA) transferred resources from the Immediate Office of External Affairs to the Office of Public Affairs to reflect the transfer of the Audiovisual Division to that organization.

1983 Accomplishments

In 1983, the Agency obligated a total of $470,800 and 12.1 total workyears, all of which was for the Salaries and Expenses appropriation for the components which were organized into the Program Management program element. These components provided the management, resource, and administrative support necessary to establish the newly created Office of External Affairs.

In late 1983, the Offices of Congressional Liaison (formerly the Congressional Liaison Division of the Office of Legislation), Legislative Analysis (formerly the Legislative Division of the Office of Legislation), Public Affairs, Intergovernmental Liaison, and Federal Activities were consolidated to create the Office of External Affairs to provide a better managed and coordinated approach to the Agency's external activities.

PROGRAM MANAGEMENT - PESTICIDES AND TOXIC SUBSTANCES

1985 Program Request

The Agency requests $2,557,300 supported by 55.3 total workyears for this program, all of which is for the Salaries and Expenses appropriation, representing increases of $114,800 and 1.0 workyear. The increases will be used for general administration and oversight. These resources will provide for senior level management of the pesticides and toxic substances program as well as for the Immediate Office of the Assistant Administrator for Pesticides and Toxic Substances. Key activities include: effective and efficient general management, strategic planning, and administrative and budget support.

1984 Program

In 1984, the Agency is allocating $2,442,500 and 54.3 permanent workyears for this program, all of which is for the Salaries and Expenses appropriation. This program is providing management support for the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act.

1984 Explanation of Changes from the Amendment

The net decrease of -$22,300 results from the following action:

-Reprogramming. (-$22,300) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$22,300 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $2,168,100 and 45.3 total workyears for this program, all of which was for the Salaries and Expenses appropriation. The program provided executive management, strategic planning and analysis, and budget support to the Office of Pesticides and Toxic Substances programs.

PROGRAM MANAGEMENT - GENERAL COUNSEL

1985 Program Request

The Agency requests a total of $446,500 supported by 10.5 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $28,200 due primarily to additional personnel and operating support and no change in workyears. The request will provide for executive management, planning, budgeting, financial management, management analysis, and administrative support services for the Office of General Counsel.

1984 Program

In 1984, the Agency is allocating a total of $418,300 and 10.5 total workyears to this program, all of which is for the Salaries and Expenses appropriation. The program provides for executive management, planning, budgeting, financial management, management analysis, and administrative support for the Office of General Counsel. A reorganization abolished the Office of Legal and Enforcement Counsel (OLEC). Program Management resources presented here were moved from OLEC to the Office of General Counsel.

1984 Explanation of Changes from the Amendment

The net increase of +$15,900 results from the following action:

-Reprogramming. (+$15,900) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$15,900 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $310,800 and 7.7 total workyears for this program, all of which was for the Salaries and Expenses appropriation. Activities focused on providing executive management, planning, analytical support, budgeting, financial management, and administrative services to the General Counsel component of the Office of Legal and Enforcement Counsel.

PROGRAM MANAGEMENT - RESEARCH AND DEVELOPMENT

1985 Program Request

The Agency requests a total of $3,733,200 supported by 57.7 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents a decrease of $97,100 and 3.0 workyears from 1984. The decreases are made possible due to management streamlining and improved efficiencies.

In 1985, ORD's Program Management activities will provide overall direction, central management services, scientific and technical policy guidance, and administrative support to the research programs conducted at Headquarters in 14 laboratories and in various field sites. These activities encompass: the coordination of the research program planning and budgeting cycles, including the development of research strategies and program plans; the monitoring of operating year resource utilization; the provision of on site coordination of research activities and administrative and support services required by the co-located laboratories in Cincinnati, Ohio, and Research Triangle Park, North Carolina; the performance of liaison activities, enabling ORD to respond to regional needs and to work with Congress, OMB, and other Federal agencies; the operation and enhancement of ORD's Information Systems to support research program planning and accountability to management; and the performance of all other activities (e.g., facilities planning and management, management studies) required for the smooth operation of ORD.

1984 Program

In 1984, the Agency is allocating a total of $3,830,300 and 60.7 total workyears for this program, all of which is for the Salaries and Expenses appropriation. The activities provided for by these resources will on a continuing basis provide overall direction and support to ORD's programs to insure the coordination of research efforts, the efficient utilization of resources, and the satisfaction of the needs identified by the program and regional offices.

1984 Explanation of Changes from the Amendment

The net decrease of -$19,000 results from the following action:

-Reprogramming. (-$19,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$19,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,866,000 and 61.5 total workyears, all of which was for the Salaries and Expenses appropriation. These resources provided for overall direction, central management services, policy guidance, liaison activities, ORD's Information Systems, and general administrative and budget support.

PROGRAM MANAGEMENT - SOLID WASTE AND EMERGENCY RESPONSE

1985 Program Request

The Agency requests $1,676,400 supported by 32.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation, representing an increase of $179,200 for personnel and operating costs and no change in workyears. The increase reflects increases in personnel and support costs. These resources will allow the Agency to staff and operate a complete management team within the Office of Solid Waste and Emergency Response (OSWER). Policy recommendations and proposed regulations will be thoroughly reviewed for conformity to law, executive orders, and the Administrator's guidance. Effective integration of hazardous waste and Superfund activities will occur on a continuous basis. Deadlines for producing guidance and regulations and for meeting other milestones established by Congress, OMB, or the Administrator will be met. Planning and program evaluation will contribute to increased productivity and the redirection of resources and effort toward priority projects. OSWER budget requests will be developed and justified to the Administrator, OMB, and Congress. Financial management activities will be in accordance with established policies and procedures. Congressional and other executive correspondence will be answered promptly and responsively.

1984 Program

In 1984, the Agency is allocating $1,497,200 and 32.0 total workyears to this program, all of which is for the Salaries and Expenses appropriation. Expected accomplishments include implementation of an overall OSWER management plan, including measures of succes, milestones, and performance reviews; management of the review of policy recommendations and proposed regulations; integration of both program and enforcement hazardous waste and Superfund activities; preparation and justification of OSWER budgets and oversight of resource allocation and financial management; and development of an OSWER accountability system. Additional resources for Superfund program management are included in the Hazardous Site and Spill Response program element.

1984 Explanation of Changes from the Amendment

The net decrease of -$20,700 results from the following action:

-Reprogramming. (-$20,700) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$20,700 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $1,024,400 and 23.8 total workyears, all of which was for the Salaries and Expenses appropriation. During 1983, changes in the top management of OSWER led to the rebuilding of the office. Major emphasis was originally placed on those activities which accompany the reestablishment of the office: restaffing, defining goals and objectives, and determining responsibilities. Once these activities were underway, emphasis was placed on restoring public confidence in the Agency by managing and overseeing an aggressive program to regulate hazardous waste and to remedy the problems caused by uncontrolled hazardous waste sites.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Immediate Office of the Administrator								
Salaries & Expenses		$1,629.6	$2,012.0	$1,743.2	$1,674.3		$1,799.1	$124.8
	TOTAL	$1,629.6	$2,012.0	$1,743.2	$1,674.3		$1,799.1	$124.8
Office of Regional Operations								
Salaries & Expenses		$166.7		$261.0	$321.4		$279.3	-$42.1
	TOTAL	$166.7		$261.0	$321.4		$279.3	-$42.1
Office of Management Services								
Salaries & Expenses		$237.2	$526.8	$290.6	$290.6		$322.5	$31.9
	TOTAL	$237.2	$526.8	$290.6	$290.6		$322.5	$31.9
Office of Executive Secretariat								
Salaries & Expenses		$408.8	$459.8	$478.6	$478.6		$523.4	$44.8
	TOTAL	$408.8	$459.8	$478.6	$478.6		$523.4	$44.8
Regulatory Information Service Center								
Salaries & Expenses		$534.1	$568.3	$568.3	$568.3		$575.0	$6.7
	TOTAL	$534.1	$568.3	$568.3	$568.3		$575.0	$6.7
Administrator's Representation Fund								
Salaries & Expenses		$2.2	$3.0	$3.0	$3.0		$3.0	
	TOTAL	$2.2	$3.0	$3.0	$3.0		$3.0	

AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Office of International Activities								
Salaries & Expenses		$1,071.2	$1,035.8	$1,035.8	$1,035.8		$1,132.4	$96.6
	TOTAL	$1,071.2	$1,035.8	$1,035.8	$1,035.8		$1,132.4	$96.6
Office of Civil Rights								
Salaries & Expenses		$946.4	$1,094.6	$1,094.6	$1,094.6		$1,186.7	$92.1
	TOTAL	$946.4	$1,094.6	$1,094.6	$1,094.6		$1,186.7	$92.1
Science Advisory Board								
Salaries & Expenses		$857.6	$1,064.6	$1,064.6	$1,064.6		$1,165.6	$101.0
	TOTAL	$857.6	$1,064.6	$1,064.6	$1,064.6		$1,165.6	$101.0
Office of Administrative Law Judges								
Salaries & Expenses		$601.8	$701.8	$701.8	$701.8		$770.3	$68.5
	TOTAL	$601.8	$701.8	$701.8	$701.8		$770.3	$68.5
Office of Small & Disadvantaged Business Utilization								
Salaries & Expenses		$303.6	$207.1	$211.0	$211.0		$240.4	$29.4
	TOTAL	$303.6	$207.1	$211.0	$211.0		$240.4	$29.4
TOTAL:								
Salaries & Expenses		$6,759.2	$7,673.8	$7,452.5	$7,444.0		$7,997.7	$553.7
Office of the Administrator/ Executive Offices	TOTAL	$6,759.2	$7,673.8	$7,452.5	$7,444.0		$7,997.7	$553.7

AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Immediate Office of the Administrator	30.9	37.6	34.3	32.3		29.3	-3.0
Office of Regional Operations	3.1		4.0	4.0		4.0	
Office of Management Services	5.1	10.0	6.0	6.0		7.4	1.4
Office of Executive Secretariat	10.6	11.0	11.0	11.0		11.0	
Regulatory Information Service Center	4.0	5.0	5.0	5.0		5.0	
Office of International Activities	16.5	14.0	14.0	14.0		14.0	
Office of Civil Rights	13.8	14.6	14.6	14.6		14.8	.2
Science Advisory Board	8.0	14.1	14.1	14.1		14.1	
Office of Administrative Law Judges	13.8	15.0	15.0	15.0		15.0	
Office of Small & Disadvantaged Business Utilization	5.8	4.1	4.1	4.1		4.1	
TOTAL PERMANENT WORKYEARS	111.6	125.4	122.1	120.1		118.7	-1.4

AGENCY MANAGEMENT

Office of the Administrator/Executive Offices

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Immediate Office of the Administrator	36.7	41.3	38.3	35.3		32.3	-3.0
Office of Regional Operations	3.7		4.0	4.0		4.0	
Office of Management Services	7.2	14.2	8.0	8.0		8.0	
Office of Executive Secretariat	14.3	15.8	15.8	15.8		15.8	
Regulatory Information Service Center	4.0	5.0	5.0	5.0		5.0	
Office of International Activities	23.1	22.0	22.0	22.0		22.0	
Office of Civil Rights	20.0	21.8	21.8	21.8		21.8	
Science Advisory Board	14.6	23.9	23.9	23.9		23.9	
Office of Administrative Law Judges	13.8	15.6	15.6	15.6		15.6	
Office of Small & Disadvantaged Business Utilization	6.6	4.9	4.9	4.9		4.9	
TOTAL WORKYEARS	144.0	164.5	159.3	156.3		153.3	-3.0

MANAGEMENT AND SUPPORT

Agency Management

Office of the Administrator/Executive Offices

Budget Request

The Agency requests a total of $7,997,700 for the Salaries and Expenses appropriation supported by 153.3 total workyears for the Office of the Administrator in 1985. This is an increase of $553,700 for personnel costs and a decrease of 3.0 workyears from 1984 for the completion of the Deputy Administrator's task force that worked on Agency policy and management review. The resources will support stronger executive management in the form of firmer policy guidance, more effective communications with the Regions, and better quality scientific advice for the entire Agency.

Program Description

These resources include the salaries and associated costs for the Immediate Office of the Administrator and the staff offices which report directly to the Administrator. The Administrator and Deputy Administrator are responsible for providing policy and direction to the Agency and ensuring implementation of their policies; the staff offices provide crosscutting Agency Guidance for scientific review of regulations and research, international environmental initiatives, as well as civil rights, administrative law hearings, and regional communications.

Immediate Office of the Administrator -- This Office includes: the Administrator and Deputy Administrator, special assistants to the Administrator and Deputy Administrator in the various program areas , a Judicial Officer and assistant, speech writer, clerical support staff, and messengers.

Office of Regional Operations -- This Office provides Headquarters with a stronger and more effective link to each of the ten regional offices. This link ensures that the Administrator's policies are effectively communicated to the Regional Administrators, includes the Regions in the policy-making process, alerts the Administrator to any potential regional problems and concerns, and assists him in managing significant regional issues.

Office of Management Services -- This Office provides centralized budget planning and implementation, resource management, personnel, computer planning, and administrative support services to the Administrator and staff offices.

Office of Executive Secretariat -- This Office is responsible for handling, processing, and tracking all of the Administrator's correspondence, Deputy Administrator's correspondence, Congressional correspondence, and Freedom of Information (FOI) correspondence.

Regulatory Information Service Center -- The Center is responsible for tabulating and compiling information provided by other Federal agencies concerning their regulatory efforts.

Administrator's Representation Fund -- The Fund is used for official receptions, meetings, and affairs hosted primarily by the Administrator for domestic and foreign officials.

Office of International Activities -- This Office provides guidance and management for the Agency's international activities and programs with Western European countries, Japan, and the Agency's Scientific Activities Overseas (SAO) Program. In addition, the Office manages agreements with Canada and Mexico on cross-boundary environmental issues and oversees Agency involvement in the activities of international organizations such as the United Nations Environmental Program, the World Health Organization, and the Organization for Economic Cooperation and Development (OECD). Finally, the Office plays a strong role in formulating and implementing Agency policies that affect the international marine environment.

Office of Civil Rights -- This Office manages the Agency's civil rights programs. It provides policy guidance to the Administrator and evaluates activities required to carry out the Agency's responsibilities to assure equal opportunity and prohibit discrimination in employment at EPA. This program element also supports the area Civil Rights Directors at major research and satellite installations in Cincinnati, Research Triangle Park, and Las Vegas; the activities of the Headquarter's Federal Women's Program Committee; and processing of discrimination complaints lodged by Agency employees and applicants for employment.

Science Advisory Board (SAB) -- The Board consists of a Director, professional and clerical staff, and approximately 50 independent scientists and engineers who advise the Administrator on the scientific and technical bases of the Agency's decisions. They review the scientific basis of regulatory proposals, the adequacy of Agency research and the research planning process, the five-year research and development plan, as well as special requests from the Administrator, the Deputy Administrator and the Congress. The SAB prepares findings and recommendations in technical reports which are legally required to be sent directly to the Administrator and to the Congress.

Office of Administrative Law Judges -- Judges from this Office preside over and conduct hearings required by the Administrative Procedures Act related to appeals of Agency regulations and decisions.

Office of Small and Disadvantaged Business Utilization -- This Office provides Agencywide oversight in implementing programs under Sections 8 and 15 of the Small Business Act (as amended) to further the utilization of EPA procurement and financial assistance programs by small and disadvantaged businesses. It develops national policy for EPA and serves as the focal point for providing guidance for implementing the Agencywide minority and women's business enterprise policy under grants and cooperative agreements.

IMMEDIATE OFFICE OF THE ADMINISTRATOR

1985 Program Request

The Agency requests a total of $1,799,100 supported by 32.3 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $124,800 for personnel costs and a decrease of 3.0 total workyears resulting from the completion of the Deputy Administrator's task force that worked on Agency policy and management review. The major focus of activity in the Immediate Office will be to ensure better internal management, continue emphasis on enforcement and compliance efforts, pursue delegation of programs to State and local governments, support enhanced science as a basis for decision making, and improve the Agency's methodologies for managing risk.

1984 Program

In 1984, the Agency is allocating a total of $1,674,300 and 35.3 total workyears to this Office, all of which is for the Salaries and Expenses appropriation. The major focus of activity in the Immediate Office will be to ensure better internal management, emphasize enforcement and compliance, pursue delegation of programs to state and local governments, and support enhanced science as a basis for decision making and managing risk.

1984 Explanation of Changes from the Amendment

The net decrease of -$68,900 results from the following actions:

-Reprogrammings. (-$68,900) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$68,900 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,629,600 and 36.7 total workyears for this program, all of which was for the Salaries and Expenses appropriation. The major focus was improving Agency communication on issues with major outside organizations, Congress, and public interest groups.

OFFICE OF REGIONAL OPERATIONS

1985 Program Request

The Agency requests a total of $279,300 supported by 4.0 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This is a decrease of $42,100, due to Senior Executive Service (SES) candidate resources included in 1984 but not carried into 1985, and no change in total workyears from 1984 levels. The Office will continue to provide a communications link between headquarters and the ten regional offices.

1984 Program

The Agency is allocating a total of $321,400 and 4.0 total workyears, all of which is for the Salaries and Expenses appropriation. The Office will provide a liaison between the regional offices and the Administrator to ensure that the Administrator's policies are effectively communicated to the Regional Administrators, to include the regions in the policy-making process, to alert the Administrator to any potential regional problems and concerns, and to assist him in managing significant regional issues.

1984 Explanation of Changes from the Amendment

The net increase of +$60,400 results from the following action:

-Reprogramming. (+$60,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$60,400 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $166,700 and 3.7 total workyears for this program, all of which was in the Salaries and Expenses appropriation. The Office, which the Administrator established on September 16, 1983, was developed to provide Headquarters with a strong and effective link to the ten regions.

OFFICE OF MANAGEMENT SERVICES

1985 Program Request

The Agency requests a total of $322,500 supported by 8.0 total workyears, all of which is for the Salaries and Expenses appropriation. This represents an increase of $31,900 for personnel costs and no change in total workyears. This Office will continue to provide administrative, personnel management and budget support, in addition to computer planning support to staff offices in the Office of the Administrator.

1984 Program

In 1984, the Agency is allocating a total of $290,600 and 8.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation. The Office will monitor resource expenditures, develop the outyear budget for the staff offices, provide uniform personnel and administrative support services, and assist staff offices with recruitment, staffing and property control. Activities will focus on improving resource and personnel utilization by centralizing financial management and automating personnel records.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $237,200 and 7.2 total workyears for this program, all of which was for the Salaries and Expenses appropriation. The Office completed monthly financial and operating plan reports, budget development and execution for the staff offices, workload analysis for Regional Management, in addition to providing personnel action preparation and staffing plan development, administrative services, and resource and computer planning studies for the staff offices in the Office of the Administrator.

OFFICE OF EXECUTIVE SECRETARIAT

1985 Program Request

The Agency requests a total of $523,400 supported by 15.8 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $44,800 for personnel costs and no workyears from 1984 levels. This Office will continue to manage the Administrator's correspondence, Deputy Administrator's correspondence, Congressional correspondence, and Freedom of Information (FOI) correspondence.

1984 Program

In 1984, the Agency is allocating a total of $478,600 and 15.8 total workyears for this program, all of which is for the Salaries and Expenses appropriation. Through the Executive Correspondence Tracking System, the Office will track and monitor all incoming and outgoing Agency correspondence. The Office will continue to prepare a yearly report to Congress on the cost to the Agency and to the public of administering the Freedom of Information Act.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $408,800 and 14.3 total workyears for this program, all of which was for the Salaries and Expenses appropriation. The Office logged, controlled, and tracked approximately 5000 letters to and from Congress; received, assigned for action and tracked approximately 23,000 letters to and from the Administrator and Deputy Administrator using the newly created executive correspondence tracking system, and controlled approximately 4,000 Freedom of Information requests.

REGULATORY INFORMATION SERVICE CENTER

1985 Program Request

The Regulatory Information Service Center (RISC) requests a total of $575,000 supported by 5.0 total workyears, all of which is for the Salaries and Expenses appropriation. This represents an increase of $6,700 for personnel costs and no change in total workyears. The Center will publish two editions of the Unified Agenda of Federal Regulations and will continue to maintain an automated data base of Federal Government regulatory activity. The Center will also continue its monthly analysis of Federal Register Statistics.

1984 Program

The Regulatory Information Service Center is allocating a total of $568,300 and 5.0 total workyears, all of which is for the Salaries and Expenses appropriation. The Center will continue to produce the Unified Agenda of Federal Regulations for October 1983 and April 1984. The Center will also place into operation an automated data base of Federal Government regulatory activity and will continue its monthly analysis of Federal Register Statistics.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $534,100 and 4.0 total workyears for this program, all of which was in the Salaries and Expenses appropriation. The Center coordinated the publication of the Unified Agenda of Federal Regulations for October 1982 and April 1983, and developed the October 1983 Agenda. In addition, the Center assisted the Canadian government in developing the guidance of the first Canadian Agenda of Regulations. The Center also produced the monthly analysis of Federal Register Statistics.

ADMINISTRATOR'S REPRESENTATION FUND

1985 Program Request

The Agency requests a total of $3,000 for this program, all of which is in the Salaries and Expenses appropriation. This reflects no change from the 1984 level. This fund will enable the Administrator to host official receptions, meetings, and affairs for visiting dignitaries and officials.

1984 Program

In 1984, the Agency is allocating a total of $3,000 to this program, all of which is under the Salaries and Expenses appropriation, to cover the expenses of official receptions and other functions.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,200 for this function under the Salaries and Expenses appropriation.

OFFICE OF INTERNATIONAL ACTIVITIES

1985 Program Request

The Agency requests a total of $1,132,400 supported by 22.0 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $96,600 for personnel costs and no change in total workyears from 1984 levels. The Office will continue to provide guidance, coordination and exchange of scientific and technical information on a regular basis in support of Agency programs, and promote agreed upon approaches to common environmental problems with border countries, including development of an environmental agreement with Mexico to control border sanitation problems , and guidance on international acid precipitation. In 1985, emphasis will also be directed to ensure the harmonization of regulatory practices to meet environmental objectives and to facilitate trade and environmental aspects of trade in chemicals and shipment of hazardous wastes.

1984 Program

The Agency is allocating a total of $1,035,800 and 22.0 total workyears to this Office, all of which is for the Salaries and Expenses appropriation. Dealing with border pollution problems with Canada and Mexico will continue to dominate the focus of this office. This includes continuing negotiations on a transboundary air quality agreement, a joint plan to reduce phosphorous levels in the Great Lakes, and cooperative efforts to remedy the pollution in the Niagara River Basin. Negotiations are under way with Mexico concerning a new border agreement on control of border sanitation problems. New initiatives will be taken in support of bilateral cooperation with West Germany, Brazil, China, the Netherlands, USSR, and the Caribbean nations. The Office will also play a strong role in formulating and implementing Agency policies that affect international trade in chemicals, transfrontier shipment of hazardous wastes, and the protection of the global environment including the oceans and atmosphere.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,071,200 and 23.1 total workyears, all of which was for the Salaries and Expenses appropriation. The development and implementation of bilateral cooperation and exchange programs on environmental issues with Canada and Mexico was the major emphasis in 1983. The environmental problems with China and the Soviet Union, and with international organizations such as the United Nations Environmental Program, the World Health Organization, and the Organization for Economic Cooperation and Development, were also emphasized.

OFFICE OF CIVIL RIGHTS

1985 Program Request

The Agency requests a total of $1,186,700 supported by 21.8 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This is an increase of $92,100 for personnel costs and no change in total workyears.

In 1985, the Office of Civil Rights will continue development and training of Civil Rights staff; improve and strengthen external complaints handling system; continue implementation of Civil Rights training for managers; expand and improve Agencywide recruitment efforts; and provide technical guidance and direction for the Agency's civil rights efforts. This office will also provide continuous monitoring of affirmative action plan implementation; expand and improve the Equal Employment Opportunity (EEO) counseling program to resolve complaints through informal conciliation; strengthen and improve the special emphasis programs by conducting seminars and workshops for special emphasis employees and Agency managers; increase quantity and quality of EEO reviews and studies; strengthen the Agency's participation in the Historically Black Colleges and Universities Program; and improve the implementation of the Agency's policy on non-discrimination in Federally assisted programs.

1984 Program

The Agency is allocating a total of $1,094,600 and 21.8 total workyears, all of which is for the Salaries and Expenses appropriation. The Office of Civil Rights will continue to carry out equal opportunity hiring and employment programs; manage the Agency's affirmative action program, special emphasis programs and the discrimination complaints program; implement regulations and programs requiring EPA grant recipients to adhere to the civil rights laws and labor standards requirements of applicable Federal statutes; serve as the Agency's focal point for the Historically Black Colleges and Universities Program; develop a highly trained Civil Rights staff; establish an external complaints handling system; develop a

Civil Rights training program for EPA managers; establish in-house complaints investigations capability; develop an effective Agencywide recruitment and referral system; develop systematic approach for internal evaluation and program review; obtain Health and Human Services approval and promulgate a regulation implementing the requirements of the Age Discrimination Act of 1975; obtain Department of Justice and Equal Employment Opportunity Council's approval and publish a regulation implementing the federally conducted aspects of Section 504; develop standards to waive recommendations in labor standards cases; arrange for an accessibility study of EPA headquarters for Agency and General Services Administration use; develop standards for Agency use to insure EPA meetings and conferences are accessible; develop a standardized appeal procedure in labor standards cases; and publish a final consolidated civil rights regulation.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $946,400 and 20.0 total workyears for this program, all of which was in the Salaries and Expenses appropriation. The Office provided assistance to EPA program offices in developing the Agency's plan for support to Historically Black Colleges and Universities; developed an Agencywide Affirmative Action Plan and monitored the Agency's compliance with affirmative action goals; managed the Special Emphasis and Discrimination Complaint programs; conducted an EEO Officers Planning Conference; developed an Agencywide Civil Rights policy statement; and managed the enforcement of labor standards legislation. In addition, the Office's External Compliance Staff, assisted by the Department of Justice, internally cleared the Agency's consolidated nondiscrimination regulation.

SCIENCE ADVISORY BOARD

1985 Program Request

The Agency requests a total of $1,165,600 supported by 23.9 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $101,000 for personnel costs and no change in total workyears from 1984 levels. This increase will be used to expand the number of meetings held to address selected issues. The Deputy Administrator will identify 33-45 regulatory issues for the Science Advisory Board (SAB) to review in 1985. This review process will enable the Administrator and the Agency to gain greater credibility by basing regulatory decisions on scientific and technical data which has been reviewed by the SAB.

1984 Program

The Agency is allocating a total of $1,064,600 and 23.9 total workyears to this program, all of which is for the Salaries and Expenses appropriation. The SAB will be involved in a number of reviews during 1984. Included among these will be the Review of the Integrated Environmental Management Project; Research Outlook Review; Review of EPA's Scientific and Technological Achievement Awards; Review of Seven Health Assessment Documents, to be identified; Review of Health Advisories for Safe Drinking Water; Review of Two Effluent Guidelines for Industrial Source Categories. Other issues handled by the SAB include review of the Ambient Air Quality Standards for Lead and Ozone; Review of the Status of the Ambient Air Quality Research Program; Review of the Methodologies Used for Setting Ambient Air Quality Standards; Review of the EPA Acidic Deposition Research Program; Review of Acidic Deposition Assessment Activities; Review of the Development Plans for Two Revised Air Quality Criteria Documents; Review of the Sewage Sludge Disposal Guidelines; Superfund Assessment Activities; and Three Research Program Reviews.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $857,600 and 14.6 total workyears for this program, all of which was under the Salaries and Expenses appropriation. During 1983, the SAB provided advice on High Level Radioactive Waste Disposal Standards; Site-specific Water Quality Criteria; Guidelines for Mutagenicity Risk Assessment; Maximum Contaminant Levels for Volatile Organic Chemicals in Drinking Water; Health Advisories on Aldicarb and on Unregulated Contaminants in Drinking Water; Effluent Guidelines for the Pesticide Industry; EPA's Sludge Management Guidelines; proposed revisions to the Agency's Secondary Treatment Regulations; Air Quality Criteria Documents for lead and ozone published under section 108, and national primary and secondary ambient air quality standards published under section 109 of the Clean Air Act. Other reviews by the SAB included Critical Assessment Document for Acidic Deposition; Health Risk Assessment Methodology for Alternative National Ambient Air Quality Standards; proposals to reorganize EPA's research laboratories; EPA's Five Year R&D Plan; and Health Assessment Documents for Hazardous Pollutants; and other issues.

OFFICE OF ADMINISTRATIVE LAW JUDGES

1985 Program Request

The Agency requests a total of $770,300 supported by 15.6 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $68,500 for personnel costs and no change in total workyears from 1984 levels. In 1985, this Office will continue to preside over and conduct hearings required by the Administrative Procedures Act related to suspension, cancellation, licensing and enforcement actions, including the assessment of civil penalties initiated by the Agency. Preliminary estimates indicate a significant number of new Section 120 Clean Air Act, and Resource Conservation and Recovery Act (Solid Waste Disposal Act) cases in 1985. The Administrative Law Judges will also continue to adjudicate civil rights cases investigated by the Office of Civil Rights.

1984 Program

The Agency is allocating a total of $701,800 and 15.6 total workyears to this program, all of which is for the Salaries and Expenses appropriation. The total number of cases expected from EPA regional offices in 1984 is 578 cases. This represents an increase of 143 cases over 1983, an increase in case workload of 33 percent. In addition, this Office will handle cases originating at Headquarters, including suspensions, cancellations, Section 3(c)(1)(D) of the Federal Insecticide, Fungicide and Rodenticide Act, Clean Air Act cases, and Civil Rights cases. Civil Rights cases are not reflected in any of the cited figures.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $601,800 and 13.8 total workyears for this program, all of which was for the Salaries and Expenses appropriation. For 1983, this Office maintained a docket of 433 cases, 343 of which were new cases docketed in 1983, and 90 of which were carried over from previous years. During the year, 186 cases were settled by Consent Agreement and Final Order, Withdrawal of Complaint, and Dismissal of Case. There were 26 Initial Decisions issued by the Office of Administrative Law Judges in 1983. Again, Civil Rights cases are not reflected in any of the above figures.

OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION

1985 Program Request

The Agency requests a total of $240,400 and 4.9 total workyears for this Office, all of which is for the Salaries and Expenses appropriation. This represents an increase of $29,400 for personnel costs and no change in total workyears from 1984 levels. In 1985, the Office will continue to coordinate activities with EPA's procurement and financial assistance programs by providing training and technical assistance. The Office will provide assistance toward increasing the level of Minority Business Enterprise/Women's Business Enterprise (MBE/WBE) participation in EPA-assisted programs by assisting contract officers, program office managers, and grant recipients in locating qualified contractors by creating source lists and a complete Central Resource Directory (CRD), and by developing and implementing indirect procurement policy guidance. Resources will be devoted to providing technical and managerial assistance to Headquarters and Regional staff assigned to socioeconomic program activities and counseling to minority and women's business in compliance with Executive Order 12432. Through this effort the Agency will increase the percentage of awards to MBEs and WBEs in both direct and indirect procurements.

1984 Program

The Agency is allocating a total of $211,000 and 4.9 total workyears for this program, all of which is for the Salaries and Expenses appropriation. In 1984, the Office will implement the Presidential directive to assure increased minority business participation in contracting under grants and cooperative agreements. Extensive assistance to program and Regional Offices, grant recipients, and minority contractors is anticipated.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $303,600 and 6.6 total workyears, all of which was for the Salaries and Expenses appropriation. The Agency awarded 35 percent of its direct procurement dollars to small and disadvantaged businesses. In addition, during the year the Agency's grant/cooperative agreement recipients awarded over 10 percent of their subcontracting dollars to MBEs and WBEs.

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Program Management - Policy, Planning & Evaluation								
Salaries & Expenses		$794.9	$950.9	$950.9	$990.1		$1,016.9	$26.8
	TOTAL	$794.9	$950.9	$950.9	$990.1		$1,016.9	$26.8
Integrated Environmental Management Program								
Salaries & Expenses		$3,801.5	$3,341.6	$3,803.6	$3,556.8		$3,640.6	$83.8
	TOTAL	$3,801.5	$3,341.6	$3,803.6	$3,556.8		$3,640.6	$83.8
Office of Policy Analysis								
Salaries & Expenses		$8,269.6	$8,070.9	$8,257.2	$8,336.9		$10,479.2	$2,142.3
	TOTAL	$8,269.6	$8,070.9	$8,257.2	$8,336.9		$10,479.2	$2,142.3
Office of Standards & Regulations								
Salaries & Expenses		$3,993.5	$4,020.2	$4,020.2	$4,187.3		$5,018.1	$830.8
	TOTAL	$3,993.5	$4,020.2	$4,020.2	$4,187.3		$5,018.1	$830.8
Office of Management Systems & Evaluation								
Salaries & Expenses		$2,454.1	$2,250.1	$2,458.6	$2,456.8		$2,595.3	$138.5
	TOTAL	$2,454.1	$2,250.1	$2,458.6	$2,456.8		$2,595.3	$138.5
TOTAL:								
Salaries & Expenses		$19,313.6	$18,633.7	$19,490.5	$19,527.9		$22,750.1	$3,222.2
Office of Policy, Planning and Evaluation	TOTAL	$19,313.6	$18,633.7	$19,490.5	$19,527.9		$22,750.1	$3,222.2

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
	(DOLLARS IN THOUSANDS)						
PERMANENT WORKYEARS							
Program Management - Policy, Planning & Evaluation	13.4	16.0	16.0	15.0		17.0	2.0
Integrated Environmental Management Program	14.5	12.0	21.1	17.1		18.0	.9
Office of Policy Analysis	36.1	31.1	33.1	33.1		43.0	9.9
Office of Standards & Regulations	35.9	40.0	40.0	44.0		47.0	3.0
Office of Management Systems & Evaluation	39.5	37.1	41.7	41.7		43.0	1.3
TOTAL PERMANENT WORKYEARS	139.4	136.2	151.9	150.9		168.0	17.1

AGENCY MANAGEMENT

Office of Policy, Planning and Evaluation

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Program Management - Policy, Planning & Evaluation	16.1	21.1	21.1	20.1		20.1	
Integrated Environmental Management Program	17.0	14.0	25.0	20.0		20.0	
Office of Policy Analysis	60.2	54.3	58.3	62.1		62.1	
Office of Standards & Regulations	58.4	66.5	66.5	67.7		67.7	
Office of Management Systems & Evaluation	49.8	48.0	53.0	53.0		53.0	
TOTAL WORKYEARS	201.5	203.9	223.9	222.9		222.9	

Agency Management

Office of Policy, Planning and Evaluation

Budget Request

The Agency requests a total of $22,750,100 supported by 222.9 total workyears, all of which is for the Salaries and Expenses appropriation, an increase of $3,222,200 and no total workyears from 1984.

Program Description

The Office of Policy, Planning and Evaluation (OPPE), under the guidance of the Assistant Administrator, directs the Agency's regulation development and review process, formulates Agency policy, and develops planning strategy.

Specifically, OPPE reviews all EPA regulations to ensure consistency with Agency policy, coordinates all internal Agency reviews of regulations, and leads the Agency's regulatory reform activities.

In addition, OPPE's analyses of the economic and environmental effects of EPA's regulations, policies, and programs, as well as evaluations of the effectiveness of ongoing Agency programs, stimulate policy formulation. Through these programs, the Agency is developing a framework for a well-run strategic planning and management process, and ensuring that EPA's program objectives and environmental goals are clearly defined and met. OPPE also provides special studies and analyses to support Agency decision making processes in both management and program areas. A brief description of each of the program elements included in OPPE follows:

Program Management - Policy, Planning and Evaluation -- This program element supports the Assistant Administrator's Immediate Office and provides senior OPPE managers with policy direction, program planning, and budgeting and resource management.

Integrated Environmental Management Program -- This program is developing an integrated planning and program management strategy to make regulations more consistent and to avoid unnecessary economic or environmental impacts.

Office of Policy Analysis -- This program element contains resources to analyze all EPA regulations, policies, and programs from the perspective of their economic and environmental impacts and benefits.

Office of Standards and Regulations -- This office manages the Agency's regulation development and review process, analyzes all of EPA's regulations to ensure technical quality and consistency with Agency policy, designs the Agency's regulatory reform activities, and develops innovative approaches to regulation.

Office of Management Systems and Evaluation -- This program operates the Agency's accountability system, evaluates program effectiveness in meeting Agency goals, and designs and implements necessary management reforms, including a system to manage for environmental results.

PROGRAM MANAGEMENT - POLICY, PLANNING AND EVALUATION

1985 Program Request

The Agency requests a total of $1,016,900 supported by 20.1 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $26,800 and no workyears from 1984. The increase results from increased personnel costs. This request will provide the Assistant Administrator

with sufficient staff and resources for budgetary and administrative support necessary to manage OPPE and its component offices efficiently and effectively. Resources will be available for policy direction, quality control of regulations, and special studies and analyses.

1984 Program

In 1984, the Agency is allocating a total of $990,100 and 20.1 total workyears to this program, all of which is for the Salaries and Expenses appropriation. This program is providing overall policy direction and conducting the activities necessary to manage the component offices of the Office of Policy, Planning and Evaluation, including special studies and analyses to support the OPPE decision-making process.

1984 Explanation of Changes from the Amendment

The net increase of +$39,200 results from the following actions:

-Reprogrammings. (+$39,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$39,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $794,900 and 16.1 total workyears for this program, all of which was for the Salaries and Expenses appropriation. These funds supported the basic budgetary, administrative, analytic, and planning activities necessary to manage the Office of Policy, Planning and Evaluation.

INTEGRATED ENVIRONMENTAL MANAGEMENT PROGRAM

1985 Program Request

The Agency requests a total of $3,640,600 supported by 20.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $83,800 and no workyears from 1984. The increase is due to increases in operating and personnel costs. These resources will allow the Integrated Environmental Management Program (IEMP) to continue work on the industry studies. Consistency in the current library of industry models will also be analyzed and revised as necessary in order to run all models together and IEMP will develop an internal operations research and computer capacity. In addition, IEMP will complete work on the third geographic project as well as start work on the fourth and fifth sites. Consistent with the Administrator's decision, IEMP will also implement the recommendations presented in its 1984 report summarizing the national implications of the geographic projects undertaken.

1984 Program

In 1984, the Agency is allocating a total of $3,556,800 and 20.0 total workyears to this program, all of which is for the Salaries and Expenses appropriation. With these resources IEMP is undertaking new industry studies to better assess the cost-effectiveness of all environmental regulations for particular industrial sectors. It is also working on three geographic study areas (two of which are expected to be completed by the end of 1984) to further develop strategies for enabling Federal, State, and local governments to jointly develop efficient environmental control for particular geographic areas. In addition, IEMP is preparing a report summarizing the national implications of the geographic projects conducted to date and is determining whether it is feasible to transfer the application of the geographic approach to Regional offices and States or whether other operational modes should be considered.

1984 Explanation of Changes from the Amendment

The net decrease of -$246,800 results from the following action:

-Reprogramming. (-$246,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$246,800 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,801,500 and 17.0 total workyears for this program, all of which was for the Salaries and Expenses appropriation. These resources were used to focus on and further refine the industry and geographic methodologies formulated in 1981 and 1982. A mathematical programming model was developed, making possible the estimation of the most cost-effective pollution control strategies for the industry under study. An enhanced geographic approach was introduced as a demonstration in the Philadelphia area and work commenced on applying such methodology to a second demonstration site in Baltimore. During 1983 this program was known as the Program Integration Project (PIP).

OFFICE OF POLICY ANALYSIS

1985 Program Request

The Agency requests a total of $10,479,200 supported by 62.1 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $2,142,300 and no workyears from 1984. The increase is primarily due to the transfer of the extramural funding for the economic research program from the Office of Research and Development to the Office of Policy Analysis (OPA). In 1985, OPA will complete the Congressionally-required "Cost of Clean Air and Water" report, complete studies of the macroeconomic impacts of EPA regulations, undertake analyses of risk management across programs, and perform studies on the combined economic impact of all EPA regulations on two major industries as well as several company or plant specific financial analyses. OPA's Benefits Program will incoporate benefits analysis in decisions on construction grants and initiate a major effort to improve risk and benefit techniques applied by the Pesticides Program. Lastly, OPA's Economic Research Program will renew many of the cooperative agreements supporting the extensive system of "centers of excellence" established in 1983. With these funds, particular attention will be paid to water-related benefits methods, national benefits estimations, ozone-related benefits, and exposure estimations.

1984 Program

In 1984, the Agency is allocating a total of $8,336,900 and 62.1 total workyears to this program, all of which is for the Salaries and Expenses appropriation. With these resources, OPA is focusing on reviewing existing regulations and standards, which requires intensified cost-benefit and cost-effectiveness analysis. OPA is placing additional emphasis on intra-industry and cross-industry cost-effectiveness comparison. To effectively support this activity, the office is thoroughly reviewing its existing data base and upgrading and expanding it as necessary. The Agency is reviewing all the National Ambient Air Quality Standards as well as many of its recently promulgated effluent guidelines. Amendments to the Clean Air and Clean Water Acts may lead to even more extensive regulatory reviews. OPA is initiating a new Congressionally-mandated "Cost of Clean Air and Water" report. OPA is also continuing its strategic studies which examine the cumulative macroeconomic impacts of EPA's regulations on major industries. OPA's Benefits Program is pursuing major efforts to incorporate benefits analysis in a variety of regulatory situations, including development of the Agency's groundwater strategy. And, its Economic Research Program is developing improved methods for determining the economic benefits and, to a much more limited extent, the economic costs of pollution control.

1984 Explanation of Changes from the Amendment

The net increase of +$79,700 results from the following action:

-Reprogramming. (+$79,700) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$79,700 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $8,269,600 and 60.2 total workyears for this program, all of which was for the Salaries and Expenses appropriation. OPA continued to oversee the Agency's implementation of Executive Order 12291, working closely with program offices to evaluate the costs, economic impact, and benefits of prospective regulatory requirements or changes. OPA analyzed the economic impact of potential amendments to the Clean Air and Water Acts and completed the "Cost of Clean Air and Water" report. Work was also concluded on the permitting progress of important energy projects. A study of the macroeconomic impacts of all EPA regulations was initiated.

OFFICE OF STANDARDS AND REGULATIONS

1985 Program Request

The Agency requests a total of $5,018,100 supported by 67.7 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $830,800 and no workyears from 1984. The increase is primarily due to the transfer of the toxics integration extramural dollars into this program. In 1985, the Office of Standards and Regulations (OSR) will maintain compliance with Executive Order 12291, the Regulatory Flexibility Act, the Paperwork Reduction Act, and Federal Register requirements by continuing its technical, statistical, and policy review of existing regulations as well as those under development. It will also concentrate on analyses of Agencywide scientific issues that affect rulemaking. Additionally, OSR will work on several chemical studies and complete studies of cross program chemical regulation priorities.

1984 Program

In 1984, the Agency is allocating a total of $4,187,300 and 67.7 total workyears to this program, all of which is for the Salaries and Expenses appropriation. This level of resources allows OSR to continue its effective management and oversight of the regulation development and review process ensuring compliance with Executive Order 12291, the Regulatory Flexibility Act, the Paperwork Reduction Act, and Federal Register requirements. OSR is intensifying regulatory reform and relief efforts and is continuing to concentrate on improving the scientific, engineering, and statistical base for regulations and policies. It is also developing and testing an integrated cost-effectiveness model for multi-media chemical control and is initiating an Agencywide investigation of priorities for regulating chemicals.

1984 Explanation of Changes from the Amendment

The net increase of +$167,100 results from the following action:

-Reprogramming. (+$167,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$167,100 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,993,500 and 58.4 total workyears for this program, all of which is for the Salaries and Expenses appropriation. OSR initiated efforts to improve the scientific, engineering, and statistical base of the Agency's regulations and policies. In addition, OSR's procedural improvements included earlier and more substantive technical, economic, and policy review of Agency regulations, standards, and criteria. State involvement in the rule development process was also enhanced. OSR continued to reduce excessive paperwork burdens imposed by EPA regulations through the application of rigorous independent analysis as well as to review new and existing rules and policies. OSR also initiated an outreach program for regulatory improvement, revised and strengthened the environmental integrity of emissions trading, approved or proposed approval of twelve state generic rules and trading applications, and continued development of compliance and enforcement reforms.

OFFICE OF MANAGEMENT SYSTEMS AND EVALUATION

1985 Program Request

The Agency requests a total of $2,595,300 supported by 53.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $138,500 and no workyears from 1984. The increase is due to increases in personnel and operating costs. With these resources, the Office of Management Systems and Evaluation (OMSE) will assess whether Agency goals and program commitments are being met and what corrective actions should be taken if weaknesses are detected. In order to accomplish this, OMSE will carry out evaluations of major programs or program components, perform short-term management reviews, and operate the management accountability system and ensure its integration with other Agency management systems. OMSE will also develop Agencywide planning guidance and will implement a special tracking system for the Deputy Administrator. The Regional Administrator's Environmental Management Reports will continue under OMSE auspices as will the development of improved indicators of environmental status and trends and improved monitoring strategies.

1984 Program

In 1984, the Agency is allocating a total of $2,456,800 and 53.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This level of funding allows OMSE to assess the Agency's effectiveness in meeting program goals and commitments by conducting evaluations of major programs, by running the management accountability system, by performing a number of quality assurance reviews, and by developing and recommending corrective actions where the need for improvement is identified. Also, OMSE is developing mechanisms for connecting the accountability system, which measures each program's progress in meeting its goals and commitments, with other Agency management systems such as performance standards, merit pay, managing for environmental results, and the budget process. In addition, OMSE is working with Headquarters and Regional offices to develop improved indicators of environmental status and trends, and improved monitoring strategies. OMSE is also overseeing implementation of the recommendations contained in the final report of the State-Federal task force.

1984 Explanation of Changes from the Amendment

The net decrease of -$1,800 results from the following action:

-Reprogramming. (-$1,800) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$1,800 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,454,100 and 49.8 total workyears to this program, all of which was for the Salaries and Expenses appropriation. OMSE completed the development of an Agency strategic plan for program delegation to the States and was involved in developing other issue specific integrated management plans through work on the Administrator's management guidance for 1984 and 1985. It worked to develop strategies for improving EPA's partnership with the States and concluded evaluations on the ocean dumping program, alternatives to land disposal of hazardous waste, Air New Source Performance Standards, and hazardous air pollutants. OMSE expanded its efforts to implement and refine the accountability system for the Administrator, to conduct in-depth quality assurance reviews of programs, and to promote the adoption of baseline measures in environmental quality to assess performance and guide the Agency's allocation of resources toward actions which helped to provide the greatest environmental results.

AGENCY MANAGEMENT

Office of General Counsel

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
General Counsel								
Salaries & Expenses		$5,347.9	$6,172.5	$7,017.0	$6,198.5		$6,314.7	$116.2
	TOTAL	$5,347.9	$6,172.5	$7,017.0	$6,198.5		$6,314.7	$116.2
TOTAL:								
Salaries & Expenses		$5,347.9	$6,172.5	$7,017.0	$6,198.5		$6,314.7	$116.2
Office of General Counsel	TOTAL	$5,347.9	$6,172.5	$7,017.0	$6,198.5		$6,314.7	$116.2
PERMANENT WORKYEARS								
General Counsel		106.1	119.0	132.9	119.0		119.0	
TOTAL PERMANENT WORKYEARS		106.1	119.0	132.9	119.0		119.0	
TOTAL WORKYEARS								
General Counsel		115.1	129.5	150.4	129.5		129.5	
TOTAL WORKYEARS		115.1	129.5	150.4	129.5		129.5	

MANAGEMENT AND SUPPORT

Agency Management

Office of General Counsel

Budget Request

The Agency requests a total of $6,314,700 supported by 129.5 total workyears for this program, all of which is for the Salaries and Expenses appropriation, an increase of $116,200 and no total workyears. The increase reflects an increase in personnel and operating costs.

Program Description

This activity provides Agency program offices with interpretations of EPA administered statutes and other applicable laws and legal advice on all major regulatory decisions and other Agency actions. With the Department of Justice, it handles all litigation activities in which EPA is a defendant.

GENERAL COUNSEL

1985 Program Request

The Agency requests a total of $6,314,700 supported by 129.5 total workyears for this program, all of which is for the Salaries and Expenses appropriation. The increase of $116,200 and no total workyears from 1984 represents an increase in personnel costs and operating support.

Priority functions in 1985 include: handling all litigation in which EPA is a defendant; a large volume of complex Resource Conservation and Recovery Act (RCRA) regulatory reviews; RCRA State delegations; RCRA, National Pollutant Discharge Elimination System, and Safe Drinking Water Act permit reviews; Federal Insecticide, Fungicide, and Rodenticide Act adjudicatory proceedings; Rebuttable Presumption Against Registration conclusions; Clean Air Act and National Ambient Air Quality Standards revisions; National Emission Standards for Hazardous Air Pollutants standards; State Implementation Plan reviews; support to the Office of Inspector General; construction grant support; bid protests; debarment and suspension implementation; and Freedom of Information Act and personnel ethics matters.

1984 Program

In 1984, the Agency is allocating a total of $6,198,500 and 129.5 total workyears to this program, all of which is for the Salaries and Expenses appropriation. The 1984 program provides continued support to Agency media program priorities through legal advice and assistance, handling defensive litigation, and participating in selected administrative proceedings.

1984 Explanation of Changes from the Amendment

The net decrease of -$818,500 results from the following actions:

-Reorganization. (-$835,500) A Congressionally approved reorganization to create the Office of External Affairs (OEA) moved the Legislative Division from the Office of General Counsel to OEA and established the Office of Legislative Analysis.

-Reprogrammings. (+$17,000) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$17,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $5,347,900 and 115.1 total workyears all of which was for the Salaries and Expenses appropriation. In 1983, the General Counsel supported Agency priorities by providing legal advice and support to Agency managers and defending the Agency in litigation filed against it. The Office of General Counsel also reviewed selected regulatory actions to ensure legal defensibility and provided advice on other actions, such as grants, contracts, and personnel actions.

AGENCY MANAGEMENT

Office of External Affairs

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Office of Legislative Analysis								
Salaries & Expenses					$835.5		$903.1	$67.6
	TOTAL				$835.5		$903.1	$67.6
Office of Congressional Liaison								
Salaries & Expenses		$1,404.7	$1,811.6	$1,115.4	$929.9		$1,014.0	$84.1
	TOTAL	$1,404.7	$1,811.6	$1,115.4	$929.9		$1,014.0	$84.1
Office of Public Affairs								
Salaries & Expenses		$2,043.0	$1,393.1	$1,741.7	$2,182.3		$2,324.5	$142.2
	TOTAL	$2,043.0	$1,393.1	$1,741.7	$2,182.3		$2,324.5	$142.2
Office of Intergovernmental Liaison								
Salaries & Expenses		$504.6	$532.2	$532.2	$532.2		$560.6	$28.4
	TOTAL	$504.6	$532.2	$532.2	$532.2		$560.6	$28.4
Office of Federal Activities								
Salaries & Expenses		$1,083.7	$1,643.9	$1,635.0	$1,635.0		$1,697.2	$62.2
	TOTAL	$1,083.7	$1,643.9	$1,635.0	$1,635.0		$1,697.2	$62.2
TOTAL:								
Salaries & Expenses		$5,036.0	$5,380.8	$5,024.3	$6,114.9		$6,499.4	$384.5
Office of External Affairs	TOTAL	$5,036.0	$5,380.8	$5,024.3	$6,114.9		$6,499.4	$384.5

AGENCY MANAGEMENT

Office of External Affairs

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Office of Legislative Analysis				13.9		13.9	
Office of Congressional Liaison	26.0	31.9	22.5	17.0		19.5	2.5
Office of Public Affairs	39.4	20.1	30.4	43.4		45.6	2.2
Office of Intergovernmental Liaison	6.4	6.4	6.4	6.4		9.7	3.3
Office of Federal Activities	21.9	24.2	24.2	24.2		24.3	.1
TOTAL PERMANENT WORKYEARS	93.7	82.6	83.5	104.9		113.0	8.1

AGENCY MANAGEMENT

Office of External Affairs

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Office of Legislative Analysis				20.9		20.9	
Office of Congressional Liaison	34.5	43.4	27.5	21.5		21.5	
Office of Public Affairs	44.5	25.5	36.8	50.6		50.6	
Office of Intergovernmental Liaison	10.1	9.7	9.7	9.7		9.7	
Office of Federal Activities	25.0	29.3	29.3	29.3		29.3	
TOTAL WORKYEARS	114.0	107.9	103.3	132.0		132.0	

Agency Management

Office of External Affairs

Budget Request

The Agency requests a total of $6,499,400 for the Salaries and Expenses appropriation supported by 132.0 total workyears for the Office of External Affairs in 1985. This is an increase of $384,500 and an increase of no workyears from 1984. These resources will enable the Office of External Affairs to support the Administrator and each Assistant Administrator in more effectively communicating the Agency's program activities and mandates within and outside the Agency.

Program Description

These resources include the salaries and associated costs for the Office of Legislative Analysis, the Office of Congressional Liaison, the Office of Public Affairs, the Office of Intergovernmental Liaison, and the Office of Federal Activities. The Office of External Affairs was created at the start of 1984 by consolidating the independent activities of four former staff offices of the Office of the Administrator. The Administrator created this new organization to improve the public perception of the Agency, to increase Agency effectiveness by improving Congressional liaison, to establish outreach to broaden our constituency base through State and local contacts, public interest groups, and citizen participation, and to reaffirm and strengthen Federal agency contacts.

Office of Legislative Analysis -- This office is responsible for preparing Agency draft legislation, developing testimony for Agency officials to present before Congress, and conducting analysis of environmentally related legislation developed by the Congress. It works closely with the Administrator, Assistant Administrator for External Affairs, and the program offices in developing the Agency's legislative program and in guiding specific legislative proposals through the inter-agency legislative clearance process. This office also maintains the Agency's Legislative Reference Library and provides legislative research services for the Agency.

Office of Congressional Liaison -- This office serves as the principal point of Congressional contact for the Agency. It provides daily summaries of Congressional activities throughout EPA and provides recommendations, advice, and assistance to the Administrator, Assistant Administrator for External Affairs, and other senior policy officials involved with the development, presentation, and implementation of the Agency's legislative program. The office reviews all Congressional correspondence, responds to Congressional requests for information and Agency publications, and coordinates grant and contract announcements to Congress.

Office of Public Affairs -- This office develops Agency policy for media relations and public information. Its activities include: preparing press releases and feature material for media distribution; responding to press inquiries; conducting press conferences and briefings; coordinating media appearances of key Agency officials; and compiling daily and weekly newsclips of national press coverage. The office also prepares publications for the general public on major programs and activities of EPA; produces newsletters for internal EPA use; supervises the nationwide EPA community relations program to inform citizens of EPA decisions and actions; supports television and radio outlets nationwide with audiovisual materials explaining EPA programs; and reviews all public information materials for conformance to the Agency's Graphics Standards System.

Office of Intergovernmental Liaison -- This office serves as the Agency's principal point of contact with major national public interest groups, environmental groups, industry representatives, and State and local governments; advises the Administrator and other Agency officials on the positions and views of these groups; and develops appropriate strategies for effective interactions and dia-

logue with them and their constituencies. The office will continue to emphasize the Administrator's concern for developing cooperation and support for delegating Agency programs to State and local governments and for broadening the base of involvement in the Agency's regulatory decision making process.

Office of Federal Activities -- This office develops national policies for dealing with environmental issues and problems associated with Federal agencies. Specifically, the Office of Federal Activities (OFA) is responsible for ensuring that EPA and other Federal agencies carry out their activities in an environmentally sound manner pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act. In this capacity, OFA files and publishes notices of all Environmental Impact Statements. In concert with the Army Corps of Engineers, OFA manages the Dredge and Fill program under Section 404 of the Clean Water Act. OFA oversees Federal facility compliance with all Federal statutory environmental requirements, and specifically with Executive Order 12088. OFA also develops policies for dealing with environmental problems on Indian reservations and implements such policies.

OFFICE OF LEGISLATIVE ANALYSIS

1985 Program Request

The Agency requests a total of $903,100 supported by 20.9 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $67,600 and no workyears from 1984 levels. The increase is due to increases in personnel and support costs. During 1985, the office will realize efficiencies in dealing with Congressional and Agency requests due to continuing computerization of routine legislative research functions. The budget request will enable the office to ensure legislation, testimony, and reports on legislation are developed for presentation to the Congress in a timely manner.

1984 Program

The Agency is allocating a total of $835,500 and 20.9 total workyears to this office, all of which is for the Salaries and Expenses appropriation. The Office of Legislative Analysis provides leadership and support for special working groups established within the Agency to draft legislative initiatives in key areas. It ensures that testimony, drafting of legislation, and reports on pending and enacted legislation will be developed and provided to the Congress in a timely fashion. In addition to providing technical support to the Agency and the Office of Congressional Liaison on the major environmental legislation developing in Congress, special attention will be devoted to reauthorization of the Clean Air, Clean Water, and Safe Drinking Water Acts. The office is also responsible for representing the Agency in all legislation-related day-to-day contacts with the Office of Management and Budget and other Federal agencies.

In late 1983, the Office of Legislation was abolished and the Legislation Division was transferred to the Office of General Counsel. Upon further review, it was determined that the Legislative Division should be established as a separate operating entity within the Office of External Affairs to improve the effectiveness of the Agency in presenting a cohesive legislative program to the Congress and the public.

1984 Explanation of Changes from the Amendment

The net increase of +$835,500 results from the following action:

-Reorganization. (+$835,500) A Congressionally approved reorganization to create the Office of External Affairs (OEA) moved the Legislative Division from the Office of General Counsel to OEA and established the Office of Legislative Analysis.

1983 Accomplishments

The 1983 resources for the Legislative Division are reflected in the Congressional Liaison program element. In 1983, the Office of Legislative Analysis reviewed legislative suggestions from the program offices for consistency with the Administrator's overall goals and policies and recommended to the Administrator a package of legislative amendments to be pursued in 1984. In addition, the Office of Legislative Analysis developed testimony and related material for 87 hearings, and submitted 6 formal legislative proposals, two of which became public law.

OFFICE OF CONGRESSIONAL LIAISON

1985 Program Request

The Agency requests a total of $1,014,000 supported by 21.5 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $84,100 and no workyears from 1984 levels. The increase in dollars is due to more accurate pricing of workyears and support costs. The continuing use of computerized data bases for routine research and information functions within the Office of Congressional Liaison (OCL) and the Office of Legislative Analysis will enable OCL staff to deal more rapidly with Congressional requests in 1985. The budget request will enable the office to provide day-to-day liaison with the Congress and will ensure that legislation, testimony, reports on legislation, and Member and Committee requests are provided in a timely manner.

1984 Program

The Agency is allocating a total of $929,900 and 21.5 total workyears to this office, all of which is for Salaries and Expenses appropriation. The Office of Congressional Liaison represents the views of the Agency before Congress and is responsible for the coordination of EPA-related hearings, the legislative management of the Agency's nine major statutory authorities, the briefing of affected Congressional delegations, and the supervision of Congressionally generated casework and all daily interaction with Congressional Members and staff. Special attention in the second session of the 98th Congress will be placed on Congressional actions involving such major pieces of legislation as CERCLA, TSCA, the Clean Air Act, and the Clean Water Act.

At the start of 1984, the Office of Congressional Liaison was established as a separate operating entity.

1984 Explanation of Changes from the Amendment

The net decrease of -$185,500 results from the following actions:

-Reprogramming. (-$185,500) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$26,500 to the Salaries and Expenses appropriation.

Another reprogramming totaling -$159,000, transferred resources from the Office of Congressional Liaison to the Pollutant Strategies and Air Standards Development Program at the direction of Congress in a letter dated October 20, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,404,700 and 34.5 total workyears for this program, all of which was for the Salaries and Expenses appropriation. These obligations represent the combined expenditures for the Offices of Congressional Liaison (formerly the Congressional Liaison Division of the Office of Legislation) and Legislative Analysis (formerly the Legislative Division of the Office of Legislation).

The Office of Congressional Liaison was responsible for all day-to-day Congressional contacts, including more than 200 briefings of Members and/or staff, involvement in 87 hearings, and coordination of more than 70 specific Committee investigative information requests.

OFFICE OF PUBLIC AFFAIRS

1985 Program Request

The Agency requests a total of $2,324,500 supported by 50.6 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of $142,200 and no workyears from 1984 levels. The increase reflects more accurate pricing of workyears and support costs. In 1985, the Office of Public Affairs (OPA) will continue to educate the public about the issues before the Agency and to promote a better understanding of the Administrator's objectives and goals as well as the Agency's mission.

1984 Program

The Agency is allocating a total of $2,182,300 and 50.6 total workyears for this office, all of which is for the Salaries and Expenses appropriation. In addition to working with the news media and providing informational materials for the general public, OPA activities will be devoted to: (1) establishing a Community Relations arm to design, develop and coordinate strategies to explain EPA activities on a proactive and ongoing basis; (2) improving Agency publications to ensure that Congress, the public and the regulated community are adequately informed about Agency activities; and (3) improving internal communications by expanding news briefs, instituting a management bulletin, and coordinating Regional news monitoring.

1984 Explanation of Changes from the Amendment

The net increase of +$440,600 results from the following action:

-Reorganization. (+$440,600) A Congressionally approved reorganization to create the Office of External Affairs (OEA) transferred resources from the Immediate Office of External Affairs to the Office of Public Affairs to reflect the transfer of the Audiovisual Division to that organization.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,043,000 and 44.5 total workyears, all of which was for the Salaries and Expenses appropriation. In addition to its regular duties, the office assisted in the production of an annual Administrator's Report to the President; published a new booklet as a guide to the Agency and its activities; initiated a more comprehensive daily news briefs publication for the use of top Agency officials in both headquarters and the regions; and implemented the Agency's Peer Review and Administrative Control System.

OFFICE OF INTERGOVERNMENTAL LIAISON

1985 Program Request

The Agency requests a total of $560,600 supported by 9.7 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This represents an increase of $28,400 and no workyears from 1984 levels. The increase in resources reflects more accurate pricing of workyears and support costs. In 1985, the office expects to continue to enhance its program of communication and liaison with State and local elected officials and major intergovernmental consti-

tuency organizations (ICOs). The office will initiate outreach efforts for environmental and industry interest groups, and will play a major role in the implementation of the Agency's State-Federal Roles Task Force recommendations.

1984 Program

In 1984, the Agency is allocating a total of $532,200 and 9.7 total workyears, all of which is for the Salaries and Expenses appropriation. The current fiscal year program includes activities which support one of the Administrator's primary goals, to pursue delegation of EPA programs to State and local governments. The office will improve communication with elected State and local officials by maintaining regular contact with intergovernmental constituent organizations, environmental and industry organizations, and interest groups; representing the Agency at meetings conducted by ICO environmental committees and assisting in the development of ICO environmental policy statements; developing an Agency policy on the review of ICO contract and grant requests to ensure relevant and cost-effective work products; participating in Agencywide workgroups on EPA policy management issues; communicating on a regular and frequent basis with elected State and local officials; and providing advice on State and local concerns to senior Agency officials.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $504,600 and 10.1 total workyears for this program, all of which was in the Salaries and Expenses appropriation. During 1983, the office established and improved basic working relationships with intergovernmental constituency organizations, attended and/or addressed numerous meetings of ICO environmental committees, began a series of informal meetings with various business groups, and communicated on a daily basis with numerous elected State and local officials.

OFFICE OF FEDERAL ACTIVITIES

1985 Program Request

The Agency requests a total of $1,697,200 supported by 29.3 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This represents an increase of $62,200 and no workyears. The increase reflects more accurate pricing of workyears and support costs. The Office of Federal Activities (OFA) will maintain oversight concerning EPA's compliance with the National Environmental Policy Act (NEPA), including preparation of the necessary environmental documents for NEPA compliance, such as Environmental Impact Statements (EISs); review other Federal agencies' projects and actions including their EISs; direct activities to assure compliance by other Federal agencies with all environmental statutes pursuant to Executive Order 12088; review the budget plans of other agencies to assure adequate funding of pollution abatement projects pursuant to Office of Management and Budget Circular A-106; manage the dredge and fill (Section 404) program; and coordinate EPA programs for Indian reservations.

1984 Accomplishments

In 1984, the Agency is allocating $1,635,000 and 29.3 total workyears for this office, all of which is for the Salaries and Expenses appropriation. The Office of Federal Activities develops guidance and directs implementation of EPA policies associated with other Federal agencies; it has been increasing liaison activities with these agencies. OFA plans to revise and update policies and guidance for its programs, including development of Agency Indian policies. In

addition, the office continues to review and prepare EISs, review other Federal actions, and pursuant to Executive Order 12088 and Office of Management and Budget Circular A-106, direct activities related to compliance of Federal installations with environmental regulations.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $1,083,700 and 25.0 total workyears, all of which was for the Salaries and Expenses appropriation. The Office of Federal Activities focused its activity on regulatory reform within the 404 program and on development and implementation of Agency policies and guidance associated with other Federal agencies. Specifically, OFA reviewed about 200 Environmental Impact Statements, and proposed rules and regulations pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act. OFA continued to direct activities to assure Federal facility compliance with all environmental mandates.

AGENCY MANAGEMENT

Office of Inspector General

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Office of Inspector General								
Salaries & Expenses		$11,309.1	$12,163.1	$13,600.0	$13,761.2		$14,695.4	$934.2
	TOTAL	$11,309.1	$12,163.1	$13,600.0	$13,761.2		$14,695.4	$934.2
TOTAL:								
Salaries & Expenses		$11,309.1	$12,163.1	$13,600.0	$13,761.2		$14,695.4	$934.2
Office of Inspector General	TOTAL	$11,309.1	$12,163.1	$13,600.0	$13,761.2		$14,695.4	$934.2
PERMANENT WORKYEARS								
Office of Inspector General		140.7	140.7	173.6	172.6		211.7	39.1
TOTAL PERMANENT WORKYEARS		140.7	140.7	173.6	172.6		211.7	39.1
TOTAL WORKYEARS								
Office of Inspector General		160.1	170.7	206.7	205.7		215.7	10.0
TOTAL WORKYEARS		160.1	170.7	206.7	205.7		215.7	10.0

MANAGEMENT AND SUPPORT

Agency Management

Office of Inspector General

Budget Request

The Agency requests a total of $14,695,400 supported by 215.7 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This is an increase of $934,200 and 10.0 total workyears to establish a fraud prevention program and support ongoing activities.

Program Description

This office is responsible for: conducting, supervising, and coordinating audits and investigations relating to EPA programs and operations; promoting economy and effectiveness in the administration of EPA programs; preventing and detecting fraud and abuse in EPA programs and operations; keeping the Administrator and the Congress advised of problem areas and related corrective action; and reviewing EPA regulations and legislation.

OFFICE OF INSPECTOR GENERAL

1985 Program Request

The Agency requests a total of $14,695,400 supported by 215.7 total workyears for this office, all of which is for the Salaries and Expenses appropriation. This reflects an increase of 10.0 total workyears and $934,200. The additional resources requested will be used to establish a fraud prevention program and enhance the operations discussed below. The Office of the Inspector General (IG) will continue to place primary emphasis on increasing internal and management audits of Agency programs, reducing the backlog of construction grant final audits, and investigating antitrust violations, white collar crimes, employee misconduct, and improprieties by contractors.

1984 Program

In 1984, the Agency is allocating a total of $13,761,200 and 205.7 total workyears to this office, all of which is for the Salaries and Expenses appropriation. The Office of the Inspector General will increase its efforts in performing internal and management audits needed to help improve the economy, efficiency, and effectiveness of overall program operations. Primary emphasis will be on reviewing programs or areas which have never been reviewed. For example, reviews will be made of the adequacy of:

- Federal and state controls to assure that hazardous and toxic materials are not improperly disposed of in open dumps and land fills;

- State agency management of construction grant programs to assure that facilities being constructed are needed, properly sized, cost effective, constructed in accordance with approved plans and specifications, and provide for improved treatment which meets established effluent limitations; and

- Agency procedures to evaluate whether the use of pesticides and/or toxic substances should be approved or restricted.

The backlog of construction grants awaiting final audit will be reduced by more than 50 percent through the use of public accounting firms under contract.

Investigative resources will be devoted to investigations of (1) unlawful price fixing and bid rigging conspiracies; (2) white collar crimes concerning embezzlement, forgery, procurement fraud, and false claims; (3) employee misconduct and unlawful disclosures of confidential business information; and (4) improprieties by contractors leading to suspension and debarment actions. Continued efforts will be made to encourage the use of the Office of the Inspector General hotline to uncover instances of suspected fraud, waste, and mismanagement. A fraud prevention program will be established and the Office of the Inspector General will provide technical and audit assistance to elements of the Agency assessing the adequacy of internal controls as required by the Federal Managers Financial Integrity Act of 1982.

1984 Explanation of Changes from the Amendment

The net increase of +$161,200 results from the following actions:

-Reprogrammings. (+$161,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$161,200 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $11,309,100 and 160.1 total workyears, all of which was for the Salaries and Expenses appropriation. The Office of the Inspector General issued 1,842 reports on regular EPA audits which questioned $116 million of the $3.8 billion audited. On an overall basis, $97 million of costs questioned were sustained by Agency management. During the year, the Agency obtained $48 million of cost efficiencies and $40 million of cash savings as a result of audit efforts. Internal audits provided recommendations for improving the effectiveness and efficency of program operations. These included:

- Improved enforcement of Agency requirements to initiate timely construction of wastewater treatment works could save the agency more than $400 million, and

- Improved controls over EPA's external research and development program were needed to assure that funds were spent for the purposes intended, adequate reviews were made of research proposals, and necessary controls were in place to assure that completed research reports were provided in a timely manner.

The Office of Inspector General also completed the initial phase of coordinating vulnerability assessments for all Agency programs and began work to reduce the backlog of construction grant projects awaiting final audit. The Office of the Inspector General opened 136 new investigative cases and closed 93 cases with 29 indictments and convictions. The office pioneered new investigative approaches to uncover fraud in the sewer line rehabilitation industry. It had excellent results in this regard in the Atlanta area. For the first time in the history of the IG's office, it became involved in bid rigging cases through the cooperation of the U.S. Department of Justice Antitrust Division and the U.S. Department of Transportation. These efforts resulted in 14 indictments, 12 convictions and numerous suspensions and debarments.

AGENCY MANAGEMENT

Office of Administration and Resources Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Program Management - Administration								
Salaries & Expenses		$1,899.4	$1,908.4	$2,025.7	$1,319.5		$1,324.6	$5.1
	TOTAL	$1,899.4	$1,908.4	$2,025.7	$1,319.5		$1,324.6	$5.1
Financial Management - Headquarters								
Salaries & Expenses		$4,603.2	$3,460.8	$4,212.3	$4,362.4		$5,443.9	$1,081.5
	TOTAL	$4,603.2	$3,460.8	$4,212.3	$4,362.4		$5,443.9	$1,081.5
Office of the Comptroller								
Salaries & Expenses		$2,259.2	$2,227.8	$2,227.8	$2,227.8		$2,514.5	$286.7
Operations, Research and Facilities		$95.6						
	TOTAL	$2,354.8	$2,227.8	$2,227.8	$2,227.8		$2,514.5	$286.7
Contracts and Grants Management								
Salaries & Expenses		$8,694.0	$8,088.6	$8,378.7	$8,498.7		$9,453.9	$955.2
	TOTAL	$8,694.0	$8,088.6	$8,378.7	$8,498.7		$9,453.9	$955.2
Personnel and Organization Services								
Salaries & Expenses		$7,093.6	$6,631.1	$6,633.8	$6,673.8		$7,734.2	$1,060.4
	TOTAL	$7,093.6	$6,631.1	$6,633.8	$6,673.8		$7,734.2	$1,060.4

AGENCY MANAGEMENT

Office of Administration and Resources Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Facilities & Management Services								
Salaries & Expenses		$6,045.7	$5,807.0	$5,636.5	$5,835.9		$6,440.7	$604.8
	TOTAL	$6,045.7	$5,807.0	$5,636.5	$5,835.9		$6,440.7	$604.8
Information Systems & Services								
Salaries & Expenses		$5,079.8	$4,652.8	$4,981.6	$5,274.6		$5,974.4	$699.8
	TOTAL	$5,079.8	$4,652.8	$4,981.6	$5,274.6		$5,974.4	$699.8
Occupational Health & Safety								
Salaries & Expenses		$.1						
	TOTAL	$.1						
TOTAL:								
Salaries & Expenses		$35,675.0	$32,776.5	$34,096.4	$34,192.7		$38,886.2	$4,693.5
Operations, Research and Facilities		95.6						
Office of Administration and Resources Management	TOTAL	$35,770.6	$32,776.5	$34,096.4	$34,192.7		$38,886.2	$4,693.5
PERMANENT WORKYEARS								
Program Management - Administration		27.1	32.0	35.0	25.8		25.8	

AGENCY MANAGEMENT

Office of Administration and Resources Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Financial Management - Headquarters	110.1	89.8	106.1	107.1		112.1	5.0
Office of the Comptroller	46.8	45.0	45.0	45.0		45.0	
Contracts and Grants Management	181.1	165.3	173.9	175.7		181.7	6.0
Personnel and Organization Services	136.1	125.1	128.7	129.7		137.7	8.0
Facilities & Management Services	167.7	160.5	155.4	167.4		170.2	2.8
Information Systems & Services	103.9	89.3	101.9	104.3		109.3	5.0
TOTAL PERMANENT WORKYEARS	772.8	707.0	746.0	755.0		781.8	26.8
TOTAL WORKYEARS							
Program Management - Administration	37.2	43.0	47.0	31.0		29.0	-2.0
Financial Management - Headquarters	135.9	111.0	128.8	131.8		136.8	5.0
Office of the Comptroller	55.2	58.7	58.7	58.7		58.7	

AGENCY MANAGEMENT

Office of Administration and Resources Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Contracts and Grants Management	224.5	206.6	216.0	219.0		224.0	5.0
Personnel and Organization Services	183.6	173.6	177.6	178.6		186.6	8.0
Facilities & Management Services	191.3	181.1	176.0	190.0		190.0	
Information Systems & Services	126.3	106.1	119.9	124.9		129.9	5.0
TOTAL WORKYEARS	954.0	880.1	924.0	934.0		955.0	21.0

Agency Management

Office of Administration and Resources Management

Budget Request

The Agency requests a total of $38,866,200 supported by 955.0 total workyears, all of which will be for the Salaries and Expenses appropriation, an increase of $4,693,500 and 21.0 total workyears from 1984. The increased resources are necessary to provide additional administrative and personnel support and enhanced financial services to an expanding Agency.

Program Description

The Office of Administration and Resources Management (OARM) performs Agencywide administrative management and support functions and provides administrative services to Headquarters and our two largest non-Regional field operations -Research Triangle Park (RTP), North Carolina and Cincinnati, Ohio. OARM also controls the Agency's central planning and budgeting process which allocates workyear and financial resources among program areas and ensures adequate fund control. In addition, OARM provides certain administrative support services for the entire Agency, including buildings and facilities management and nationwide support functions.

The immediate office of the Assistant Administrator provides overall direction for all OARM activities as well as Agencywide policy regarding administrative support services. There are five organizational components under the Assistant Administrator for Administration and Resources Management: Office of the Comptroller, Office of Administration, Office of Information Resources Management, and the Offices of Administration at Research Triangle Park and Cincinnati. The Office of the Comptroller is responsible for the Agency's financial accountability, policy, and budget development activities. The Office of Administration provides services in the areas of personnel administration, facilities management, organizational analysis, and contract and grant management and administers the Agency's occupational health and safety program. The Office of Information Resources Management directs the Agency's ADP program and library services. Our RTP and Cincinnati offices provide the same services and support as those at Headquarters to the environmental programs at EPA's major field locations. A brief description of each of the program elements included in OARM follows:

Program Management - Administration -- This program element consists of the Assistant Administrator's immediate office which provides oversight, planning functions, and performs all of the budgeting and resource management activities within OARM.

Financial Management - Headquarters -- This component includes financial management, policy and accounting, and financial reporting activities for Headquarters and field offices.

Office of the Comptroller -- This component develops and operates EPA's program planning and budgeting system; analyzes and prepares Agency budgets for submission to Congress and OMB; and maintains the Agency's allocation, control, and review system for all workyear and financial resources.

Contracts and Grants Management -- This program element provides resources to establish Agencywide contracts and grants policy; to award and administer contracts and small purchases at Headquarters, RTP, and Cincinnati; and to award and manage Headquarters grants and other financial assistance programs.

Personnel and Organization Services -- This program provides resources for Agencywide personnel policy guidance and personnel services such as staffing, classification, and training to Headquarters and field offices; Agencywide management analysis and directives management; and the Agency's occupational health and safety program designed to maintain safe working conditions and to protect the health of our employees.

Facilities and Management Services -- This program element provides resources for facilities acquisition, maintenance, and protection; management of the Nationwide Support, Headquarters Support, and Buildings and Facilities accounts; and the immediate offices of the Directors of the Office of Information Resources Management and the Offices of Administration at Cincinnati and Research Triangle Park.

Information Systems and Services -- Included in this program element are resources for the Agency's centralized ADP systems management and processing support staff; the Library Systems Staff, which maintains the Agency's libraries at headquarters, Cincinnati, and Research Triangle Park; and the ADP services component within the Office of Administration at Cincinnati.

PROGRAM MANAGEMENT - ADMINISTRATION

1985 Program Request

The Agency requests $1,324,600 supported by 29.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. The increase of $5,100 represents increases in personnel and support costs and the decrease of 2.0 workyears reflects both changes in management priorities through functional reorganizations as well as efficiencies from improved management. This level of funding will maintain current service levels for the basic budgetary, administrative, analytical, and strategic planning needs of the Office of Administration and Resources Management (OARM). In 1985, the Office will provide guidance and overall direction for OARM, provide program and administrative support, direct direct and manage OARM's resources, and continue to develop and initiate strategies to enhance the efficiency and effectiveness of OARM.

1984 Program

In 1984, the Agency is allocating $1,319,500 and 31.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This funding is used for centralized strategic planning, oversight of the Agency's administrative systems and services, review of organizational and consolidation issues, continued strengthening of EPA's financial management, and the exploration of cost containment and other management effectiveness strategies within OARM and for the Agency. In addition, these funds are being used to direct, monitor, and conduct special analyses and projects related to the effective execution and efficient operation of OARM's budget.

1984 Explanation of Changes from the Amendment

The net decrease of -$706,200 results from the following actions:

-Reprogrammings. (-$706,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$3,200 to the Salaries and Expenses appropriation.

An additional reprogramming of -$703,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to the line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $1,899,400 and 37.2 total workyears for this program, all of which was for the Salaries and Expenses appropriation. These resources provided overall policy direction for OARM long-range planning, strategy development, budgeting, resource management, and other management activities. During 1983 several priority actions were accomplished: improved contracts and grants management, cost reduction and containment strategies, better financial management, recommendations for ADP consolidation, capital asset management, position management planning, and improved service delivery. Building upon the consolidation of OARM's analytical and administrative personnel, we achieved improved service and resource efficiencies in our budgetary, analytical, administrative, and long-range planning activities.

FINANCIAL MANAGEMENT - HEADQUARTERS

1985 Program Request

The Agency requests $5,443,900 supported by 136.8 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $1,081,500 and 5.0 total workyears. The increase in resources will enable the Agency to fully implement the Federal Managers Financial Integrity Act and other statutory requirements and improve financial services. Through this program, we will continue efforts to standardize financial and accounting transaction processing so that it is better controlled while also responsive to both Agencywide and program-specific needs. Services funded by this program include: basic accounting and payroll support; accountability throughout the Financial Management System; support to enhance the Office of Administration and Resources Management's efforts in budget execution and resource control at the allowance level; processing of grants, contracts, purchase orders, travel, and other vouchers and claims; and financial reporting necessary to meet Agency fund control requirements. These resources will also support our efforts to refine Agency accounting and financial policies; increase operational productivity through automation; improve internal day-to-day financial service; provide controls which permit us to detect and prevent fraud, waste, and abuse; and perform a full range of cash management reviews.

1984 Program

The Agency is allocating $4,362,400 and 131.8 total workyears for this program, all of which is for the Salaries and Expenses appropriation. With these resources we are providing the full array of financial services for the Agency. This includes the continuation of our effort to fully automate our financial processing to meet the reporting requirements from OMB, Treasury, and the Congress; implementing OMB Bulletin 83-6, which requires establishing a policy for accelerating the processing and deposit of receipts; improving control over disbursements; and eliminating idle cash balances. We will also fully implement an electronic fund transfer system to reduce paperwork within the financial management area.

1984 Explanation of Changes from the Amendment

The net increase of +$150,100 results from the following actions:

-Reprogrammings. (+$150,100) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$19,900 to the Salaries and Expenses appropriation.

An additional reprogramming of +$170,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to the line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, The Agency obligated $4,603,200 and 135.9 total workyears for this program, all of which was for the Salaries and Expenses appropriation. In addition to routine financial management activities, we implemented an automated travel information and management system which provides better management of travel funds; an aggressive OMB approved cash management program; an Agencywide client services program; and continued to monitor audit disallowances to ensure collection of debts due the Agency.

OFFICE OF THE COMPTROLLER

1985 Program Request

The Agency requests $2,514,500 supported by 58.7 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This reflects an increase of $286,700 for increased personnel and support costs and no workyears from 1984. With these resources, the Office of the Comptroller will direct EPA's initial planning and budgeting process for 1987 and the budget request for 1986. This request will also fund resource analyses, information, and assistance to all Headquarters and Regional management offices; management of the automated obligations and outlays forecasting system; analyses of selected resource trends during the execution of the 1985 budget; and continuation of the implementation of OMB Circular A-76. These analytical projects will better link the Agency's planning, budgeting, and resources management processes.

1984 Program

In 1984, the Agency is allocating $2,227,800 and 58.7 total workyears to this program, all of which is for the Salaries and Expenses appropriation. With these funds the Office of the Comptroller manages the 1986 budget process, provides support in the development of the 1985 operating plans, monitors expenditure of 1984 funds, conducts resource utilization analyses, and is upgrading the Agency workload models. These resources also fund the program required by OMB Circular A-76 which requires cost analysis of commerical and industrial activities to determine if these activities should be performed by the Agency or the private sector.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $2,354,800 and 55.2 total workyears for this program, of which $2,259,200 was for the Salaries and Expenses appropriation and $95,600 for the Operations, Research and Facilities appropriation. With these resources, this program managed the initial phase of the 1985 budget process, supported the development of the Agency's 1984 budget and operating plans, monitored 1983 expenditure of funds, and provided special analyses of resource issues for senior Agency management.

CONTRACTS AND GRANTS MANAGEMENT

1985 Program Request

The Agency requests $9,453,900 supported by 224.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $955,200 and 5.0 workyears. The increased resources will allow us to enhance our contracts management capabilities to ensure and monitor contractor performance.

In the contracts area, our request will also enable us to continue to process and award new contracts and purchase orders; close out existing contracts; evaluate contractor cost proposals; process contract terminations and claims; and provide technical review, policy compliance, and administrative oversight and management to the three contracting and purchasing offices in headquarters, Cincinnati, and Research Triangle Park, North Carolina. These resources will also support the automated procurement document control system and the project officers training program that will aid in producing more understandable and precise Requests for Procurement and better managed contracts.

In the grants and other financial assistance areas, these funds will allow us to: develop and interpret policy and procedural guidance for Agencywide assistance programs; award and administer Headquarters grants, cooperative agreements, and interagency agreements; respond to requests for ad hoc assistance from Regions and Federal assistance recipients; continue to modify, update, and simplify our grant regulations; increase in-house audit and cost analyses; and continue efforts begun in 1983 to debar and suspend persons who abuse the privileges of Federal assistance. These resources will also support cost benefit analyses on grant regulations and data verifications for the Grants Information and Control System.

1984 Program

In 1984, the Agency is allocating $8,498,700 and 219.0 total workyears for this program, all of which is for the Salaries and Expenses appropriation. In the contracts area, we expect to award $270,000,000 in contracts and process $50,000,000 in purchase orders. Our key objectives are to award and manage contracts, increase productivity by simplifying the tasks required to process and administer contracts, further automate the procurement system, and continue our project officers training and certification program.

We will continue to streamline the regulations governing Federal assistance to eliminate unnecessary and duplicative requirements and to reduce the information burden our regulations impose on grantees. We also are developing guidance for EPA managers and grantees on the revised and simplified regulations. We will continue to award and administer Federal assistance agreements funded by headquarters program offices. In addition, we will ensure debarment or suspension of persons who abuse the privileges of Federal assistance through waste, poor performance, or corrupt practices which will result in greater efficiency, program integrity, and significant dollar savings to the Government.

1984 Explanation of Changes from the Amendment

The net increase of +$120,000 results from the following action:

-Reprogramming. (+$120,000) A reprogramming of +$120,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $8,694,000 and 224.5 total workyears for this program, all of which was for the Salaries and Expenses appropriation. With these resources, we awarded contract actions totalling $240,000,000 and purchase order actions totalling $50,000,000. We streamlined contracting procedures which expedited contract processing. We continued to negotiate overhead rates with EPA contractors and assistance recipients in support of our own operations and OMB Circular A-87 (regarding indirect costs for State and local governments). We also continued our participation with OMB in the implementation of the Federal Acquisition Regulations. In the Federal assistance area, we have increased the number of consolidated grants; simplified our grant procedures by revising four important regulations; implemented a debarment and compliance program designed to eliminate waste, fraud, and abuse; and assumed responsibility for administering interagency agreements.

PERSONNEL AND ORGANIZATION SERVICES

1985 Program Request

The Agency requests $7,734,200 supported by 186.6 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $1,060,400 and 8.0 total workyears. The increase is for increased personnel and program costs in the Personnel Management Division (PMD) and the Management and Organization Division (MOD).

PMD will utilize this increase to enhance the Agency's existing human resource development program by assisting managers and employees in their career advancement goals and providing the Agency with new and qualified personnel for EPA's critical program areas. These resources will continue to fund PMD's ongoing functions as required by law which include position management, pay administration, personnel/payroll processing, and recruiting.

MOD will maintain its current program functions of providing management studies and organizational analyses. The increase in contract dollars will provide analytical and managerial studies of Headquarters and Regional information needs.

The Occupational Health and Safety Staff (OHSS) will continue to provide full service and technical assistance to all health and safety programs in EPA and, with contract support, will implement a comprehensive medical data records project.

1984 Program

The Agency is allocating $6,673,800 and 178.6 total workyears for this program, all of which is for the Salaries and Expenses appropriation. In 1984, PMD is implementing a more comprehensive human resource development program by broadening training and executive development efforts, which will assure better workforce planning and utilization. To improve position management, PMD is developing a plan to enhance control of such problems as general grade escalation. PMD also provides quality personnel programs and services that meet statutory and programmatic requirements.

MOD provides a central analysis staff for Agencywide organization improvement and reform efforts. MOD also provides analytical support to senior managers on operating policies and procedures and administers and coordinates all Agency proposals for reorganization, delegation of authority, and Agency forms.

OHSS continually upgrades Agency occupational health and safety programs, and has developed specialized health and safety procedures for the handling of hazardous material.

1984 Explanation of Changes from the Amendment

The net increase of +$40,000 results from the following action:

-Reprogramming. (+$40,000) A reprogramming of +$40,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $7,093,600 and 183.6 total workyears for this program, all of which was for the Salaries and Expenses appropriation. In addition to providing a full range of personnel services and functions, PMD developed a plan for a comprehensive human resource development program. Increased emphasis was placed on improving the skills, knowledge, and abilities of the EPA workforce; providing personnel services to the program offices; and making personnel programs available to supervisors and managers for tracking and rewarding employee performance.

MOD expanded its organizational process reviews which improved program effectiveness and efficiency in several Agency offices.

In 1983, OHSS distributed revised medical monitoring guidelines incorporating both the changes in EPA missions and six years of medical monitoring program experience; generated and graphically displayed EPA's up-to-date illness and injury reports; eliminated incorrect claims from the Workmen's Compensation Statement; and developed a number of innovative safety training programs for EPA.

FACILITIES AND MANAGEMENT SERVICES

1985 Program Request

The Agency requests $6,440,700 supported by 190.0 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $604,800 and no workyears to cover anticipated increases in personnel and support costs. With these resources we will: provide nationwide policy guidance and technical assistance in the fields of telecommunications, mail accountability, property and supply management, printing procurement and production, and physical and document security; administer the Agency's Nationwide Support and headquarters Support budgets; manage the Buildings and Facilities program; provide facilities engineering and real estate expertise to all EPA programs; provide operational support and housekeeping services at EPA facilities located in Washington, Cincinnati, and Research Triangle Park, North Carolina (RTP); monitor and direct contractor resources under support contracts; and provide management direction for the Office of Information Resources Management, the Offices of Administration at Cincinnati and RTP, and the Facilities Divisions at headquarters, RTP, and Cincinnati. In 1985, we will continue the same service levels for these functions as in 1984.

1984 Program

In 1984, the Agency is allocating $5,835,900 and 190.0 total workyears to this program, all of which is for the Salaries and Expenses appropriation. We are continuing many initiatives begun in 1982 and 1983, particularly in the areas of cost containment, user accountability, increased reliance on contractors for actual service delivery, and more effective and efficient office and building services.

1984 Explanation of Changes from the Amendment

The net increase of +$199,400 results from the following actions:

-Reprogrammings. (+$199,400) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$119,400 to the Salaries and Expenses appropriation.

Another reprogramming of +$80,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $6,045,700 and 191.3 total workyears to this program, all of which was for the Salaries and Expenses appropriation. In 1983 we prepared a space plan to direct the realignment of Agency space holdings in conformance with GSA space utilization guidelines, improved working conditions at Waterside Mall, enhanced headquarters security, continued major cost-cutting efforts while maintaining service levels in several areas, and maximized the utilization of contractor resources through improved contract and project management.

INFORMATION SYSTEMS AND SERVICES

1985 Program Request

The Agency requests $5,974,400 supported by 129.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $699,800 and 5.0 workyears for the Agency's information resources management program. Our central automated data processing (ADP) management group sets Agencywide ADP policy; assists EPA programs in developing and maintaining computerized information systems; operates the Agency's timesharing computer center at Research Triangle Park, North Carolina (RTP); and coordinates Agencywide ADP services to assure more effective, efficient, and responsible use of our ADP services. These resources will enable us to manage EPA's data center facility in RTP, maintain a financing mechanism and accounting methodology for central timesharing service, develop Agencywide information management policies and procedures, and maintain data standards which ensure the data integrity which is critical to EPA's mission and program objectives. In 1985, we will address three new activities essential to the cost-effective ADP support of EPA programs and Regions: the modernization of the distributed processing network that serves EPA Regions and laboratories, the integration of EPA's major administrative systems under a single data base management system, and the operation of an in-house Agency payroll system.

Also included within this program are traditional library functions, such as reference and referral services, and administrative support for the libraries in headquarters, RTP, and Cincinnati, as well as guidance and management for the entire Agency library system. We are also expanding the EPA Information Clearinghouse (which coordinates all Agency environmental data bases) to include information on grants and contracts to assist Agency managers in avoiding duplicative efforts and to facilitate the use of already available data by EPA researchers and analysts. The Public Inquiry Center, which responds to over 50,000 public inquiries annually, and the records management function are also funded under this program.

1984 Program

In 1984, the Agency is allocating $5,274,600 and 124.9 total workyears for this program, all of which is for the Salaries and Expenses appropriation. These resources support ADP activities including managing EPA's data center facility and maintaining those systems which are essential to the Agency's mission. We provide ADP planning and system design assistance to program offices, focusing our resources toward high priority systems. We are beginning to address data base applications and the distributed processing network (Regional and laboratory minicomputers and telecommunications) throughout the Agency, and to strengthen our management of EPA's ADP resources.

1984 Explanation of Changes from the Amendment

The net increase of +$293,000 results from the following action:

-Reprogramming. (+$293,000) A reprogramming of +$293,000 transferred the resources for analytical and substantive project management from the Immediate Office of the Assistant Administrator to line operation offices within the Office of Administration and Resources Management. This Salaries and Expenses reprogramming, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $5,079,800 and 126.3 total workyears for this program, all of which was for the Salaries and Expenses appropriation, to support centralized information management activities for the Agency. We emphasized particularly the improved compatibility and efficiency of EPA's automated systems and the development of a prototype office automation system.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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REGIONAL MANAGEMENT

Regional Management

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Resource Management - Regions								
Salaries & Expenses				$1,536.3	$1,632.6		$1,636.2	$3.6
	TOTAL			$1,536.3	$1,632.6		$1,636.2	$3.6
Financial Management - Regions								
Salaries & Expenses		$2,233.6	$2,558.8	$2,682.0	$2,415.6		$2,687.1	$271.5
	TOTAL	$2,233.6	$2,558.8	$2,682.0	$2,415.6		$2,687.1	$271.5
Personnel Management - Regions								
Salaries & Expenses		$2,920.8	$2,664.4	$3,049.7	$2,883.7		$3,152.6	$268.9
	TOTAL	$2,920.8	$2,664.4	$3,049.7	$2,883.7		$3,152.6	$268.9
Administrative Management - Regions								
Salaries & Expenses		$5,024.0	$5,119.4	$5,635.9	$5,183.4		$5,550.9	$367.5
	TOTAL	$5,024.0	$5,119.4	$5,635.9	$5,183.4		$5,550.9	$367.5
Regional Management								
Salaries & Expenses		$8,814.0	$8,926.6	$8,904.8	$8,431.6		$8,744.0	$312.4
	TOTAL	$8,814.0	$8,926.6	$8,904.8	$8,431.6		$8,744.0	$312.4
Regional Counsel								
Salaries & Expenses		$3,198.4	$3,125.6	$3,266.9	$3,246.3		$3,495.8	$249.5
	TOTAL	$3,198.4	$3,125.6	$3,266.9	$3,246.3		$3,495.8	$249.5

REGIONAL MANAGEMENT

Regional Management

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Planning, Evaluation & Analysis - Regions								
Salaries & Expenses		$3,434.3	$4,291.8	$2,499.2	$2,174.5		$2,409.9	$235.4
	TOTAL	$3,434.3	$4,291.8	$2,499.2	$2,174.5		$2,409.9	$235.4
TOTAL:								
Salaries & Expenses		$25,625.1	$26,686.6	$27,574.8	$25,967.7		$27,676.5	$1,708.8
Regional Management	TOTAL	$25,625.1	$26,686.6	$27,574.8	$25,967.7		$27,676.5	$1,708.8
PERMANENT WORKYEARS								
Resource Management - Regions				39.9	42.3		39.9	-2.4
Financial Management - Regions		77.0	73.8	80.3	80.3		84.0	3.7
Personnel Management - Regions		78.3	72.6	79.7	79.7		81.7	2.0
Administrative Management - Regions		137.7	131.1	141.6	141.6		141.6	
Regional Management		173.4	160.3	160.3	160.3		160.3	
Regional Counsel		68.0	70.2	70.2	70.2		70.2	
Planning, Evaluation & Analysis - Regions		88.9	97.2	57.3	54.9		57.3	2.4
TOTAL PERMANENT WORKYEARS		623.3	605.2	629.3	629.3		635.0	5.7

REGIONAL MANAGEMENT

Regional Management

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL WORKYEARS							
Resource Management - Regions			42.5	45.1		42.5	-2.6
Financial Management - Regions	87.9	82.4	89.6	89.6		92.6	3.0
Personnel Management - Regions	99.9	86.1	93.9	93.9		95.9	2.0
Administrative Management - Regions	175.5	159.3	170.9	170.9		170.9	
Regional Management	217.9	198.2	198.2	198.2		198.2	
Regional Counsel	75.3	78.2	78.2	78.2		78.2	
Planning, Evaluation & Analysis - Regions	94.3	103.6	61.1	58.5		61.1	2.6
TOTAL WORKYEARS	750.8	707.8	734.4	734.4		739.4	5.0

Regional Management

Budget Request

The Agency requests a total of $27,676,500 from the Salaries and Expenses appropriation supported by 739.4 total workyears in 1985, an increase of $1,708,800 and 5.0 total workyears from 1984. The increase will primarily support full implementation of internal control systems in the Regions, implementation of Reform 88 initiatives, and support a larger Regional workforce.

Program Description

This program contains the following program elements:

Resource Management - Regions -- This program element provides resources to develop Regional budgets and operating plans, participate in the workload analysis process, manage current year resources and enhance resource management and control in the Regions.

Financial Management - Regions -- This program element provides financial accounting and reporting services for the Regional offices.

Personnel Management - Regions -- These resources provide basic personnel services, including staffing, classification, and training, to the Regional offices.

Administrative Management - Regions -- This group of activities includes minicomputer systems management, library support, safety, security, printing and copying, facilities management, small purchases, and other administrative functions.

Regional Management -- This unit includes the Regional Administrators and their immediate staffs, as well as the basic staff functions of civil rights.

Regional Counsel -- The ten offices of Regional Counsel assist the Regional Administrators in ensuring that their decisions are legally defensible and consistent with national legal interpretations. They represent the Regional office in defensive litigation activities; review Regional rulemakings; assist States in obtaining delegation of programs; and support the Regional enforcement litigation program.

Planning, Evaluation, and Analysis - Regions -- Resources in this program element provide analytical support to the Regional Administrators to assure the efficient and effective operation of EPA Regions. Activities include planning, accountability reporting, program evaluation, economic analysis, management, and Regional participation in EPA's regulatory process.

RESOURCE MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $1,636,200 supported by 42.5 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $3,600 and a decrease of 2.6 total workyears from 1984, resulting from increased efficiency. The request provides resources for our Regional Administrators to develop Regional budgets and operating plans, participate in the workload analysis process, manage current year expenditures, and enhance resource management and control in the Regional offices.

1984 Program

In 1984, the Agency is allocating $1,632,600 and 45.1 total workyears to this program, all of which is for the Salaries and Expenses appropriation. These resources are being used to conduct the budgeting and resource analysis functions in the ten Regional offices. These resources allow Regional Administrators to effectively and efficiently manage their Regions by providing sound analysis concerning resource management and to upgrade resource reporting in our Regional offices.

1984 Explanation of Changes from the Amendment

The net increase of +$96,300 results from the following actions:

-Reprogrammings. (+$96,300) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$96,300 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated resources for these activities under the Planning, Evaluation, and Analysis Program Element. These resources allowed the Regional Administrators to participate in the 1985 budget and 1984 operating plan processes for our Regional offices and to effectively and efficiently manage 1983 expenditures.

FINANCIAL MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $2,687,100 supported by 92.6 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $271,500 and 3.0 total workyears. This increase will support full implementation of internal control systems in our Regional offices and allow for implementation of Reform 88. At this level of funding, Regional finance offices will also provide basic services and maintain ongoing and routine financial management functions, which include maintaining GAO-approved accounting and internal control systems, processing obligation transactions and voucher payments, conducting payroll activities, preparing billings and processing collections, providing monthly fund control reports, and processing and paying claims for travel. The Agency will also continue efforts to fully automate our financial management process and to strengthen our cash and credit management, internal control initiatives, and data integrity and quality assurance.

1984 Program

In 1984, the Agency is allocating $2,415,600 and 89.6 total workyears to this program, all of which is for the Salaries and Expenses appropriation. With these resources, the Regional finance offices are providing all basic accounting, payment processing, and payroll support activities and will increase emphasis on audit coordination and follow-up activities. This includes tracking all audit exceptions from point of issue to final resolution. The Agency is also continuing efforts to detect abuse of Federal funds; to strengthen our credit management to ensure timely and economical collection of all monies owed EPA; and to implement an Agencywide data integrity assurance program to provide timely, complete, and accurate financial reports.

1984 Explanation of Changes from the Amendment

The net decrease of -$266,400 results from the following actions:

-Reprogrammings. (-$266,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$15,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling -$281,400, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $2,233,600 and 87.9 total workyears for this program, all of which was for the Salaries and Expenses appropriation. With these resources, Regional finance offices strengthened the automated financial control systems and implemented an internal control system to improve EPA's defense against the misuse of Federal resources. The Agency also ensured that billing and collection activities met the President's commitment to cash management. Other activities supported by this program included payroll and fiscal support services, timely collection of monies owed EPA, data integrity and quality assurance programs, and timely and accurate financial reports to support Regional management.

PERSONNEL MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $3,152,600 supported by 95.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $268,900 and 2.0 total workyears. This increase in dollars and workyears will provide personnel resources necessary to support a larger regional workforce. This request will enable the Regional Personnel offices to effectively respond to requests for staffing and recruitment actions, payroll and personnel actions, and training requests. In 1985, utilizing the resources from this request, the Regional Personnel offices will fully implement the Regional employee relations programs, conduct special studies to support effective management of the Regional workforce, maintain the Performance Management System, conduct non-discretionary labor relations activities, and provide timely and reliable personnel management services.

1984 Program

In 1984, the Agency is allocating $2,883,700 and 93.9 total workyears for this program, all of which is for the Salaries and Expenses appropriation. The Regional Personnel offices are providing a full range of ongoing personnel services as described above to meet statutory requirements. The Regional Personnel offices are also providing Regional managers with management and organizational analyses to support the Regions' missions and programs.

1984 Explanation of Changes from the Amendment

The net decrease of -$166,000 results from the following actions:

-Reprogrammings. (-$166,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$14,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling -$180,000, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $2,920,800 and 99.9 total workyears for this program, all of which was for the Salaries and Expenses appropriation. The Regional Personnel offices provided quality personnel management services as well as Region-specific management and organizational assistance to Regional managers. The offices conducted position management studies, organizational analyses, and training programs to assist managers in optimizing personnel resources. Regional Personnel offices also assisted the headquarters personnel policy office in refining the Performance Management System and Merit Pay Program required by the Civil Service Reform Act, and maintained the Federal Equal Opportunity Recruitment Program.

ADMINISTRATIVE MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $5,550,900 supported by 170.9 total workyears for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $367,500 for increased personnel and support costs and no change in total workyears. The resources in this program element provide a wide range of administrative services to support day-to-day Regional operations, and to provide information management support such as systems design, development, planning, and evaluation. With this funding, the Regions will provide current services in health and safety, information management, and small purchase and contract and procurement liaison. Regional automated data processing (ADP) groups will effectively plan for and manage their computer and word processing services, as well as provide reliable, responsive technical assistance to end-users. In addition, while the costs associated with the ADP modernization of the Regional network will be funded by headquarters, Regional ADP personnel will make most of the necessary equipment installations and software modifications and implement the new hardware process in their own Regions. Regional Safety Officers will continue to conduct strong health and safety programs to minimize risks to EPA personnel.

1984 Program

In 1984, the Agency is allocating $5,183,400 and 170.9 total workyears, all of which is for the Salaries and Expenses appropriation, to provide Regional administrative support. These funds are providing ongoing operational support such as safety and security, property management and supply, general office services, libraries, small purchase and contract and procurement liaison, and program management. In addition, resources are being used to manage Regional computer centers, provide assistance to State and local agencies and EPA personnel in all ADP and word processing matters, prepare and install new system software and hardware, and offer in-house training for new systems users.

1984 Explanation of Changes from the Amendment

The net decrease of -$452,500 results from the following actions:

-Reprogrammings. (-$452,500) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$45,000 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling -$497,500, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $5,024,000 and 175.5 total workyears for this program, all of which was for the Salaries and Expenses appropriation. This provided a wide range of administrative services to all Regional programs, including: acquisition and management of equipment, supplies, and services; management of Regional ADP resources; and provision of library systems and services. As part of the Agency's commitment to provide the highest possible level of administrative services, the Regions maintained administrative information systems and minicomputer operations to ensure effective ADP operational support for Regional programs; provided administrative direction for support activities and services; maintained Regional library operations,, and managed word processing equipment and ADP systems acquisitions. The Regions also coordinated Regional records management, directed contracting and purchasing activities, ensured safety and security in the Regions, and managed property and supplies.

REGIONAL MANAGEMENT

1985 Program Request

The Agency requests a total of $8,744,000 supported by 198.2 total workyears for this program, all of which is for the Salaries and Expenses appropriation. This represents an increase of $312,400 for personnel costs and no change in total workyears. The budget request will enable the program to continue to shape and articulate policy for State and local governments, respond to inquiries from Congress, the news media and the public, establish regular communications with public interest, environmental, and business groups, and maintain Equal Employment and Freedom of Information programs.

1984 Program

In 1984, the Agency is allocating a total of $8,431,600 and 198.2 total workyears to this function, all of which is for the Salaries and Expenses appropriation. Basic press services and media relations activities are being maintained as well as policy guidance and executive direction for the Region as a whole. The program will continue the processing of Freedom of Information (FOI) requests, issuing critical news releases, maintaining a regional Equal Employment Opportunity program, responding to Congressional inquiries, and coordinating EPA involvement in major State environmental issues.

1984 Explanation of Changes from the Amendment

The net decrease of -$473,200 results from the following actions:

-Reprogrammings. (-$473,200) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$62,100 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling -$411,100, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $8,814,000 and 217.9 total workyears, all of which was for the Salaries and Expenses appropriation. This program provided support for the Regional Administrators and their immediate staffs, as well as for the basic staff functions of public affairs, Congressional, intergovernmental activities, and the equal employment opportunity function.

REGIONAL COUNSEL

1985 Program Request

The Agency requests a total of $3,495,800 supported by 78.2 total workyears, all of which is for the Salaries and Expenses appropriation, and reflects an increase of $249,500 and no change in total workyears. The increase represents additional personnel and operating support.

The 1985 Regional program will provide legal advice and consultation to Regional programs and will act as lead EPA attorneys on defensive litigation involving principally Regional issues. Other major activities include reviewing State legal authorities and advising States in program assumption matters related to the Resource Conservation and Recovery Act (RCRA) and other statutes; providing support to the construction grants program; and assisting States in making changes in statutes and regulations resulting from amendments to environmental statutes.

1984 Program

In 1984, the Agency is allocating a total of $3,246,300 and 78.2 total workyears to this program, all of which is for the Salaries and Expenses appropriation. Regional program includes assistance in furthering the assumption of environmental protection programs by States by providing advice and assistance to State agencies. In the construction grants area, the Regional Counsels handle administrative proceedings such as bid protests and grant appeals. It also advises on problems arising from outstanding grants.

1984 Explanation of Changes from the Amendment

The net decrease of -$20,600 results from the following actions:

-Reprogrammings. (-$20,600) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$20,600 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,198,400 and 75.3 total workyears, all of which was for the Salaries and Expenses appropriation. In 1983, the Regional Counsel program supported Agency priorities by providing legal advice and support to Regional managers and defending the Agency in litigation filed against it. They also advised on actions such as grants, contracts, and personnel actions. Additionally, Regional Counsel activities included advising State agencies on the legal requirements for assuming environmental protection programs, assisting in drafting appropriate regulatory language, and helping negotiate and document the terms of delegation agreements.

PLANNING, EVALUATION, AND ANALYSIS - REGIONS

1985 Program Request

The Agency requests $2,409,900 supported by 61.1 total workyears for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $235,400 and 2.6 workyears. In 1985, this request will provide the Regional Administrators with the resources necessary to carry out essential Regional planning, evaluation, and analysis activities. The Regions will concentrate on managing for environmental results; improving the annual planning process and utilizing environmental objectives in the planning process; refining accountability systems; analyzing weaknesses in the Agency's monitoring programs; improving monitoring data; developing monitoring strategies; and regulatory reform.

1984 Program

In 1984, the Agency is allocating a total of $2,174,500 and 58.5 total workyears to this program, all of which is for the Salaries and Expenses appropriation. These resources allow the Regions to execute essential Regional planning, program evaluation, and analytic activities. The Regions are placing special emphasis on accountability systems, process streamlining, regulatory reform, management for environmental results, and shifting Regional programs from an implementation to an oversight role. Specific examples include: linking accountability systems with performance standards, tracking of Regional and State activities, and implementing EPA oversight policy.

1984 Explanation of Changes from the Amendment

The net decrease of -$324,700 results from the following actions:

-Reprogrammings. (-$324,700) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net decrease of -$36,300 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expenses dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling -$288,400, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,434,300 and 94.3 total workyears for this program, all of which was for the Salaries and Expenses appropriation, to conduct the planning, evaluation, analysis, and budgeting functions in the ten Regional offices. (In 1984, the resources to support the budget activities were transferred to the Resources Management program element under the purview of the Office of Administration and Resource Management.) These resources reflected the increased importance of the budget execution and control functions, plus the Regional component of the Agencywide initiative to implement measures for regulatory reform and to institute management for environmental results. These resources allowed Regional Administrators to effectively and efficiently manage their Regions by providing sound analyses of Regional policy, processes, and resource management.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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SUPPORT COSTS

Support Costs

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Professional Training								
Salaries & Expenses		$415.8	$507.6	$507.6	$507.6		$500.0	-$7.6
	TOTAL	$415.8	$507.6	$507.6	$507.6		$500.0	-$7.6
Nationwide Support Services								
Salaries & Expenses		$43,830.8	$48,219.0	$48,219.0	$48,035.6		$53,571.6	$5,536.0
Operations, Research and Facilities		$29.7						
	TOTAL	$43,860.5	$48,219.0	$48,219.0	$48,035.6		$53,571.6	$5,536.0
Headquarters Support Services								
Salaries & Expenses		$25,275.8	$26,349.2	$26,699.2	$26,733.2		$31,779.5	$5,046.3
	TOTAL	$25,275.8	$26,349.2	$26,699.2	$26,733.2		$31,779.5	$5,046.3
Regional Support Services								
Salaries & Expenses		$14,526.2	$12,430.4	$12,430.4	$19,258.1		$20,569.7	$1,311.6
	TOTAL	$14,526.2	$12,430.4	$12,430.4	$19,258.1		$20,569.7	$1,311.6
Automated Data Processing Support Costs								
Salaries & Expenses		$18,024.1	$14,864.0	$19,564.0	$19,799.1		$23,700.0	$3,900.9
	TOTAL	$18,024.1	$14,864.0	$19,564.0	$19,799.1		$23,700.0	$3,900.9

SUPPORT COSTS

Support Costs

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
Lab Support - Research & Development								
Salaries & Expenses		$5,046.0	$4,710.4	$4,710.4	$4,710.4		$5,535.4	$825.0
	TOTAL	$5,046.0	$4,710.4	$4,710.4	$4,710.4		$5,535.4	$825.0
Lab Support - Air & Radiation								
Salaries & Expenses		$1,967.8	$2,178.5	$2,178.5	$2,178.5		$2,178.5	
	TOTAL	$1,967.8	$2,178.5	$2,178.5	$2,178.5		$2,178.5	
Lab Support - Pesticides & Toxic Substances								
Salaries & Expenses		$134.0	$151.4	$151.4	$151.4		$251.4	$100.0
	TOTAL	$134.0	$151.4	$151.4	$151.4		$251.4	$100.0
TOTAL:								
Salaries & Expenses		$109,220.5	$109,410.5	$114,460.5	$121,373.9		$138,086.1	$16,712.2
Operations, Research and Facilities		$29.7						
Support Costs	TOTAL	$109,250.2	$109,410.5	$114,460.5	$121,373.9		$138,086.1	$16,712.2

TOTAL WORKYEARS	
Regional Support Services	.3
TOTAL WORKYEARS	.3

Support Costs

Budget Request

The Agency requests a total of $138,086,100, all of which will be for the Salaries and Expenses appropriation, for support services in 1985, an increase of $16,712,200 from 1984. This increase will cover general support increases associated with a growing Agency workforce, as well as rising rent, telephone, and utility costs.

Program Description

The Agency Support Service component provides funds for general support to all Agency programs except Superfund. Programs under support services are:

Professional Training -- This component provides funds for Agencywide training programs including executive and supervisory training and development programs mandated by the Office of Personnel Management, the Civil Service Reform Act, or specific EPA needs.

Nationwide Support Services -- Agencywide costs include the following support functions: facilities rental and associated costs; payments to the U.S. Postal Service; Federal Telecommunications Service (FTS); nationwide protective services; reimbursements to the Federal Employees Compensation Fund; payments to the Public Health Service for personnel and administrative services for commissioned officers assisgned to EPA; and contracts and intergovernmental agreements which support EPA's occupational health and safety program and finance and payroll systems.

Headquarters Support Services -- This program funds local office, building, and information management service costs for headquarters and the field offices at Research Triangle Park (RTP), North Carolina and Cincinnati, Ohio.

Regional Support Services -- This component funds local office, building, and information management service costs for Regional offices.

Automated Data Processing Support Costs -- This program funds timesharing and related data processing services provided to all Agency programs through contracts with commercial suppliers and in-house computer facilities.

Lab Support - Research and Development -- This provides resources for basic facilities, operations, and maintenance for Office of Research and Development's seven laboratories (those located outside Cincinnati and Research Triangle Park). These costs are not covered by the Headquarters Support account, which funds similar items in headquarters, Cincinnati, and RTP.

Lab Support - Air and Radiation -- This provides funds for basic facilities and maintenance to support the Motor Vehicle Emissions Laboratory, the Eastern Environmental Radiation Facility, and the Las Vegas facility.

Lab Support - Pesticides and Toxic Substances -- This covers basic facilities and operations and maintenance costs for the laboratories in Beltsville, Maryland and Bay St. Louis, Mississippi.

PROFESSIONAL TRAINING

1985 Program Request

The Agency is requesting $500,000 for this program, all of which will be for the Salaries and Expenses appropriation, a decrease of $7,600 from 1984. This request maintains current training and development programs mandated either by statute, the Office of Personnel Management (OPM), or identified as specific Agency workforce needs. Our comprehensive human resources development program, serving headquarters, the Regions, and EPA's laboratory network, will enable the Agency's workforce to adapt to changing environmental programs and problems. These training efforts will enhance the Agency's scientific and technical expertise, management effectiveness, and clerical support.

1984 Program

In 1984, the Agency is allocating $507,600 for professional training activities, all of which is for the Salaries and Expenses appropriation. These funds are being utilized to strengthen and expand the skills, knowledge, and abilities of EPA employees in headquarters, laboratories, and Regional offices. This training effort features several on-going programs: secretary/clerical development, executive development, supervisory/management development, and technical and general workforce development. These programs and those mandated by the Civil Service Reform Act and OPM ensure that EPA has the requisite skills within its workforce to continually accomplish its statutorily mandated mission.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $415,800, all of which was for the Salaries and Expenses appropriation to provide professional training courses for EPA employees. These funds were utilized to revise the Agency's training policies and to develop and implement several training initiatives: the Senior Executive Service Candidate Program, performance appraisal skill workshops, and the career counseling center. Professional training funds were also utilized to conduct a thorough training needs assessment.

NATIONWIDE SUPPORT SERVICES

1985 Program Request

The Agency requests a total of $53,571,600 for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $5,536,000 over 1984. The increase from 1984 is attributable to increased FTS costs associated with expanded usage, increased space rental costs and requirements to accommodate a growing Agency workforce, and increased payroll and finance system costs related to the greater use of these systems.

1984 Program

In 1984, the Agency is allocating $48,035,600, all of which is under the Salaries and Expenses appropriation for Nationwide Support Services. The cost containment efforts begun in 1982 and 1983 in the areas of space, mail, and telecommunications will be expanded and updated in 1984.

1984 Explanation of Changes from the Amendment

The net decrease of -$183,400 results from the following action:

-Reprogramming. (-$183,400) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$183,400 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $43,860,500 for this program, of which $43,830,800 was for the Salaries and Expenses appropriation and $29,700 for the Operations, Research, and Facilities appropriation, which provided support services to all Agency programs. We implemented the following cost-cutting measures in 1983: (1) space consolidation at headquarters and in the field in accordance with GSA space utilization guidelines, (2) new mail accountability equipment to monitor and control postage costs, and (3) additional telephone user accountability equipment to further reduce our long distance bills.

HEADQUARTERS SUPPORT SERVICES

1985 Program Request

The Agency requests a total of $31,779,500 for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $5,046,300 from 1984. The increase over 1984 relates to several factors: (1) increased telecommunications and utility costs; (2) increased ADP support requirements; and (3) general support increases associated with a growing Agency workforce. The resources in this component fund office and building, ADP, and library services at Research Triangle Park (RTP), North Carolina, and Cincinnati:

1984 Program

In 1984, the Agency is allocating $26,733,200, all of which is for the Salaries and Expenses appropriation, to fund headquarters support costs. This provides resources to continue basic office, building, and information management services at EPA headquarters, RTP, and Cincinnati. Although we will continue and expand our cost reduction programs in 1984, higher workforce levels will cause a slight increase in headquarters support costs from 1983 levels.

1984 Explanation of Changes from the Amendment

The net increase of +$34,000 results from the following action:

- Reprogramming. (+$34,000) a reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. The change resulted in a net increase of +$34,000 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $25,275,800, all of which was for the Salaries and Expenses appropriation, for Headquarters Support Services. We undertook the following initiatives in 1983: (1) enhanced headquarters security, (2) improved the condition of Waterside Mall, (3) developed a plan for headquarters space, and (4) provided nationwide policy guidance and technical assistance in the areas of telecommunications equipment procurement, security management, and property control.

REGIONAL SUPPORT SERVICES

1985 Program Request

The Agency requests $20,569,700 for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $1,311,600 from 1984. The increase from 1984 anticipates telecommunications and utilities rate increases, an enhanced Regional effort in the area of computer services, and general support increases concomitant with an expanded Regional workforce. The request will provide basic support services to the ten Regional offices.

1984 Program

In 1984, the Agency is allocating $19,258,100, all of which is for the Salaries and Expenses appropriation. In 1984, the Office of Administration and Resources Management initiated a consolidation of all non-program specific Regional expense dollars (except Personnel Compensation and Benefits and travel) under the Regional Support Services program element. This funding consolidation allows Regions to centrally manage their expenses in a more cost-effective manner.

1984 Explanation of Changes from the Amendment

The net increase of +$6,827,700 results from the following actions:

- Reprogramming. (+$6,827,700) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$188,900 to the Salaries and Expenses appropriation.

An additional reprogramming was made moving all non-program specific "support" type expense dollars into the Regional Support program element. The reprogramming to Salaries and Expenses, totaling +$6,638,800, was included in a reprogramming letter to Congress on September 29, 1983.

1983 Accomplishments

In 1983, the Agency obligated $14,526,200, all of which was for the Salaries and Expenses appropriation, to provide basic support services to the ten Regional offices.

AUTOMATED DATA PROCESSING SUPPORT COSTS

1985 Program Request

The Agency requests $23,700,000 for this program, all of which will be for the Salaries and Expenses appropriation, an increase of $3,900,900 from 1984, to support the operations of the Agency's National Computer Center (NCC) at Research Triangle Park (RTP), North Carolina. Our 1985 request is based upon our projections of a significant increase in the demand for automated data processing service in 1984 and 1985. While the overall increase in services will decrease unit prices, the larger demand means that the total cost for services will be higher.

This program funds centralized timeshare services for all EPA programs and is vital to the operation and maintenance of our data systems (including national environmental data bases and Agencywide management and administrative systems). It is, therefore, inextricably tied to the attainment of EPA's environmental goals. These funds provide hardware and software equipment rental, maintenance requirements, and the contractor support necessary to operate the National Computer Center in RTP. The NCC operates and manages the central computer facility in RTP; the Washington Distribution Center, a user service in Headquarters; and a nationwide telecommunications network.

In 1985, we will complete the modernization of EPA's mainframe computers, telecommunications network, and the interactive software necessary to make our central data bases accessible and useful to national, Regional, and State environmental program managers. Critical national systems, including the new air monitoring and compliance tracking system, the water enforcement and needs survey systems, and the initiative to integrate EPA's administrative systems, were all designed assuming modernized facilities and networks. Funding this modernization is necessary to preclude the redesign of significant aspects of these new systems.

1984 Program

In 1984, the Agency is allocating $19,799,100, all of which is for the Salaries and Expenses appropriation, to provide ADP timesharing services to all Agency programs exclusive of the Superfund program. In 1984, the NCC is implementing facility management innovations such as consolidating the UNIVAC and IBM operations into a single location, thus reducing the costs of telecommunications, increasing productivity, and allowing a more optimal use of resources. The NCC is emphasizing the use of standard vendor supplied software with reduced maintenance requirements; capitalized leased disk subsystems, which provide continuing savings over the life of the system; and user assistance to reduce failure and downtime.

1984 Explanation of Changes from Budget Estimate

The net increase of +$235,100 results from the following actions:

-Reprogrammings. (+$235,100) Several reprogrammings were made to this activity which were not reportable under the Congressional reprogramming limitations. These changes resulted in a net increase of +$235,100 to the Salaries and Expenses appropriation.

1983 Accomplishments

In 1983, the Agency obligated $18,024,100, all of which was for the Salaries and Expenses appropriation, to provide ADP services to all Agency programs exclusive of Superfund in 1983. We improved our timeshare tracking and reporting practices, enabling EPA timeshare users to better plan and manage their automated data processing activities.

LAB SUPPORT - RESEARCH AND DEVELOPMENT

1985 Program Request

The Agency requests a total of $5,535,400 for this program, all of which will be for the Salaries and Expenses appropriation. This represents an increase of $825,000 resulting from the dramatic cost increases that have occurred in the Office of Research and Development's remote laboratories over the past few years. The funds will provide for essential services required to operate and maintain ORD's seven remote laboratories located in Athens, Georgia; Ada, Oklahoma; Corvallis, Oregon; Duluth, Minnesota; Narragansett, Rhode Island; Gulf Breeze, Florida; and Las Vegas, Nevada. The services include, but are not limited to facilities operation and maintenance, janitorial and guard services, local telephone services, utilities, mechanical equipment operations, maintenance, and rental costs.

1984 Program

In 1984, the Agency is allocating a total of $4,710,400 for this program, all of which is for the Salaries and Expenses appropriation to provide for the essential services required to operate and maintain ORD's remote laboratories.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $5,046,000 for this program, all of which was for the Salaries and Expenses appropriation. This provided funding for the operations and maintenance of ORD's remote laboratories.

LAB SUPPORT - AIR AND RADIATION

1985 Program Request

The Agency requests a total of $2,178,500 for this program, all of which is for the Salaries and Expenses appropriation. This represents no change from 1984. This program supports the Motor Vehicle Emissions Laboratory (MVEL) in Ann Arbor, Michigan; the Eastern Environmental Radiation Facility (EERF) in Montgomery, Alabama; and the Las Vegas radiation laboratory in Nevada. These funds provide for the basic facilities operations and maintenance costs necessary to support these laboratories. Support provided consists of security, janitorial and maintenance services, utilities, GSA vehicles, supplies and materials, and communications.

1984 Program

In 1984, the Agency is allocating $2,178,500, all of which is for the Salaries and Expenses appropriation to support these three laboratories. The 1984 program is providing the same types of activities described for 1985, as these services, basic laboratory operations, maintenance and supplies are required on a continuing basis.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,967,800 for this program, all of which was for the Salaries and Expenses appropriation in support of the MVEL, the EERF and the Las Vegas Facility. These funds provided the basic facilities operations and maintenance costs necessary to operate these laboratories.

LAB SUPPORT - PESTICIDES AND TOXIC SUBSTANCES

1985 Program Request

In 1985, the Agency requests $251,400, all of which will be for the Salaries and Expenses appropriation, an increase of $100,000 to cover more intensive use of facilities for activity related to pesticides. These funds will be used for basic facilities and operations and maintenance costs for the laboratories in Beltsville, Maryland and Bay St. Louis, Mississippi. These costs include utilities, security, communications, warehousing, custodial services and building maintenance.

1984 Program

In 1984, the Agency is allocating $151,400 for this program, all of which is for the Salaries and Expenses appropriation. The 1984 program supports the same type of activities as in 1985.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

The Agency obligated $134,000 for this program, all of which was for the Salaries and Expenses appropriation for continuing requirements for general support and maintenance.

ENVIRONMENTAL PROTECTION AGENCY

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SUPERFUND

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
APPROPRIATION							
Hazardous Substance Response Trust Fund	$230,233.4	$310,000.0	$410,000.0	$410,000.0	$50,000.0	$640,000.0	230,000.0
TOTAL, Superfund	$230,233.4	$310,000.0	$410,000.0	$410,000.0	$50,000.0	$640,000.0	230,000.0
PERMANENT WORKYEARS	635.7	619.3	892.0	890.9	50.0	1,249.0	358.1
TOTAL WORKYEARS	724.8	707.1	1,007.1	1,007.1	50.0	1,357.1	350.0
OUTLAYS	$147,803.0	$269,000.0	$325,000.0	$325,000.0	$15,000.0	$535,000.0	$210,000.0
AUTHORIZATION LEVELS	Authorization is by virtue of Appropriation Act.						

OVERVIEW AND STRATEGY

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (commonly known as "Superfund") charged the EPA with the responsibility for providing emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites. In 1985, the major emphasis of the Superfund program will be to stabilize imminent threats at hazardous waste sites and to implement the necessary long-term remedial response actions. The cost of implementing CERCLA is financed by the Hazardous Substance Response Trust Fund. This Fund is derived primarily by the combination of excise taxes levied on oil and chemical manufacturers and revenues from the General Fund. The authority to collect taxes expires on or before September 30, 1985.

As authorized under CERCLA, EPA will respond to releases of hazardous substances, pollutants, and contaminants by taking removal or remedial actions or by compelling responsible parties to undertake the response action. Removal actions are generally short term responses taken to abate an immediate threat posed by the uncontrolled release of hazardous substances at sites or spills into the air, land, or water. Remedial actions involve long-term and more permanent remedies taken instead of or in addition to removal actions. The program will continue to select sites for remedial actions from the National Priorities List (NPL) and undertake all response in accordance with the National Contingency Plan.

While the Agency has the primary responsibility for implementing the program, CERCLA and Executive Order 12316 provide a clear mandate for the Agency to work closely with a variety of other Federal agencies and the States to carry out the Act. The Agency undertakes five major activities in implementing the Superfund program: Hazardous Substance Response, Enforcement, Research and Development, Management and Support, and Interagency Support. The effective integration of these activities involves close cooperation among various Agency offices, the States, and other Federal agencies with specific program responsibilities.

HAZARDOUS SUBSTANCE RESPONSE ACTIONS WILL INCREASE SIGNIFICANTLY IN 1985

In 1985, Hazardous Substance Response activities financed by the Hazardous Substance Response Trust Fund will focus on the containment of the most serious hazardous waste emergencies and will continue to plan and implement remedial responses at uncontrolled sites posing the greatest threat to public health and the environment. The Agency will continue its systematic evaluation of all known uncontrolled waste sites to determine which pose a significant threat to public health and the environment. As required by CERCLA, the National Priorities List (NPL) has been prepared to provide a basis for determining priorities for response and enforcement efforts.

In order to make the best use of available resources, each site on the list will be evaluated to determine whether there is a strong probability of initiating a successful enforcement action. In those instances where there is a significant likelihood of success, a concerted effort will be made to have the responsible party assume the cost of response. In most cases, negotiations with responsible parties will be based on assessments of the site and analysis of alternative solutions conducted by the Agency. If these negotiations fail, the Agency will proceed to design and implement the selected alternative. In those instances where there is little or no chance to have the responsible party assume the cost of response, the Agency will initiate efforts to characterize the site, identify and analyze feasible solutions, and design and implement the most cost-effective remedy.

By the end of 1985, the Agency expects to have initiated Federally-financed planning efforts at approximately 396 sites for eventual remedial actions by either responsible parties or the Fund and begun the design or implementation of solutions at approximately 135 sites. Of this total, the Agency is requesting supplemental 1984 funding to begin design or implementation at 10 of these sites and to accelerate the process of characterizing sites for either Fund-financed response or enforcement action at 35 sites.

The Agency will continue to work closely with the States in selecting and implementing solutions at hazardous waste sites. States will be encouraged to accept management of all response actions. For those sites where the States do not accept the lead, the Agency will contract for the necessary expertise to conduct the assessment and selection of alternatives and the Army Corps of Engineers will manage design and construction contracts to implement the selected remedy.

The Agency will continue to ensure an effective emergency response program for any major hazardous substance spills and for emergency releases at hazardous waste sites. Approximately 4,000 hazardous substance spills and site emergencies occur each year. The Federal government will become involved only in those situations where the party responsible is either unknown or incapable of properly handling the response and the State and local governments are unable to provide adequate response. The Agency will continue to work closely with the U.S. Coast Guard and other members of the National and Regional Response Teams, as well as the States, to provide timely and effective response in those situations where it is truly necessary.

ENFORCEMENT ACTIONS WILL BE FOCUSED TO ACHIEVE MAXIMUM SITE CLEANUP AND RECOVERY OF FUNDS

The goal of the enforcement program is to secure privately-financed response actions through negotiated settlement or administrative and legal actions and to recover Trust Fund money spent on Federal remedial and removal actions. Those responsible for uncontrolled sites will be given an early opportunity to reach a settlement and voluntarily assume the cost of responding. In most cases, negotiations will be based on an assessment of site conditions and alternative solutions identified by the Agency. This will enable the Agency to target its enforcement efforts at those sites where there is a high probability of success.

The Agency will also initiate administrative and legal actions against those parties who fail to negotiate in good faith, focusing on the development of legally and technically sound cases where appropriate, including those instances where Fund-financed response can not be undertaken. In addition, in those cases where a Fund-financed response action is undertaken, the Agency will seek to recover the cost of responding.

RESEARCH AND DEVELOPMENT WILL CONTINUE TO SUPPORT FIELD RESPONSE ACTIONS

The Research and Development program supports the Agency, States, and industry in resolving those technical problems which inhibit the effective implementation of removal and remedial actions. Support focuses on adapting existing technologies and scientific information for application to uncontrolled hazardous waste site situations. For example, current technologies used in the construction industry and spill cleanup may be applicable to uncontrolled waste sites. However, before these technologies can be applied, they must first be tested, their cost-effectiveness determined, and their limitations understood. In addition, field response personnel must be in a position to rapidly identify and to accurately measure the hazardous waste with which they are confronted and to quickly determine the risk involved to the surrounding population and ecosystem.

Superfund research and development activities are systematically designed to provide the following in support of the Agency's program: methods for sampling and analyzing hazardous materials needed for quality assurance protocols; techniques for field response personnel to use in evaluating potential sites; and engineering and other technical guidance to Federal, State, and local officials for immediate response at uncontrolled site cleanup operations.

MANAGEMENT AND SUPPORT WILL PROVIDE AGENCY SERVICES TO THE SUPERFUND PROGRAM

Management and Support activities for the Superfund program provide the full array of financial, administrative, and support services in an integrated and efficient manner. The five major activities conducted to supply basic Agency management and support are administrative services, financial management, policy analysis, and the services of the Offices of the Inspector General and General Counsel.

EPA WILL CONTINUE TO UTILIZE THE EXPERTISE OF OTHER FEDERAL AGENCIES

In addition to requiring integration of the efforts of the various Agency offices with program responsibilities, the Superfund program requires close cooperation among various Federal agencies. Executive Order 12316, signed by the President in August 1981, requires that the Agency assume overall responsibility for the management of the program. In addition, several other agencies including the Departments of Justice, Health and Human Services, Transportation, Commerce, Labor, Interior, and the Federal Emergency Management Agency (FEMA) are assigned responsibilities under CERCLA and the Executive Order. To ensure a coordinated Federal program, the Agency has emphasized the development of an integrated approach in undertaking site response actions. Ongoing activities of other Federal agencies are determined jointly under the interagency budget process established in the Executive Order and are generally funded through transfer allocation accounts. Additional activities at specific sites undertaken by other Federal agencies may by triggered at the request of the EPA's on-scene personnel and are, with the exception of FEMA, funded through reimbursable agreements. This dual system ensures that agencies have sufficient funds to conduct ongoing activities while providing the EPA with the ability to manage and coordinate Federal actions at specific sites.

Program Activities	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1984 vs 1985
REMOVAL ACTIONS					
Immediate Removal Actions	88	50	150	150	0
Planned Removal Actions	6	10	20	20	0
REMEDIAL ACTIONS					
Preliminary Assessments	1,891	4,000	4,000	6,600	+2,600
Inspections	550	2,000	1,300	2,000	+700
Remedial Investigations/ Feasibility Studies					
Fund Lead	85	55	55	69	+ 14
Enforcement Lead	30	---	25	46	+ 21
Designs	11	40	30	68	+ 38
Initial Remedial Measures	18	25	25	25	0
Remedial Actions	6	22	15	46	+ 31
ENFORCEMENT ACTIONS					
Technical Support for Ongoing Docket/Filed Cases	48	40	55	77	+ 22
Settlements	27	50	11	15	+ 4
Civil Litigation Case Support					
CERCLA Section 106 Imminent Hazard	4	10	8	11	+ 3
CERCLA Section 107 Cost Recovery	17	24	34	48	+ 14

Program Activities	Amendment/ Current Estimate 1984	Supplemental Request 1984
REMOVAL ACTIONS		
Immediate Removal Actions	150	---
Planned Removal Actions	20	---
REMEDIAL ACTIONS		
Preliminary Assessments	4,000	---
Inspections	1,300	---
Remedial Investigation/ Feasibility Studies		
Fund Lead	55	+20
Enforcement Lead	25	+15
Designs	30	+10
Initial Remedial Measures	25	---
Remedial Actions	15	+2
ENFORCEMENT ACTIONS		
Technical Support for Ongoing Docket/Filed Cases	55	---
Settlements	11	---
Civil Litigation Case Support		
CERCLA Section 106 Imminent Hazard	8	8
CERCLA Section 107 Cost Recovery	34	---

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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SUPERFUND

Hazardous Substances Research

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Scientific Assessment								
Hazardous Substance Response Trust Fund		$776.4	$794.0	$844.0	$844.0		$1,255.7	$411.7
	TOTAL	$776.4	$794.0	$844.0	$844.0		$1,255.7	$411.7
Monitoring Systems & Quality Assurance								
Hazardous Substance Response Trust Fund		$2,085.5	$2,905.9	$3,705.9	$3,705.9		$4,922.8	$1,216.9
	TOTAL	$2,085.5	$2,905.9	$3,705.9	$3,705.9		$4,922.8	$1,216.9
Environmental Engineering & Technology								
Hazardous Substance Response Trust Fund		$3,794.4	$2,221.3	$3,721.3	$3,666.3		$6,291.4	$2,625.1
	TOTAL	$3,794.4	$2,221.3	$3,721.3	$3,666.3		$6,291.4	$2,625.1
Environmental Processes & Effects								
Hazardous Substance Response Trust Fund		$162.2	$459.5	$509.5	$509.5		$163.6	-$345.9
	TOTAL	$162.2	$459.5	$509.5	$509.5		$163.6	-$345.9
TOTAL:								
Hazardous Substance Response Trust Fund		$6,818.5	$6,380.7	$8,780.7	$8,725.7		$12,633.5	$3,907.8
Hazardous Substances Research	TOTAL	$6,818.5	$6,380.7	$8,780.7	$8,725.7		$12,633.5	$3,907.8

SUPERFUND

Hazardous Substances Research

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Scientific Assessment	2.5	2.5	3.4	3.4		4.0	.6
Monitoring Systems & Quality Assurance	10.0	8.4	14.4	14.4		19.6	5.2
Environmental Engineering & Technology	12.7	11.5	20.3	20.3		31.3	11.0
Environmental Processes & Effects	1.5	2.1	3.1	3.1		3.1	
TOTAL PERMANENT WORKYEARS	26.7	24.5	41.2	41.2		58.0	16.8
TOTAL WORKYEARS							
Scientific Assessment	2.5	2.5	3.5	3.5		4.0	.5
Monitoring Systems & Quality Assurance	10.4	8.4	14.4	14.4		19.6	5.2
Environmental Engineering & Technology	12.7	11.5	21.5	21.5		31.3	9.8
Environmental Processes & Effects	1.5	2.1	3.1	3.1		3.1	
TOTAL WORKYEARS	27.1	24.5	42.5	42.5		58.0	15.5

Hazardous Substance Research

Major Outputs/Milestones	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Provide Techniques and Procedures for Site and Situation Assessment			
- Prepare health risk assessments for use in remedial and enforcement actions (Scientific Assessment)	Ongoing	Ongoing	Ongoing
- Develop state-of-the-art methods for site-specific risk assessments (Scientific Assessment)	9/83	9/84	9/85
- Provide guidelines for site sampling (Monitoring)	-	9/84	9/85
- Provide quality assurance for National Contract Laboratory Program (Monitoring)	Ongoing	Ongoing	Ongoing
Evaluate Technologies to Manage Uncontrolled Waste Sites			
- Evaluate the testing and demonstration of EPA's mobile incinerator (Env. Eng.)	6/83	9/84	6/86
- Provide handbooks for decontamination and construction equipment design (Env. Eng.)	1/84	9/84	1/85
- Provide handbook on Fugitive Dust Control around Superfund sites (Env. Eng.)	-	9/85	9/85
Provide Information for Personnel Health and Safety Equipment and Procedures			
- Provide report on evaluation of permeability of suit fabric (Env. Eng.)		10/84	10/84
- Provide manual for selection of protective clothing materials (Env. Eng.)	9/85	9/85	9/85
Support Reportable Quantities Regulatory Efforts			
- Provide monitoring guidelines (Monitoring)	9/84	9/85	
- Determine carcinogenicity and chronic toxicity criteria for use in determining reportable quantities (Scientific Assessment)	9/83	9/84	
Provide technical support to Enforcement and Regional Offices (All ORD Offices)	Ongoing	Ongoing	Ongoing

Hazardous Substance Research

Budget Request

The Agency requests a total of $12,633,500 supported by 58.0 total workyears for 1985, an increase of $3,907,800 and 15.5 total workyears from 1984. Within this level, there are increases in environmental engineering and technology, monitoring systems and quality assurance, scientific assessment and a decrease in environmental processes and effects. The increase in engineering will support additional technology evaluations and technical support for the Office of Emergency and Remedial Response (OERR) and Office of Waste Programs Enforcement (OWPE). The increases in monitoring and quality assurance and scientific assessment will principally be used to support additional enforcement actions. The decrease in environmental processes reflects the completion of a set of site and situation assessment technical manuals.

Program Description

The Office of Research and Development (ORD) primarily provides technical support to the Superfund program office based upon completed research and expertise obtained from other programs such as Hazardous Waste. This technical support includes providing tailored guidance documents, operations manuals, assessment techniques, and technical expertise to meet the specific requirements of EPA program and Regional offices, States and local authorities. Specific program objectives established as the basis for ORD support activities are:

Objective 1. Provide Techniques and Procedures for Site and Situation Assessment. These activities provide the techniques and procedures to allow On-Scene Coordinators (OSC's) to quickly and effectively assess the degree of hazard posed at specific uncontrolled hazardous waste sites. An extensive quality assurance program for the National Contracts Laboratory Program is also provided, including development and promulgation of analytical methods to measure and characterize samples from Superfund sites.

Objective 2. Evaluate Technologies to Manage Uncontrolled Waste Sites. Activities supporting this objective evaluate and assess the technologies, techniques and construction materials which may be applicable to controlling hazardous waste releases to the environment in a cost-effective manner.

Objective 3. Provide Procedures for Ensuring Effective Post-Closure Assessment at Hazardous Waste Sites. These activities provide the means to accurately monitor and determine the adequacy of control during the post-closure phase of site cleanup.

Objective 4. Provide Information on Personnel Health, Protective Equipment and Procedures. These activities provide evaluation and assessment of the technologies applicable to ensuring personnel health and safety during removal and cleanup operations.

Objective 5. Support Reportable Quantities Regulatory Efforts. These activities support Superfund regulatory efforts by ranking and assigning reportable quantities to chemicals based upon a number of scientific and technical factors. These quantities are then used as a basis for taking corrective action, if necessary.

Objective 6. Provide Technical Support to Enforcement, Program and Regional Offices. This work provides review of remedial action design and implementation plans, review and evaluation of all quality assurance/quality control (QA/QC) plans, and review and new data submitted by liable parties for specific site problems. Expert witnesses are furnished when required.

SCIENTIFIC ASSESSMENT

1985 Program Request

The Agency requests a total of $1,255,700 supported by 4.0 total workyears for this program, all of which is funded under the Hazardous Substance Response Trust Fund. This represents an increase of $411,700 in total funding and an increase of 0.5 workyears, reflecting the Agency's increased need for technical support for enforcement activities, and for development of procedures for assessing exposures and health risks for compounds like 2,3,7,8-TCDD (dioxin).

Provide Techniques and Procedures for Site and Situation Assessment. In 1985 site-specific, situation-specific, or chemical-specific health risk assessments will be prepared to assist the program office in evaluating both alternative courses of action at uncontrolled sites and potential regulatory strategies. In addition, risk methods development work will continue in order to maintain existing protocols at the state-of-the-art. Technical guidelines will also be developed to estimate emissions of low vapor pressure and highly adsorptive compounds similar to 2,3,7,8 -TCDD from contaminated land sites.

~~Provide~~ Technical Support to Enforcement, Program and Regional Offices. In 1985, an increased number of site-specific or chemical-specific assessments will be prepared to predict the relative risk they pose and assist the program office in evaluating the need for enforcement action. These assessments may range from brief hazard summaries to peer-reviewed, detailed documents for use in litigation or negotiation. In addition, physical-chemical properties of 2,3,7,8-TCDD will be determined for use in transport and fate studies associated with risk assessments. Exposure to 2,3, 7,8-TCDD through accumulation on skin and subsequent ingestion will be evaluated.

1984 Program

In 1984 the Agency is allocating a total of $844,000 and 3.5 permanent workyears for this program, all of which is funded under the Hazardous Substance Response Trust Fund.

Provide Techniques and Procedures for Site and Situation Assessment. A variety of site and situation-specific risk assessments covering single chemicals and simple mixtures are being provided to the Office of Emergency and Remedial Response (OERR) and the Regions. A methods handbook for site-specific assessments is being completed and subjected to peer review. A previously established capacity to provide rapid response health assessments is being expanded and will be interfaced with the Chemical Information System.

Provide Procedures for Ensuring Effective Post-Closure of Uncontrolled Sites. Protocols are being developed and tested for estimating aggregate acceptability indices for exposure to residual levels of complex chemical mixtures. The protocols will be applied to a limited number of specific cases to test how easily they can be followed, using data from the Agency's monitoring program.

Support Reportable Quantities Regulatory Efforts. Health effects data for specific chemicals are being analyzed. These chemicals are ranked according to the risk they pose, based on carcinogenicity or chronic toxicity, for use by the program office which is in the process of determining minimum reportable quantities for each chemical. Response to public comments on earlier rulemaking relative to reportable quantities is included as a part of this activity.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983 the Agency obligated a total of $776,400 and 2.5 total workyears for this program, all of which was funded under the Hazardous Substance Response Trust Fund.

Provide Techniques and Procedures for Site and Situation Assessment. In 1983 toxicity data was assembled and entered into the rapid response data base entitled Studies in Toxicology Applicable to Risk Assessment. Four rapid response health assessments were provided as requested by the program staff. Methodology development for site-specific risk assessment was advanced through two symposia.

Provide Procedures for Ensuring Effective Post-Closure of Uncontrolled Sites. In 1983 several detailed site specific human health risk assessments were prepared as part of this program. Work continued on the concept of developing aggregate acceptability indices for exposures to residual levels of hazardous substance remaining after remedial response has been completed.

Support Reportable Quantities Regulatory Efforts. In 1983 chemical-specific criteria for determining reportable quantities were prepared for 191 chemicals based on carcinogenicity, and for 260 chemicals based on chronic toxicity.

MONITORING SYSTEMS AND QUALITY ASSURANCE

1985 Program Request

The Agency requests a total of $4,922,800 supported by 19.6 total workyears for this program, all of which is funded under the Hazardous Substances Response Trust Fund. This reflects an increase of $1,216,900 and 5.2 workyears and will result in strengthening the quality assurance program in support of the Agency's National Contract Laboratory Program. The increase will also support increased sampling quality assurance and a laboratory analysis support program for enforcement actions and settlement agreements.

Provide Techniques and Procedures for Site and Situation Assessment. It is anticipated that the National Contracts Laboratory Program will soon increase to 50 contractors thereby requiring additional quality assurance support. On-site evaluations, protocol revision, quarterly reviews, and data audits will be provided to establish data of known quality in support of this program. The use of aerial photography to establish the growth and past use of hazardous sites will be continued. The Compendium of Sampling Methods will be updated. The sampling quality assurance program and the air monitoring evaluation programs will be expanded.

Provide Technical Support to Enforcement, Program and Regional Offices. Additional support to OWPE will be provided in response to the increase in litigation actions. Expert witness, monitoring and data analysis for case preparation will be provided. Quality assurance for settlement agreements will be provided to agreements such as Hyde Park. Support in the form of geophysical monitoring and specialized monitoring will be provided to removal and remedial actions. A referee

laboratory to analyze complex samples will be provided to the Regions. Specific site studies in air, water, and soils will be provided to the program office and Regions.

1984 Program

In 1984, the Agency is allocating a total of $3,705,900 and 14.4 total workyears to this program, all of which is funded under the Hazardous Substances Response Trust Fund.

Provide Techniques and Procedures for Site and Situation Assessment. A quality assurance program is continuing that ensures that data of known quality are produced by laboratory analysis contractors. The latest protocols, instrumentation for field sampling and air monitoring techniques are being investigated. Historical and new aerial photography are being used to characterize site conditions from 1935 to the present.

Support Reportable Quantities Regulatory Efforts. A compendium of available monitoring methods for ambient and emergency monitoring of air, water, and soils is being completed for the promulgation of Superfund regulations under CERCLA Section 101 (14) and 102.

Provide Technical Support of Enforcement, Program and Regional Offices. A Quality Assurance/Quality Control Laboratory is providing referee analysis capabilities to the Regions and program office. The program includes sample analysis for enforcement and the analyses of complex samples. Support is being provided to the Office of Water Programs Enforcement in the form of case preparation using state-of-the-art equipment and scientific expertise. Field monitoring capabilities including geophysical monitoring is being provided to all media.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $2,085,500 and 10.4 workyears for this program, all of which was funded under the Hazardous Substances Response Trust Fund.

Provide Techniques and Procedures for Site and Situation Assessment. The quality assurance program was expanded to meet the needs of 32 laboratories in the National Contract Laboratory Program. The first edition of a "Compendium of Sampling Methods" including guidelines on response to emergencies was completed. A sampling quality assurance program was initiated. Aerial photography was used to characterize more than 700 sites.

Support Reportable Quantities Regulatory Efforts. The first draft of a compendium of monitoring methods for reportable quantities was completed.

Provide Technical Support to Enforcement, Program and Regional Offices. Support was provided in the form of special studies on air, surface and ground water, and oversight of a laboratory for the analysis of complex field samples.

ENVIRONMENTAL ENGINEERING AND TECHNOLOGY

1985 Program Request

The Agency requests a total of $6,291,400 supported by 31.3 total workyears for this program, all of which is funded under the Hazardous Substances Response Trust Fund. The increase of $2,625,100 and 9.8 total workyears reflects the

requirements for additional engineering support by the Office of Emergency and Remedial Response (OERR). Implementation experience at sites has indicated a need for increased engineering support in the evaluation of technologies and technical support for OERR and the Office of Waste Programs Enforcement.

Provide Techniques and Procedures for Site and Situation Assessment. Engineering expertise will be applied to the assessment of hazardous waste site situations including hydrology, geology, and soil characteristics so as to assist regional office Superfund staff, EPA zone contractors, and State Superfund offices in the development of corrective measure options. Those groups associated with Superfund require assistance in feasibility studies and remedial action development. ORD staff will serve on a technical advisory committee, review site assessment and feasibility plans, and advise on remedial actions. Based on data collected by ORD in surveys and technology evaluations, the latest information on the cost and effectiveness of remedial action technologies can be applied to the specific sites. In addition, criteria for conducting site assessment and feasibility studies leading to the data required to make remedial action decisions will be prepared.

Evaluate Technologies to Manage Uncontrolled Waste Sites. Evaluations of response technology to support emergency action at hazardous materials spills and newly discovered releases of hazardous materials from uncontrolled waste sites will be increased. Emphasis will to be placed on field evaluation of prototypical equipment such as the mobile incineration system, mobile soils washing system and the mobile carbon regenerator for cost-effective multi-media removal actions at uncontrolled sites. Efforts will also address the evaluation and demonstration of innovative, commercially available equipment and technology, such as a modular transportable incineration system. A scientifically defensible technology base (including guidelines) will be prepared to provide response personnel direction on the use of chemicals introduced into the environment to mitigate the effects of hazardous releases.

Remedial technology activities will also be increased to address the engineering and technology needs of the program office and Regions relative to cleaning up problems at uncontrolled hazardous waste sites. Assessing the cost and technological effectiveness of applied techniques will be an integral part of this effort. A handbook on fugitive dust control at hazardous waste sites will be produced. Fixation of contaminated soils will be demonstrated.

Provide Information on Personnel Health and Safety Equipment and Procedures. As more sophisticated situations involving uncontrolled hazardous wastes sites are addressed, there will be an increasing need to evaluate specialized equipment and establish current state-of-the-art procedures to ensure personnel health and safety during removal and cleanup operations. Emphasis will include manuals establishing guidelines for contamination avoidance for response personnel and specialized treatment equipment and the evaluation of equipment and techniques specific to the safety requirements of response personnel.

Provide Technical Support to Enforcement, Program and Regional Offices. Timely technical and scientific assistance, information, and analysis in support of removal and remedial response activities involving multi-media pollution from uncontrolled waste sites will be provided to program, regional, and State offices in the form of on-site consultation, review of remedial investigation/feasibility studies, supervision of cleanup operations involving ORD equipment, analytical support, and assistance in enforcement cases.

1984 Program

In 1984, the Agency is allocating a total of $3,666,300 and 21.5 total workyears for this program, all of which is funded under the Hazardous Substance Response Trust Fund.

Evaluate Technologies to Manage Uncontrolled Waste Sites. Major response activities include demonstration and evaluation of prototypical equipment for multi-media removal actions at hazardous material releases and uncontrolled hazardous waste sites. Efforts are concentrating on full-scale testing of the mobile incinerator, carbon regenerator, and soils washer and evaluation of the feasibility of a modular transportable incineration system. Full-scale, controlled-condition testing on the use of chemicals and additives introduced into the environment for cleanup purposes is being initiated, and the previously developed computerized file on removal action case histories is being expanded to include remedial action case histories and documentation of feasibility study information to further assist in cleanup decision-making.

Major remedial activities include: review and evaluation of techniques which are being used and have been used in the past to assess their cost-effectiveness; field evaluations and verification of new remedial techniques which will become part of technical handbooks for use by State and Federal agencies responsible for site remedial actions; and field verification of a model to evaluate different remedial action techniques on a site-specific basis.

Provide Information on Personnel Health, Protective Equipment and Procedures. This program is providing manuals on the testing of specialized safety equipment and procedures for ensuring personnel safety during site reconnaissance and cleanup, including decontamination of equipment and personnel. Emphasis is on evaluation and assessment of protective clothing and breathing apparatus, personal monitoring for exposure, safety procedures for extended site operations and decontamination techniques for specialized cleanup equipment used during emergency response operations.

Provide Technical Support to Enforcement, Program, and Regional Offices. Quick turnaround technical advice and consultation is being provided to regional offices, OWPE and States. It involves review of designs for removal and remedial actions, review of data submitted by liable parties, expert witness testimony at litigation procedures, on-site consultation, analytical support, and technology transfer from the research program to Agency users.

1984 Explanation of Changes from the Amendment

The net decrease of -$55,000 results from the following action:

-Reprogramming. (-$55,000) This reprogramming transferred -$55,000 to the Hazardous Substance - Office of Research and Development - Lab Support program from this program to provide funds for Superfund-related lab support activities in the Office of Research and Development.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,794,400 and 12.7 total workyears for this program, all of which was funded under the Hazardous Substance Response Trust Fund.

Evaluate Technologies to Manage Uncontrolled Waste Sites. Major accomplishments in the response area included completion of preliminary tests and trial burns of the mobile incinerator, which was designed for field use in destroying hazardous organic substances collected from cleanup operations. During 1983, a system shakedown and performance testing of the mobile carbon regenerator was completed in preparation for controlled condition testing and field evaluations. A state-of-the-art report on drum handling practices at uncontrolled hazardous waste sites was completed and submitted for external peer review in preparation for publication. A literature search and laboratory study on candidate chemicals for in situ detoxification of contaminated soils was also completed.

In the remedial area, a handbook for evaluating remedial action technology was completed. An engineering evaluation and cost analysis of 23 major remedial action efforts at uncontrolled hazardous waste sites was also completed.

Provide Information on Personnel Health, Protective Equipment and Procedures. Activities supporting this objective were not initiated until the end of 1982 and as a result, major outputs will not be available until 1984. However, projects were initiated to modify and obtain NIOSH certification for a long-term, self-contained chemical protective ensemble and evaluate the chemical permeation and degradation resistance of a totally encapsulating protective outergarment for use by response personnel.

Provide Technical Support to Enforcement, Program and Regional Offices. Several direct technical support activities were completed for the Office of Emergency and Remedial Response, Office of Waste Programs Enforcement, and the Regions involving on-site consultation and analytical support, review of remedial action investigation/feasibility studies, and support of enforcement cases. A technology transfer workshop was held involving the program office, contractors, regional offices, and the Corps of Engineers.

ENVIRONMENTAL PROCESSES AND EFFECTS

1985 Program Request

The Agency requests a total of $163,600 supported by 3.1 total workyears for this program, all of which is funded under the Hazardous Substances Response Trust Fund. This is a decrease of $345,900 and reflects completion of a set of site and situation assessment technical manuals.

Provide Technical Support to Enforcement, Program and Regional Offices. Technical support will be provided in response to specific requests from program and regional offices. Technical support services include: groundwater sampling, analyses, and contaminant plume tracking; and bioassessments of soil and water samples from Superfund sites. Other technical support includes: input to negotiated closure plans, expert witness testimony, and site-specific consultations.

1984 Program

In 1984, the Agency is allocating a total of $509,500 and 3.1 total workyears to this program, all of which is funded under the Hazardous Substances Response Trust Fund.

Provide Techniques and Procedures for Site and Situation Assessment. Major activities are being conducted in the following areas. At the request of the Office of Emergency and Remedial Response, drafts of technical documents are being expanded for inclusion into a comprehensive Remedial Investigation Guidance Manual. Preparation of two guidance documents are being initiated: a) a field guide for biological sampling at Superfund sites; and b) a document detailing how to apply environmental criteria to action decisions. These documents were recently cited as priority needs by State and regional personnel. Samples from Superfund sites are being analyzed using biological assessment procedures.

Provide Technical Support to Enforcement, Program and Regional Offices. Technical support in the areas of groundwater contamination sampling, groundwater well construction and contaminant plume tracking is being provided. Other technical support services include input to negotiated closure plans, legal testimony and consultations.

1984 Explanation of Change from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983 the Agency obligated a total of $162,200 and 1.5 total workyears for this program, all of which was funded under the Hazardous Substance Response Trust Fund

Provide Techniques and Procedures for Site and Situation Assessment. In 1983, the following documents were published: an EPA Guide for identifying clean up alternatives at hazardous waste sites and spills; a manual addressing the ecological effects of cleanup options; and a handbook for predicting groundwater contaminant transport.

Provide Technical Support to Enforcement, Program and Regional Offices. During 1983, technical expertise associated with groundwater contamination and other problem areas was provided at the following Superfund Sites: Chem Dyne, Ohio; Criner, Oklahoma; Love Canal, New York; Taylor Road, Florida; Kin-Buc, New Jesey; Olim Corp., Georgia; Hyde Park, New York.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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SUPERFUND

Hazardous Substance Response - Enforcement

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Hazardous Substance Technical Support - Office of Enforcement & Compliance Monitoring								
Hazardous Substance Response Trust Fund		$3,252.1	$964.5	$3,744.5	$3,744.5		$5,268.8	$1,524.3
	TOTAL	$3,252.1	$964.5	$3,744.5	$3,744.5		$5,268.8	$1,524.3
Hazardous Substance Technical Enforcement								
Hazardous Substance Response Trust Fund		$11,628.5	$17,512.8	$21,393.2	$21,393.2	$1,296.9	$36,549.7	$15,156.5
	TOTAL	$11,628.5	$17,512.8	$21,393.2	$21,393.2	$1,296.9	$36,549.7	$15,156.5
Hazardous Substance Legal Enforcement								
Hazardous Substance Response Trust Fund		$2,838.9	$3,628.7	$4,535.1	$4,565.3		$7,106.1	$2,540.8
	TOTAL	$2,838.9	$3,628.7	$4,535.1	$4,565.3		$7,106.1	$2,540.8
TOTAL:								
Hazardous Substance Response Trust Fund		$17,719.5	$22,106.0	$29,672.8	$29,703.0	$1,296.9	$48,924.6	$19,221.6
Hazardous Substance Response-Enforcement	TOTAL	$17,719.5	$22,106.0	$29,672.8	$29,703.0	$1,296.9	$48,924.6	$19,221.6

SUPERFUND

Hazardous Substance Response - Enforcement

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Hazardous Substance Technical Support - Office of Enforcement & Compliance Monitoring	27.8	12.0	21.0	21.0		34.5	13.5
Hazardous Substance Technical Enforcement	103.0	120.6	171.9	171.9	24.0	303.9	132.0
Hazardous Substance Legal Enforcement	61.5	73.9	85.7	85.7		132.3	46.6
TOTAL PERMANENT WORKYEARS	192.3	206.5	278.6	278.6	24.0	470.7	192.1
TOTAL WORKYEARS							
Hazardous Substance Technical Support - Office of Enforcement & Compliance Monitoring	30.2	14.0	24.0	24.0		34.5	10.5
Hazardous Substance Technical Enforcement	116.3	140.0	195.9	195.9	24.0	334.5	138.6
Hazardous Substance Legal Enforcement	68.3	82.5	95.5	95.5		139.4	43.9
TOTAL WORKYEARS	214.8	236.5	315.4	315.4	24.0	508.4	193.0

SUPERFUND

Hazardous Substance Response-Enforcement

Budget Request

The Agency requests a total of $48,924,600 supported by 508.4 total workyears for 1985 from the Hazardous Substance Response Trust Fund appropriation for technical, administrative, and legal enforcement activities. This represents an increase of $19,221,600 and 193.0 workyears from 1984. The increase reflects additional efforts to secure privately-financed response to releases of hazardous substances. It will also support an increased level of cost recovery actions, thereby conserving the Trust Fund for use at future sites and spills.

Program Description

The Hazardous Substance Response Enforcement program includes the administrative and legal enforcement activities authorized under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In the event a release or threat of a release presents an imminent or substantial endangerment to public health or the environment, the Agency may order responsible parties to take abatement action by issuing a CERCLA Section 106 Administrative Order. Noncompliance with such orders can result in the Agency seeking fines and/or treble damage penalties against the party. Civil judicial actions also may be initiated to compel response action. CERCLA Section 107 authorizes the Agency to recover the cost of Federally-financed response actions from responsible parties. Criminal actions may be initiated for failure to notify authorities of releases as required under CERCLA Section 103.

The enforcement program provides the legal and technical support for negotiations for privately-financed response, development and execution of Section 106 Administrative Orders, and initiation of civil, criminal, and cost recovery cases for referral to the Department of Justice. The program also provides legal and technical support of ongoing cases filed by the Department of Justice on behalf of the Agency and reviews and comments on State-lead enforcement actions.

Hazardous Substance Technical Support - Office of Enforcement and Compliance Monitoring -- This program supports the Superfund activities of the National Enforcement Investigations Center (NEIC). The NEIC provides specialized support for high priority enforcement cases including specialized assistance in case preparation, field investigations, laboratory analysis including high hazard samples, and preparation of technical testimony. The NEIC also provides specialized assistance for State-lead enforcement activities.

Hazardous Substance Technical Enforcement -- This program develops the technical documentation for the Superfund enforcement program and initiates administrative enforcement actions. The activities include identifying responsible parties and performing site assessments to document the extent of the threat and the preferred remedy. Also included is technical support for: up-front negotiations with private parties, cases referred to and litigated by the Department of Justice including new and existing civil cases to compel cleanup, cases to recover Trust Fund costs, and criminal cases. Technical support is also provided for State-lead enforcement actions. The program also initiates and manages CERCLA Section 106 Administrative Orders.

Hazardous Substance Legal Enforcement -- This program provides the legal staff for the Superfund enforcement program. The activities include developing the legal documentation necessary to obtain privately-financed response, providing legal support for issuing administrative orders, and negotiating private party cleanup. The program also participates with the Department of Justice in negotiating consent decrees, conducting civil and criminal litigation, and litigating to recover costs paid from the Trust Fund.

HAZARDOUS SUBSTANCE TECHNCIAL SUPPORT - OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING

1985 Program Request

The Agency requests a total of $5,268,800 supported by 34.5 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. This represents an increase of $1,524,300 and 10.5 workyears from 1984. The increase reflects the National Enforcement Investigations Center's (NEIC) efforts in providing specialized technical support for civil and criminal litigation.

In 1985, this program will provide specialized technical support to nationally managed cases that require unusually complex or sophisticated technical capabilities. This program will supplement Regional and State staff in those cases that are technically difficult, and will fully support precedent-setting criminal cases. Responsibilities will include providing technical consultation and assistance in case preparation activities including high hazard laboratory procedures, conducting field investigations in support of case development efforts, laboratory analysis in support of all media, including groundwater sample analysis, evidence evaluation, report preparation, technical testimony, and negotiation of technical aspects of key consent decrees. Contract funds will provide for a continuation of the evidence audit quality control function. This program will also support remedial investigations and cleanup related to dioxin and associated pesticide derivatives.

1984 Program

In 1984, the Agency is allocating a total of $3,744,500 and 24.0 total workyears to this program from the Hazardous Substance Response Trust Fund appropriation. Specialized technical capabilities are made available to Regional enforcement programs and State agencies for site entry procedures. The program also prepares and analyzes high hazard samples and provides a wide range of specialized analytical procedures, quality control, and evidence security procedures. The NEIC assists the Federal Bureau of Investigation (FBI) and Regional investigative staffs in criminal investigations of hazardous waste disposal practices by training FBI personnel in EPA technical evidence gathering procedures. Evidence audit control processes are continued in 1984 to ensure that proper chain-of-custody procedures are followed to support the field investigation team contract.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $3,252,100 and 30.2 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. This program provided technical consultation and assistance in litigation preparation by performing laboratory analyses, data evaluation, technical testimony, and negotiation of technical aspects of consent decrees. It also developed high hazard laboratory procedures, investigative protocols, and provided technical support in the review of Agency regulations.

HAZARDOUS SUBSTANCE TECHNICAL ENFORCEMENT

1985 Program Request

The Agency requests a total of $36,549,700 supported by 334.5 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. This reflects an increase of $15,156,500 and 138.6 total workyears to expand efforts to secure privately-financed response action at National Priorities

List (NPL) and other priority sites including dioxin sites. This increase will also enable the agency to initiate and continue cost recovery in all cases where it is cost-effective and there is a financially viable party.

In 1985, the Agency will focus its enforcement efforts on those sites where plans have identified those National Priorities List (NPL) sites where negotiations are most likely to result in privately-financed cleanup. The Agency will conduct a detailed site analysis at 46 sites to support these negotiations. Funding for these investigations is provided under the Hazardous Spill and Site Response program, but will be managed under the enforcement program. These studies will streamline the enforcement process by providing private parties an "up-front" understanding of what the Agency wants them to do and will enable the Agency to proceed immediately with Fund-financed response if negotiations fail. The Agency expects to reach settlement with responsible parties at 15 sites in 1985 under this program.

In addition to targeting negotiations, the Agency will also focus on initiating Administrative and Federal action to compel private party response at appropriate sites or where Fund-financed response can not be undertaken. In 1985, the Agency will provide technical support for the development of 11 new cases for referral to the Department of Justice and will provide continued support for 77 ongoing cases.

Technical documentation for the issuance of Administrative Orders and enforcement of those orders will be provided to support efforts to compel privately-financed cleanup and to recover the cost of Fund-financed cleanup.

The Agency will seek recovery of Trust Fund costs from financially viable responsible parties as authorized under CERCLA Section 107. Efforts to recover Trust Fund costs for removal and remedial actions will increase in 1985. The Agency will begin to shift emphasis in 1985 from recovery of funds expended for removal activities to recovery of remedial funds as sites are completed. This shift will enable the Agency to recover significantly larger amounts during 1985 and beyond as the more expensive remedial actions are completed. The Agency expects to refer 48 cost recovery actions to the Department of Justice.

Contract efforts to meet the stringent technical requirements essential for successful negotiations include responsible party searches and determinations of financial viability, review of defendents proposed plans for response action, and conduct of evidence audits. Effective management of these activities will require close coordination with response and legal enforcement personnel to plan Federal response and to provide the broadest possible base of technical information to support enforcement actions.

1984 Supplemental Request

The Agency requests an additional $1,296,900 supported by 24.0 additional workyears over the enacted level from the Hazardous Substance Response Trust Fund appropriation in 1984.

In 1983, the Agency simplified its enforcement procedures by requiring that a detailed site assessment be concluded prior to initiation of enforcement actions. This provides the Agency with a firm technical basis for negotiations, enables responsible parties to understand "up front" what is expected, and allows EPA to proceed rapidly with remedial construction if negotiations fail.

In 1983, enforcement investigations were initiated at 30 sites. To maintain the momentum gained under this program and the response program, the Agency will initiate 15 investigations in addition to the 25 originally planned to support enforcement efforts in 1984. The workyears requested are needed to adequately manage these additional sites. Contract funds are requested separately under the Hazardous Spill and Site Response program.

1984 Program

In 1984, the Agency is allocating a total of $21,393,200 and 195.9 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. These resources support continuing enforcement actions at sites on the National Priorities List (NPL) and other priority sites, including dioxin sites, and cost recovery efforts where Federal funds have been expended.

In 1984, the Agency expects to reach settlements with responsible parties at 11 sites. The Agency is initiating studies to develop potential solutions at 25 sites to facilitate negotiations with responsible parties and is issuing CERCLA Section 106 Adminstrative Orders, monitoring compliance with orders, and providing technical support for the litigation necessary to enforce them. The Agency is supporting the development of 8 new civil cases to compel private party response and an estimated 55 ongoing civil actions already filed by the Department of Justice on behalf of the Agency. The Agency is increasing its efforts to recover Trust Fund costs for removal and remedial actions at approximately 34 sites or spills.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated a total of $11,628,500 and 116.3 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. These resources supported the effort necessary to begin enforcement at sites on the expanded National Priorities List (NPL) and to initiate cost recovery where Federal funds were expended.

The Agency developed technical enforcement policies and managed a nationally consistent program to secure privately-financed response actions at National Priorities List (NPL) sites. The Agency identified responsible parties, initiated appropriate administrative actions, and supported legal actions. In 1983, the Agency reached settlements at 27 sites for privately-financed response action valued at approximately $92,000,000. The Agency issued 26 CERCLA Section 106 Administrative Orders to abate imminent hazards, monitored compliance with such orders, and provided technical support for any litigation that was necessary to enforce them. The Agency provided technical enforcement support for 48 ongoing cases and developed 4 new civil enforcement actions.

The Agency initiated cost recovery actions against viable responsible parties at sites where Federally-financed removal action had been undertaken. Demand letters were issued to responsible parties and negotiations were conducted to recover costs. Technical support was provided for the development of 17 cost recovery and 9 criminal cases for referral to the Department of Justice.

HAZARDOUS SUBSTANCE LEGAL ENFORCEMENT

1985 Program Request

The Agency requests a total of $7,106,100 supported by 139.4 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. This represents an increase of $2,540,800 and an increase of 43.9 total workyears from 1984. This increase in total workyears reflects the Agency's increased enforcement efforts. In 1985, Headquarters will pursue a consistent and fair legal approach through the implementation of its enforcement policies. Specifically, the Agency will ensure consistency in negotiated settlements and in decisions related to the initiation and conduct of civil actions.

Legal enforcement efforts in 1985 will focus on providing support for the development of 11 cases to compel privately-financed cleanup. Cases will be initiated at those sites where the Fund can not be used or in other instances when appropriate, such as when a precedent-setting issue is involved. The Agency will also continue to provide legal support for the 77 ongoing cases which have been referred to the Department of Justice. These complex precedent-setting cases are taking longer to conclude than originally anticipated. Where appropriate, legal support will be provided for the development and issuance of Administrative Orders, and to ensure compliance with these orders.

The Agency will also expand its support for the development of cases to recover Trust Fund monies. In 1985, efforts will focus on the initiation of recovery actions at 48 sites or spills. Emphasis will shift from the recovery of removal costs to the more complex recoveries of remedial costs reflecting the progress of the Hazardous Substance Response program.

In addition, this program will support the Agency's dioxin strategy by participating in the identification of and negotiations with responsible parties for cleanup of dioxin at production and disposal facilities identified as posing a significant threat to public health.

1984 Program

In 1984, the Agency is allocating $4,565,300 and 95.5 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. Agency efforts focus on providing the necessary legal support in negotiations with responsible parties for privately-financed response actions and for recovery of Federal expenditures from responsible parties.

The Agency is providing support to the Department of Justice for ongoing civil actions and prepares new civil cases to compel private party response and to recover Federal funds expended in site cleanup. Criminal cases are developed as appropriate. Legal support and documentation is provided in the development and execution of negotiated settlements, Administrative Orders, and enforcement of Administrative Orders and consent decrees as required.

In 1984, Headquarters is completing initial development of enforcement policies to ensure a fair and consistent approach in pursuing enforcement actions, including developing, with the NEIC, guidelines for judicially admissible evidence and documentation required to establish the liability of responsible parties.

1984 Explanation of Changes from the Amendment

The net increase of +$30,200 results from the following action:

-Reprogramming. (+$30,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net increase of +$30,200.

1983 Accomplishments

In 1983, the Agency obligated $2,838,900 and 68.3 total workyears from the Hazardous Substance Response Trust Fund appropriation.

In 1983, the Agency referred 21 new civil cases and 9 criminal cases to the Department of Justice. This includes 4 new cases to compel private party response and 17 new cases for cost recovery. Legal support was provided for the active civil case docket of 48 cases and 9 criminal cases.

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SUPERFUND

Management and Support

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
PROGRAM								
Hazardous Substance Financial Management - Headquarters								
Hazardous Substance Response Trust Fund		$143.4	$564.9	$564.9	$564.9		$389.5	-$175.4
	TOTAL	$143.4	$564.9	$564.9	$564.9		$389.5	-$175.4
Hazardous Substance Financial Management - Regions								
Hazardous Substance Response Trust Fund		$167.2	$364.4	$518.5	$518.5		$641.0	$122.5
	TOTAL	$167.2	$364.4	$518.5	$518.5		$641.0	$122.5
Hazardous Substance Administrative Management - Headquarters								
Hazardous Substance Response Trust Fund		$2,394.5	$2,636.3	$3,094.8	$3,094.8	$379.0	$3,351.1	$256.3
	TOTAL	$2,394.5	$2,636.3	$3,094.8	$3,094.8	$379.0	$3,351.1	$256.3
Hazardous Substance Administrative Management - Regions								
Hazardous Substance Response Trust Fund		$184.5	$401.0	$414.1	$414.1		$619.0	$204.9
	TOTAL	$184.5	$401.0	$414.1	$414.1		$619.0	$204.9

SUPERFUND

Management and Support

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Hazardous Substance Support Services - Headquarters								
Hazardous Substance Response Trust Fund		$4,025.0	$4,601.8	$6,036.4	$6,036.4	$621.5	$9,719.2	$3,682.8
	TOTAL	$4,025.0	$4,601.8	$6,036.4	$6,036.4	$621.5	$9,719.2	$3,682.8
Hazardous Substance Support Services - Regions								
Hazardous Substance Response Trust Fund		$1,527.0	$1,371.3	$2,088.0	$2,088.0	$400.0	$3,839.0	$1,751.0
	TOTAL	$1,527.0	$1,371.3	$2,088.0	$2,088.0	$400.0	$3,839.0	$1,751.0
Hazardous Substance Computer Services								
Hazardous Substance Response Trust Fund		$516.5	$1,480.0	$1,480.0	$1,480.0		$1,000.0	-$480.0
	TOTAL	$516.5	$1,480.0	$1,480.0	$1,480.0		$1,000.0	-$480.0
Hazardous Substance Legal Services - Headquarters								
Hazardous Substance Response Trust Fund		$83.7	$243.5	$243.5	$243.5		$250.1	$6.6
	TOTAL	$83.7	$243.5	$243.5	$243.5		$250.1	$6.6
Hazardous Substance Legal Services - Regions								
Hazardous Substance Response Trust Fund		$215.4	$397.1	$476.1	$470.9		$691.7	$220.8
	TOTAL	$215.4	$397.1	$476.1	$470.9		$691.7	$220.8

SUPERFUND

Management and Support

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Hazardous Substance - Office of the Inspector General								
Hazardous Substance Response Trust Fund		$1,289.7	$2,570.2	$3,070.2	$3,070.2		$3,109.6	$39.4
	TOTAL	$1,289.7	$2,570.2	$3,070.2	$3,070.2		$3,109.6	$39.4
Hazardous Substance - Office of Policy, Planning & Evaluation								
Hazardous Substance Response Trust Fund		$683.6	$1,224.0	$832.4	$832.4		$637.7	-$194.7
	TOTAL	$683.6	$1,224.0	$832.4	$832.4		$637.7	-$194.7
Hazardous Substance - Office of the Comptroller								
Hazardous Substance Response Trust Fund		$100.4		$391.6	$391.6		$202.6	-$189.0
	TOTAL	$100.4		$391.6	$391.6		$202.6	-$189.0
Hazardous Substance - Office of Research & Development - Lab Support								
Hazardous Substance Response Trust Fund		$54.4			$55.0		$100.0	$45.0
	TOTAL	$54.4			$55.0		$100.0	$45.0
Hazardous Substance - Planning & Evaluation								
Hazardous Substance Response Trust Fund		$10.8						
	TOTAL	$10.8						

SUPERFUND

Management and Support

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
TOTAL:							
Hazardous Substance Response Trust Fund	$11,396.1	$15,854.5	$19,210.5	$19,260.3	$1,400.5	$24,550.5	$5,290.2
Management & Support TOTAL	$11,396.1	$15,854.5	$19,210.5	$19,260.3	$1,400.5	$24,550.5	$5,290.2
PERMANENT WORKYEARS							
Hazardous Substance Financial Management - Headquarters	1.9	4.4	4.4	4.4		6.0	1.6
Hazardous Substance Financial Management - Regions	4.9	9.2	15.6	15.6		18.4	2.8
Hazardous Substance Administrative Management - Headquarters	23.8	25.3	35.0	35.0	5.0	40.0	5.0
Hazardous Substance Administrative Management - Regions	5.9	10.0	10.0	10.0		19.0	9.0
Hazardous Substance Legal Services - Headquarters	1.6	5.0	5.0	5.0		5.0	

SUPERFUND

Management and Support

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Hazardous Substance Legal Services - Regions	4.3	10.0	10.0	10.0		14.3	4.3
Hazardous Substance - Office of the Inspector General	19.9	19.8	28.8	28.8		29.8	1.0
Hazardous Substance - Office of Policy, Planning & Evaluation	1.1	7.0	4.0	4.0		3.0	-1.0
Hazardous Substance - Office of the Comptroller	2.5		3.0	3.0		4.0	1.0
TOTAL PERMANENT WORKYEARS	65.9	90.7	115.8	115.8	5.0	139.5	23.7
TOTAL WORKYEARS							
Hazardous Substance Financial Management - Headquarters	1.9	4.4	4.4	4.4		6.9	2.5
Hazardous Substance Financial Management - Regions	5.3	10.0	17.6	17.6		20.4	2.8
Hazardous Substance Administrative Management - Headquarters	26.8	28.7	39.5	39.5	5.0	44.5	5.0

SUPERFUND

Management and Support

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
Hazardous Substance Administrative Management - Regions	6.1	10.0	10.0	10.0		19.0	9.0
Hazardous Substance Legal Services - Headquarters	1.7	5.0	5.0	5.0		5.0	
Hazardous Substance Legal Services - Regions	5.6	10.0	10.0	10.0		14.3	4.3
Hazardous Substance - Office of the Inspector General	19.9	19.8	29.8	29.8		29.8	
Hazardous Substance Office of Policy, Planning & Evaluation	2.1	9.0	4.0	4.0		4.0	
Hazardous Substance - Office of the Comptroller	3.3		5.0	5.0		5.0	
TOTAL WORKYEARS	72.7	96.9	125.3	125.3	5.0	148.9	23.6

Management and Support

Budget Request

The Agency requests a total of $24,550,500 supported by 148.9 total workyears from the Hazardous Substance Response Trust Fund appropriation for Management and Support activities in 1985. This represents an increase of $5,290,200 and 23.6 total workyears from 1984.

Program Description

This function provides the full array of financial, administrative, and support services necessary to manage and implement the Superfund program.

Hazardous Substance Financial Management - Headquarters and Regions -- This component contains two program elements which maintain financial records, and track and report on the use of the Hazardous Substance Response Trust Fund.

Hazardous Substance Administrative Management - Headquarters and Regions -- These program elements provide resources to fund the Superfund administrative services necessary to award and administer contracts, process personnel actions, provide central management and technical support for Superfund information systems, acquire and maintain Superfund office and laboratory services, and provide technical assistance and training for the Superfund program staff to assure the safety of those employees.

Hazardous Substance Support Services - Headquarters and Regions -- This component contains two program elements which cover the costs of space, utilities, printing, equipment, and other nonpersonnel support needs that are allocable to the Superfund appropriation.

Hazardous Substance Computer Services -- This program element funds the data processing (timesharing) costs of operating and maintaining all Superfund information systems.

Hazardous Substance Legal Services - Headquarters and Regions -- These program elements fund the activities of the Office of the General Counsel (OGC) and the Offices of the Regional Counsels under Superfund. These activities include statutory interpretations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the issuance of opinions and advice regarding the use of the Hazardous Substance Response Trust Fund and other financial, administrative, or legal issues. In addition, OGC acts as the Agency's chief counsel in defending regulatory and other Agency decisions regarding the implementation of CERCLA. The Offices of the Regional Counsels advise and assist the Regions and States in interpreting the Act and represent Regions in defensive litigation activities.

Hazardous Substance - Office of the Inspector General -- This program element provides appropriate auditing of the Hazardous Substance Response Trust Fund, as well as pre-award, interim, and final audits of contracts awarded under the Superfund program, and audits of Cooperative Agreements with the States.

Hazardous Substance - Office of Policy, Planning and Evaluation -- This program element provides policy analysis, program evaluation, management assessments, and technical support and analysis under the Superfund program.

Hazardous Substance - Office of the Comptroller -- This program element funds the activities of the Office of the Comptroller under Superfund. These activities include budget development and oversight, response to OMB and Congressional inquiries, analysis of program operating plans, issuance of allowances, and resource analyses on critical issues pertaining to the utilization of Superfund monies.

Hazardous Substance - Office of Research and Development - Lab Support -- This program element provides the essential laboratory support services required to operate and maintain the Office of Research and Development's Superfund program in three remote laboratories across the country. These support services include facilities operation and maintenance, utilities and equipment operations, rental costs, and other nonpersonnel laboratory support needs that are allocable to the Superfund appropriation.

HAZARDOUS SUBSTANCE FINANCIAL MANAGEMENT - HEADQUARTERS

1985 Program Request

The Agency requests $389,500 supported by 6.9 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of 2.5 workyears and a decrease of $175,400. The reduction in dollars reflects less dependence on contractor support while the increased workyears will provide for enhanced accounting and financial controls, as well as the full array of standard financial services for an expanding Superfund program. These financial services include basic accounting and payroll support, processing all financial actions and vouchers, access to the Financial Management System, cash management controls, and site-specific accounting to support cost recoveries.

1984 Program

In 1984, the Agency is allocating $564,900 and 4.4 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources adequately fund all necessary day-to-day financial activities and overall guidance and coordination of the Regional finance operations associated with the Superfund program.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $143,400 and 1.9 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation to provide sound fiscal controls and assure the financial integrity of the Superfund program.

HAZARDOUS SUBSTANCE FINANCIAL MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $641,000 supported by 20.4 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of $122,500 and 2.8 workyears. This increase will enable the Agency to continue to meet the requirements for sound financial management and fund control in the Superfund program as the level of field activity increases. The activities in this program will parallel those described for the Agency's Regional Financial Management program in the Management and Support media. However, financial management for the Superfund program is distinguished by the unique nature of the program's site and spill response actions, financial recovery actions, and site-specific

accounting. These resources will ensure appropriate financial documentation is maintained for the collection of monies due the Fund for Federal response recoveries. In addition, these resources will support transaction processing (travel, payroll, vouchers), general ledger activities, imprest fund services, financial reporting, and policy guidance and coordination to Superfund program offices throughout the country.

1984 Program

The Agency is allocating $518,500 and 17.6 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources support the expanding Superfund program and meet the increasing demands for sound financial management and fund control. Among the responsibilities of the Regional finance offices are: providing timely and accurate financial reports; maintaining internal controls to ensure the fiscal integrity of the Fund; billing and collecting monies due the Fund for Federal response recovery actions; coordinating financial data from other Federal agencies; and providing accurate and auditable document support for all Superfund financial transactions.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $167,200 and 5.3 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Regional finance offices provided the full range of financial management activities described above.

HAZARDOUS SUBSTANCE ADMINISTRATIVE MANAGEMENT - HEADQUARTERS

1985 Program Request

The Agency requests $3,351,100 supported by 44.5 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of $256,300 and 5.0 workyears over the 1984 enacted level. This increase in resources reflects the need to manage and monitor the increased level of contractor effort.

This request provides centralized administrative services in the contracts, grants, information management, health and safety, and personnel areas. In addition to the increased administrative management and support needed to implement long-term contracts, Superfund contracts require special and routine monitoring, task order issuances, and subcontract approvals. The Grants Administration Division will continue to award and administer Superfund cooperative and interagency agreements. The Superfund Information Systems staff will continue to manage automated Superfund systems while emphasizing the integration of new systems with existing Agency systems and data bases. The Occupational Health and Safety staff will develop and certify training courses, work with the National Institute of Occupational Safety and Health Administration and the U.S. Coast Guard on interagency safety task forces, and implement specialized medical monitoring programs. The Headquarters Superfund personnel team will provide staffing and classification activities to service Superfund personnel.

1984 Supplemental Request

The Agency requests a total of $379,000 supported by 5.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources support expanding Superfund contracting efforts and provide proper management of the large multi-task contracts characteristic of the Superfund program.

1984 Program

The Agency is allocating $3,094,800 and 39.5 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation to provide centralized administrative and management services. In 1984, the Agency is maintaining and refining the administrative services initiated in 1983. Significant resources are being devoted to manage the contracts awarded in 1983 and to award new 1984 contracts. In addition, the Agency is implementing and refining health and safety standards and procedures and is continuing to support the Superfund program in the areas of information management and personnel services.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $2,394,500 and 26.8 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. With these resources, the Agency awarded and administered the large mission contracts required to carry out response and remedial activities; provided central technical support for developing, operating, and maintaining all automated Superfund information systems; and maintained and supported the personnel requirements of the program staff.

HAZARDOUS SUBSTANCE ADMINISTRATIVE MANAGEMENT - REGIONS

1985 Program Request

The Agency requests $619,000 supported by 19.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of $204,900 and 9.0 workyears. This request will provide efficient administrative services for an expanding Regional program by providing overall management of Superfund Regional procurement activities, coordinating efforts with the Headquarters Procurement and Contracts Division, and interpreting and disseminating information reporting requirements among various Regional offices and other Federal and State agencies. In addition, the Regions will provide a reliable health and safety program which protects the safety of the Agency's employees. These resources will also allow Regional automated data processing offices to provide adequate technical assistance to support the site-specific record keeping requirements of the Superfund program.

1984 Program

The Agency is allocating $414,100 and 10.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources enable the Regions to provide current administrative management services, to manage Superfund Regional procurement activities and coordinate efforts with the Headquarters Procurement and Contracts Division, and to interpret and disseminate Superfund specific information and reporting requirements among various Regional offices and other Federal and State agencies.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $184,500 and 6.1 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources enabled the Regional Superfund program to meet growing demands in the areas of contracting and purchasing, information management, and occupational health and safety.

HAZARDOUS SUBSTANCE SUPPORT SERVICES - HEADQUARTERS

1985 Program Request

In 1985, the Agency requests $9,719,200 from the Hazardous Substance Response Trust Fund appropriation to cover Headquarters and Agencywide nonpersonnel support costs allocable to the Superfund program. This is an increase of $3,682,800 over the 1984 enacted level which reflects both increasing costs in the support areas and an increase of the Agency's support costs that are allocable to the Superfund appropriation. As with Regional Superfund support, the amount requested in this program element is determined primarily on the basis of the ratio of Superfund workyears to total Agency workyears. As this ratio increases, so does the Superfund program's share of total Agency support costs.

This program element provides resources for Superfund's share of the Agency's facilities rental, Federal Telecommunications System, utilities, local telephone service, printing and copying, postage, other building and office services, and health and safety training.

1984 Supplemental Request

The Agency requests a total of $621,500 from the Hazardous Substance Response Trust Fund appropriation for Headquarters and Agencywide Superfund support needs. This covers additional facilities rental, Federal Telecommunications System, utilities and other office, building and information management service costs to be incurred by additional Superfund workyears.

1984 Program

In 1984, the Agency is allocating $6,036,400 from the Hazardous Substance Response Trust Fund appropriation for Headquarters and Agencywide Superfund support needs. The increase over 1983 reflects expanded Superfund activity and an increase in the portion of total support costs that are allocable to the Superfund appropriation.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishment

In 1983, the Agency obligated $4,025,000 from the Hazardous Substance Response Trust Fund appropriation for the Superfund program portion of the Agency's space rental, communications, utilities, and other office and building service costs.

HAZARDOUS SUBSTANCE SUPPORT SERVICES - REGIONS

1985 Program Request

The Agency requests $3,839,000 from the Hazardous Substance Response Trust Fund appropriation to cover Regional Superfund nonpersonnel support costs such as utilities, local telephone service, printing and copying, minicomputer operations, equipment maintenance, etc. This is an increase of $1,751,000 over the 1984 enacted level, reflecting increased costs to support the additional workyears provided to the Superfund program in 1985. As with Headquarters Superfund support, the amount requested in this program element is determined primarily on the basis of the ratio of Regional Superfund workyears to total Regional workyears. As this ratio increases, so does the Superfund program's share of total Regional support costs. A full description of the functions funded from this program element is contained in the Regional Support Services program element in the Management and Support media.

1984 Supplemental Request

The Agency requests a total of $400,000 from the Hazardous Substance Response Trust Fund appropriation for Regional Superfund support needs. This covers additional office, building and information management service costs to be incurred by additional Regional Superfund workyears.

1984 Program

In 1984, the Agency is allocating $2,088,000 from the Hazardous Substance Response Trust Fund appropriation to fund Regional Superfund support costs. The increase over 1983 reflects expanded Regional Superfund activity and an increased portion of total Regional support costs that are allocable to the Superfund appropriation.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,527,000 for this program from the Hazardous Substance Response Trust Fund appropriation for Regional rent, communications and other nonpersonnel costs associated with Superfund in the Regions.

HAZARDOUS SUBSTANCE COMPUTER SERVICES

1985 Program Request

In 1985, the Agency requests $1,000,000 from the Hazardous Substance Response Trust Fund appropriation to provide timeshare services to the Superfund program through our National Computer Center at Research Triangle Park. The reduction of $480,000 reflects a decrease in systems development and testing efforts. Based on spending patterns and program plans, these resources will adequately cover the timeshare needs of existing Superfund management information systems and support the integration of Superfund information systems with other related Agency systems and data bases.

1984 Program

In 1984, the Agency is allocating $1,480,000 for this program from the Hazardous Substance Response Trust Fund appropriation to fund the direct timeshare charges attributable to Superfund systems, including a portion of the Agencywide computer facility management contracts, rental of hardware and software, and maintenance and operational costs.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $516,500 for this program from the Hazardous Substance Response Trust Fund appropriation to provide timeshare services to the Superfund program.

HAZARDOUS SUBSTANCE LEGAL SERVICES - HEADQUARTERS

1985 Program Request

In 1985, the Agency requests $250,100 supported by 5.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an

increase of $6,600. These resources will enable the Office of General Counsel to provide continued support to the Superfund program through advice and assistance to Agency Superfund managers. This includes consultation on financial and administrative matters, legal support for the development and defense of regulations and disbursement decisions, and legal guidance on statutory interpretations and development of response priorities.

1984 Program

In 1984, the Agency is allocating $243,500 and 5.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Office of General Counsel is providing advice and consultation on financial and administrative matters, such as eligible uses of the Fund and other Agency appropriations, staffing, and budget activities; legal guidance in program matters such as interpretation of the statute and the National Contingency Plan; and defense of the Agency in any litigation brought against it.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $83,700 and 1.7 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Office of General Counsel provided legal guidance in program matters such as statutory interpretation and development of response priorities, review of proposed regulatory actions and defense of the Agency where litigation had been brought against it.

HAZARDOUS SUBSTANCE LEGAL SERVICES - REGIONS

1985 Program Request

In 1985, the Agency requests $691,700 supported by 14.3 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. This is an increase of $220,800 and 4.3 workyears to support anticipated Regional participation in defensive litigation. The Offices of Regional Counsels will continue to provide legal assistance by reviewing EPA Cooperative Agreements with States for legal sufficiency, advise States to assure appropriate legal authorities to qualify for participation in Fund-financed actions, respond to challenges to enforcement activities, determine eligible uses of the Fund, and advise on Federal procurement and treatment of confidential information.

1984 Program

In 1984, the Agency is allocating $470,900 and 10.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Regional program includes such activities as reviewing EPA Cooperative Agreements with States for legal sufficiency, assisting State agencies in assuring legal authorities to qualify participation in Fund-financed actions, and responding to legal challenges to Agency actions.

1984 Explanation of Changes from the Amendment

The net decrease of -$5,200 results from the following action:

-Reprogramming. (-$5,200) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$5,200.

1983 Accomplishments

In 1983, the Agency obligated $215,400 and 5.6 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Offices of Regional Counsels assisted the States on legal matters concerning Fund-financed removal and remedial actions. This involved advising State agencies on the legal requirements under CERCLA and assisting in drafting, negotiating and documenting the terms of EPA Cooperative Agreements with States. In addition, the Regional Counsels advised on legal problems associated with EPA removal and remedial activities.

HAZARDOUS SUBSTANCE - OFFICE OF THE INSPECTOR GENERAL

1985 Program Request

In 1985, the Agency requests $3,109,600 supported by 29.8 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of $39,400. This increase will enable the Office of the Inspector General to perform internal audits to improve the economy, efficiency, and effectiveness of the Hazardous Substance Response Trust Fund's management. For example, audits assess the adequacy of Agency site cleanup efforts, Federal and State cost recovery efforts, and Federal or State oversight of emergency response actions. Financial audits of the Fund and external contracts and agreements will continue to be audited by public accounting firms under contract. These investigative resources will enable the Office of the Inspector General to identify and eliminate situations which create the opportunity for fraud and abuse.

1984 Program

In 1984, the Agency is allocating $3,070,200 and 29.8 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources enable the Office of Inspector General to perform internal audits to improve the economy, efficiency, and effectiveness of the Fund's management. Financial audits of the Fund and external contracts and agreements are being audited by public accounting firms under contract. Investigative resources are supporting the Office of the Inspector General's efforts to identify and eliminate situations which create the opportunity for fraud and abuse.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,289,700 and 19.9 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The obligated amount included $172,000 for audits conducted by other Federal agencies and $275,000 for audits conducted by independent public accounting firms. The Office of the Inspector General completed its review and submitted to Congress the final report on the Hazardous Substance Response Trust Fund on March 31, 1983.

During 1983, the Office of Inspector General issued 72 audit reports on the Fund. Internal audit reports recommended the implementation of major changes to the Agency's accounting system and procurement procedures to assure charges to the Fund were appropriate and to help prevent excessive charges on emergency cleanup contracts.

External audits questioned $16 million of the approximately $230 million audited. Agency officials sustained the vast majority of costs questioned and took prompt action to reduce the amount of awards and credits or to initiate necessary recovery actions.

HAZARDOUS SUBSTANCE - OFFICE OF POLICY, PLANNING AND EVALUATION

1985 Program Request

The Agency requests $637,700 supported by 4.0 total workyears for this program from the Hazardous Substances Response Trust Fund appropriation, a decrease of $194,700. This reduction reflects a shift in emphasis from program implementation and evaluation to technical support and analysis. This request will maintain the workyears committed to policy direction and analysis in the Office of Policy Analysis, technical support and analysis in the Office of Standards and Regulations, and program evaluation in the Office of Management Systems and Evaluation. This will ensure that Superfund policies meet Agencywide guidelines and are supported by comprehensive economic and management analyses.

1984 Program

In 1984, the Agency is allocating $832,400 and 4.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Offices of Policy Analysis, Standards and Regulations, and Management Systems and Evaluation are providing policy development, reviewing guidance for implementing regulations, and conducting program evaluations of Superfund's management systems, activities, and accomplishments.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplisments

In 1983, the Agency obligated $683,600 and 2.1 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources were used to fund the following activities: the Office of Policy Analysis prepared and analyzed policy and program implementation issues; the Office of Standards and Regulations provided statistical and technical support of the regulatory development process; and the Office of Management Systems and Evaluation provided the program with effective management systems and accurate assessments of program activities and accomplishments.

HAZARDOUS SUBSTANCE - OFFICE OF THE COMPTROLLER

1985 Program Request

The Agency requests $202,600 supported by 5.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation, a decrease of $189,000. The reduction in resources reflects decreased contractor support. The Office of the Comptroller will coordinate and prepare the OMB and Congressional budget submission, respond to Congressional inquiries, and provide fund oversight activities including ongoing resource reviews for the Superfund program. These functions will be especially critical in 1985 when program expenditures and activities will increase.

1984 Program

In 1984, the Agency is allocating $391,600 and 5.0 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. These resources support the ongoing budget activities described above and fund contract efforts to identify and analyze major resource issues related to Superfund.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $100,400 and 3.3 total workyears for this program from the Hazardous Substance Response Trust Fund appropriation. The Office of the Comptroller prepared the 1984 Hazardous Substance Response Trust Fund Congressional budget submission and the 1985 budget submission to the Office of Management and Budget; provided allowances and other budget control mechanisms for 1983 funds; reviewed and analyzed 1984 operating plans; and conducted resource analyses on critical issues pertaining to the utilization of Superfund monies. These included methods to improve obligation patterns and workyear charging, efficient utilization of resources designated for equipment and research and development projects, and fund balancing projections.

HAZARDOUS SUBSTANCE - OFFICE OF RESEARCH AND DEVELOPMENT - LAB SUPPORT

1985 Program Request

The Agency requests a total of $100,000 for this program from the Hazardous Substance Response Trust Fund appropriation, an increase of $45,000. These resources will provide essential support services for three remote Research and Development laboratories which have workyears performing research in the Hazardous Substances area. These resources will adequately fund such items as facilities operation and maintenance, utilities and equipment operations, rental costs and other nonpersonnel support costs that are allocable to the Superfund appropriation. These resources are essential for the operation and maintenance of ORD's Superfund research program.

1984 Program

In 1984, the Agency is allocating a total of $55,000 for this program from the Hazardous Substance Response Trust Fund appropriation. These resources provide for the essential services, as described above, which are required to operate and maintain the Office of Research and Development's Superfund program in three remote laboratories.

1984 Explanation of Changes from the Amendment

The net increase of +$55,000 results from the following action:

-Reprogramming. (+$55,000) This reprogramming transferred +$55,000 from the Environmental Engineering and Technical Support program into this program to provide funds for Superfund related lab support activities in the Office of Research and Development.

1983 Accomplishments

In 1983, the Agency obligated a total of $54,400 for this program from the Hazardous Substance Response Trust Fund appropriation. This funding provided for the essential laboratory support services associated with the Superfund research program in three of the Office of Research and Development's remote laboratories.

ENVIRONMENTAL PROTECTION AGENCY

1985 Budget Estimate

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SUPERFUND

Hazardous Substance Response - EPA

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
PROGRAM								
Hazardous Spill & Site Response								
Hazardous Substance Response Trust Fund		$166,239.9	$256,345.7	$338,408.9	$313,383.9	$47,302.6	$535,607.4	$222,223.5
	TOTAL	$166,239.9	$256,345.7	$338,408.9	$313,383.9	$47,302.6	$535,607.4	$222,223.5
Assessing & Replacing Natural Resources								
Hazardous Substance Response Trust Fund			$1,009.7	$1,009.7	$1,009.7			-$1,009.7
	TOTAL		$1,009.7	$1,009.7	$1,009.7			-$1,009.7
Multi-media Support								
Hazardous Substance Response Trust Fund				$244.0	$244.0		$463.6	$219.6
	TOTAL			$244.0	$244.0		$463.6	$219.6
TOTAL:								
Hazardous Substance Response Trust Fund		$166,239.9	$257,355.4	$339,662.6	$314,637.6	$47,302.6	$536,071.0	$221,433.4
Hazardous Substance Response - EPA	TOTAL	$166,239.9	$257,355.4	$339,662.6	$314,637.6	$47,302.6	$536,071.0	$221,433.4

SUPERFUND

Hazardous Substance Response - EPA

	ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
			(DOLLARS IN THOUSANDS)				
PERMANENT WORKYEARS							
Hazardous Spill & Site Response	350.8	296.6	451.8	450.7	21.0	570.8	120.1
Assessing & Replacing Natural Resources		1.0	1.0	1.0			-1.0
Multi-media Support			3.6	3.6		10.0	6.4
TOTAL PERMANENT WORKYEARS	350.8	297.6	456.4	455.3	21.0	580.8	125.5
TOTAL WORKYEARS							
Hazardous Spill & Site Response	410.2	348.2	518.9	518.9	21.0	631.8	112.9
Assessing & Replacing Natural Resources		1.0	1.0	1.0			-1.0
Multi-media Support			4.0	4.0		10.0	6.0
TOTAL WORKYEARS	410.2	349.2	523.9	523.9	21.0	641.8	117.9

Hazardous Substance Response - Environmental Protection Agency

Budget Request

The Agency requests a total of $536,071,000 supported by 641.8 total workyears for 1985 from the Hazardous Substance Response Trust Fund appropriation, an increase of $221,433,400 and 117.9 total workyears over 1984. The increase reflects an acceleration of the Superfund program and an increase in the number of sites where the more expensive remedial construction will be undertaken. This is in contrast to earlier years in which the initial emphasis of the program was on developing basic policies and guidance for program implementation and performing the necessary preliminary site planning work.

Program Description

This program is responsible for protecting public health and the environment from the dangers associated with releases of hazardous substances into the environment by providing the necessary funding and support to undertake short-term emergency responses and long-term site cleanup. The activities include responding to spills and emergency releases of hazardous substances, conducting remedial work at abandoned and uncontrolled hazardous waste sites, and assessing and replacing natural resources damaged by hazardous substances. The authority to carry out these activities is provided by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

Hazardous Spill and Site Response -- The Agency coordinates an emergency response program to deal with the most serious hazardous substance spills and site emergencies where the responsible party or State and local governments are unable to respond adequately. The Agency also conducts a comprehensive program to evaluate all known hazardous waste sites, to establish priorities for remedial response, and to undertake the appropriate remedy at as many sites as possible. The Headquarters portion of the program establishes the policy framework, coordinates the setting of priorities, administers the response resources, and provides implementation guidance. The Regions have the lead responsibility for conducting all the preliminary field work to identify the problems and for managing the response work.

Assessing and Replacing Natural Resources -- CERCLA authorizes payments for costs associated with Federal or State efforts to restore, rehabilitate, replace, or acquire the equivalent of natural resources damaged as a result of hazardous substance releases. The Agency, in conjunction with other Federal agencies, will determine if significant or irreplaceable damage to natural resources has resulted from a release of hazardous substances, determine the economic impact of any such damage, evaluate alternatives for restoring or replacing these damaged natural resources, and finance the costs of restoration or rehabilitation.

Multi-media Support -- This program provides multi-media interdisciplinary support for CERCLA. The program will fund activities necessary to inform the public of the actions the Agency is taking under CERCLA and to allow the affected community an opportunity to participate.

HAZARDOUS SPILL AND SITE RESPONSE

1985 Program Request

The Agency requests a total of $535,607,400 supported by 631.8 total workyears from the Hazardous Substance Response Trust Fund appropriation to conduct removal

and remedial response actions in 1985. This is an increase of $222,223,500 or 71% and 112.9 total workyears from the 1984 appropriated levels. The increase reflects the continued momentum of the program in initiating planning work at additional sites on the National Priorities List (NPL) and in proceeding with the more expensive implementation work at sites where planning is completed.

Removal: The Agency expects to receive and screen 6,000 hazardous substances release notifications in 1985 to determine what, if any, response is required. In the majority of cases, the responsible party, State or local government will take the lead in addressing the problem. In situations where more than one State is involved or where there is an unusually complex problem, the Federal government will coordinate and fund the response. EPA and the Coast Guard will continue to maintain a core emergency response capability in 1985, including EPA's Environmental Response Team, comprised of Agency employees with special engineering and scientific expertise.

In 1985, the Agency will continue the expanded removal program, begun in 1983, to stabilize sites where significant threats existed, while additional long-term response was being considered. These efforts enabled the Agency to take immediate action to protect public health and the environment without waiting for the completion of long-term analysis of the site or the results of more detailed site assessments. The Agency expects that the total number of immediate removal actions will remain fairly stable at 150 sites and spills per year.

In addition to responding to emergencies, planned removals will be taken where an immediate response is not critical, but some early response is necessary to protect public health or the environment. The Agency will undertake 20 planned removal actions in 1985.

The Agency will also be conducting investigations of known dioxin production and disposal facilities. Where appropriate, removal actions will be undertaken at those facilities where a significant threat to public health exists. Dioxin sites may also be scored, when appropriate, using the hazard ranking system for inclusion on the National Priorities List (NPL) for eventual remedial action.

Remedial: Planning for and implementing remedial response is a difficult task. The work at a site, from hazard ranking through remedial investigation/feasibility study and design to the completion of implementation, will take between 30 and 50 months. Many factors, including the cooperation of the responsible parties, availability of State resources, and changes in field conditions will influence the program's progress. To ensure that sites are addressed as quickly as possible, EPA will develop site management plans for each site on the National Priorities List. These plans will enable the Agency to coordinate all proposed response and enforcement actions at a given site and monitor its progress in addressing the site.

The Agency is committed to ensuring that the site remedies are both technically sound and cost-effective. This requires that detailed studies be undertaken to characterize the problem, collect and analyze the data necessary to determine the potential range of solutions, and to evaluate and select the most effective course of action. In 1985, the Agency will be managing remedial response activities at approximately 260 sites where Fund-financed response is anticipated. Sixty-nine of these sites will have remedial investigation/feasibility studies started in 1985. The remaining sites are those where action was initiated in previous years.

Once this step is completed, the final remedial action is selected, the detailed engineering design for the proposed action is developed, and the actual implementation of the remedy is carried out by either the States, where they have elected to take the lead, or contractors under the direction of the Army Corps of

Engineers. In 1985, design work will be started at 68 sites and implementation at 46 sites. This will bring the total number of sites where a solution has been selected and design and/or construction started to 135 by the end of 1985 including the supplemental.

State Participation: The Agency will encourage as many States as possible to participate in ongoing response actions. The Agency expects that States will enter into Cooperative Agreements for approximately $102 million for site response actions. This is a substantial increase of $52 million or 104% over the anticipated level from enacted 1984 funds. Efforts will continue in 1985 to encourage States to assume greater responsibility for development and operation of their own response programs. This will include providing advice and guidance on organizing response capability; reviewing and suggesting improvements in technical resources and staff; providing technical assistance; identifying technical, health and safety training needs; and assisting in determining possible financial mechanisms that States can adopt to support their current and future activities.

Interagency Support: Resources to support incident-specific activities of other agencies will be provided under this program. Examples of incident-specific activities that may be performed by other agencies include health studies at NPL sites by the Department of Health and Human Services, permanent and temporary relocation of individuals at NPL sites by the Federal Emergency Management Agency, and the U.S. Coast Guard response to hazardous spill incidents occurring in coastal waters.

1984 Supplemental Request

The Agency is requesting $47,302,600 supported by 21.0 total workyears over the enacted level from the Hazardous Substance Response Trust Fund appropriation for 1984.

In 1983, the Agency eliminated the State cost share requirements for remedial planning and simplified the enforcement process. These changes helped enable the Agency to initiate planning for Fund-financed response at 85 sites.

The requested funds in 1984 will enable the Agency to continue this momemtum by initiating 20 additional remedial investigations for eventual Fund-financed response, 10 additional designs and begin construction at 2 additional sites. Contract funding is also requested under this program to fund 15 additional enforcement investigations which will be managed under the Hazardous Substance Technical Enforcement program.

1984 Program

In 1984, the Agency is allocating a total of $313,383,900 and 518.9 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. The majority of work in 1984 will be geared toward initiating the necessary remedial investigations and feasibility studies, continuing to work on sites initiated during 1982 and 1983, and responding to those emergencies where a Federal response is required.

Removal: The Agency will direct the response at 150 major hazardous substance releases and 20 planned removals and will provide on-scene assistance at 300 releases of hazardous substances. In addition, the regulatory and guidance framework will be completed for the removal program, including promulgation of final regulations on CERCLA notification, on reportable quantities, and on the designation of additional hazardous substances.

Remedial: In 1984, the Agency will focus its remedial efforts on initiating remedial investigations/feasibility studies at sites on the National Priorities List (NPL) and beginning design and implementation at sites where planning has been

completed. The Agency will conduct 4,000 preliminary assessments of sites, 1,300 site inspections, 55 remedial investigations/feasibility studies at sites where a Fund-financed response is anticipated, 30 engineering designs, and 15 remedial actions.

As in 1985, site-specific work undertaken by other agencies in 1984 will be funded under this program when requested by on-scene personnel.

1984 Explanation of Changes from the Amendment

The net decrease of -$25,025,000 results from the following actions:

-Reprogrammings. (-$25,025,000) A reprogramming was made to this activity which was not reportable under the Congressional reprogramming limitations. This change resulted in a net decrease of -$25,000.

An additional reprogramming of -$25,000,000 was transferred from this activity to the FEMA allocation program reflecting the remaining $24,000,000 of the total $33,100,000 designated for the Times Beach, Missouri relocation project and the $1,000,000 for the Globe, Arizona relocation project.

1983 Accomplishments

In 1983, the Agency obligated $166,239,900 and 410.2 total workyears from the Hazardous Substance Response Trust Fund appropriation for this program. Operations were directed at formulating the basic operating policies and establishing the implementation mechanisms for the program. Additionally, by the end of 1983, the Agency had developed Interagency Agreements with the Corps of Engineers and other Federal agencies and awarded Cooperative Agreements at 59 sites since 1981. The Agency had designated 546 sites as national priority sites and initiated remedial investigations at 136 sites where Fund-financed response is anticipated.

Specific accomplishments in 1983 included the processing of over 4,600 notifications of releases of hazardous substances; directing 88 immediate removals at major hazardous substances incidents and 6 planned removals; monitoring 400 removals of hazardous substances carried out by the responsible party or State and local authorities; conducting 1,891 preliminary assessments of sites and 550 site inspections; and initiating 85 remedial investigations/feasibility studies, 11 engineering designs, and 6 remedial actions.

ASSESSING AND REPLACING NATURAL RESOURCES

1985 Program Request

To date no claims have been approved. Therefore, in 1985, the Agency will not request funds for this program. Funding appropriated in previous years is available to be used for costs associated with Federal or State efforts to restore, rehabilitate, replace, or acquire the equivalent of natural resources damaged as a result of hazardous substance releases.

1984 Program

In 1984, the Agency is allocating a total of $1,009,700 and 1.0 total workyear from the Hazardous Substance Response Trust Fund appropriation to this program. These resources can support up to two damage assessments and one restoration action.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, no funds were obligated for this program because no claims were received.

MULTI-MEDIA SUPPORT

1985 Program Request

In 1985, the Agency requests a total of $463,600 supported by 10.0 total workyears from the Hazardous Substance Response Trust Fund appropriation to provide interdisciplinary support for CERCLA, an increase of $219,600 and 6.0 total workyears from 1984. The increase provides additional support to ensure effective public participation in an expanded Superfund program. Until 1984 the need for these activities were minimal. However, as the Agency completes planning efforts at a larger number of sites and begins to select and implement solutions, the Agency must ensure that the public is adequately informed of site response decisions and has an opportunity to participate.

1984 Program

In 1984, the Agency is allocating a total of $244,000 and 4.0 total workyears from the Hazardous Substance Response Trust Fund appropriation to this program. These resources will support the ongoing Superfund program activities to ensure adequate public participation in the Superfund program.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, no funds were obligated for this program.

SUPERFUND

Hazardous Substance Response - Interagency

PROGRAM		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
		(DOLLARS IN THOUSANDS)						
Department of Health & Human Services								
Hazardous Substance Response Trust Fund		$7,140.9	$1,905.0	$5,000.0	$5,000.0		$9,495.0	$4,495.0
	TOTAL	$7,140.9	$1,905.0	$5,000.0	$5,000.0		$9,495.0	$4,495.0
United States Coast Guard								
Hazardous Substance Response Trust Fund		$1,514.8	$3,674.4	$3,674.4	$3,674.4		$2,192.0	-$1,482.4
	TOTAL	$1,514.8	$3,674.4	$3,674.4	$3,674.4		$2,192.0	-$1,482.4
Department of Justice								
Hazardous Substance Response Trust Fund		$1,937.4	$2,644.0	$3,282.4	$3,282.4		$4,822.0	$1,539.6
	TOTAL	$1,937.4	$2,644.0	$3,282.4	$3,282.4		$4,822.0	$1,539.6
Federal Emergency Management Agency (FEMA)								
Hazardous Substance Response Trust Fund							$234.0	$234.0
	TOTAL						$234.0	$234.0
FEMA-Relocation								
Hazardous Substance Response Trust Fund		$7,455.5			$25,000.0			-$25,000.0
	TOTAL	$7,455.5			$25,000.0			-$25,000.0

SUPERFUND

Hazardous Substance Response - Interagency

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
National Oceanographic & Atmospheric Administration								
Hazardous Substance Response Trust Fund		$348.3		$250.0	$250.0		$500.0	$250.0
	TOTAL	$348.3		$250.0	$250.0		$500.0	$250.0
Department of Interior								
Hazardous Substance Response Trust Fund			$80.0	$315.0	$315.0		$355.0	$40.0
	TOTAL		$80.0	$315.0	$315.0		$355.0	$40.0
Occupational Safety & Health Administration								
Hazardous Substance Response Trust Fund				$151.6	$151.6		$222.4	$70.8
	TOTAL			$151.6	$151.6		$222.4	$70.8
TOTAL:								
Hazardous Substance Response Trust Fund		$18,396.9	$8,303.4	$12,673.4	$37,673.4		$17,820.4	-$19,853.0
Hazardous Substance Response - Interagency	TOTAL	$18,396.9	$8,303.4	$12,673.4	$37,673.4		$17,820.4	-$19,853.0

Hazardous Substance Response-Interagency

Budget Request

The Agency requests a total of $17,820,400 from the Hazardous Substance Response Trust Fund appropriation for Interagency activities in 1985, a decrease of $19,853,000 from 1984. The major portion of this decrease reflects the fact that 1984 funding included $25,000,000 for the permanent relocation of residents of the Times Beach, Missouri Superfund site. The requested resources will support the ongoing Superfund program activities of the Department of Health and Human Services, the United States Coast Guard, the Department of Justice, the National Oceanographic and Atmospheric Administration, the Department of Interior, the Federal Emergency Management Agency, and the Occupational Safety and Health Administration.

Program Description

Executive Order 12316, signed by the President in August 1981, requires the Agency to manage an interagency budget process culminating in a consolidated budget request for the entire Superfund program. The activities of other Federal agencies are divided into two basic categories. The first category includes those activities which are episodic in nature and are taken in direct support of specific site or spill response actions. With the exception of the Federal Emergency Management Agency (FEMA), these actions are paid on a reimbursable basis from the funds appropriated to the Hazardous Spill and Site Response program. The second category of other Federal agency involvement is support for ongoing activities which are generally not incident-specific. These activities include developing program policies and guidance, conducting health research, training response personnel, litigating civil and criminal cases, and providing scientific and technical advice to EPA on-scene coordinators. These actions are financed by the funds requested in this subactivity. All funds are provided through transfer allocation accounts with the exception of the USCG. Funds are transferred to the USCG on a reimbursable basis.

Department of Health and Human Services (HHS) -- CERCLA established an Agency for Toxic Substances and Disease Registry within the Department of Health and Human Services which has authority to investigate complaints of illness or disease related to exposure to hazardous substances, to conduct health studies and surveys, to develop appropriate testing for exposed individuals, and to develop and maintain information on health effects of toxic substances. EPA works closely with HHS to develop policies and procedures to ensure a coordinated Federal approach in conducting these activities.

United States Coast Guard (USCG) -- The USCG has the authority under CERCLA to respond to any release or threatened release involving the coastal zone, Great Lakes waters, ports, and harbors. The USCG provides training to maintain this response capability, conducts enforcement activities as necessary in their areas of responsibility, and maintains the National Response Center.

Department of Justice (DOJ) -- The Attorney General has responsibility to conduct and control all litigation arising under CERCLA. EPA prepares the required technical and legal documentation and cooperates with DOJ in the negotiation of consent decrees for privately-financed response actions.

Federal Emergency Management Agency (FEMA) -- FEMA has the authority under CERCLA to provide temporary and permanent relocation housing for individuals whose health is threatened by hazardous waste sites. EPA supports FEMA in establishing the necessary core staff in both Headquarters and Regions in order to effectively carry out delegated functions.

Federal Emergency Management Agency - Relocation -- FEMA provides temporary and permanent housing relocation to individuals threatened by hazardous waste.

National Oceanographic and Atmospheric Administration (NOAA) -- The National Contingency Plan designates NOAA as Federal Trustee for certain natural resources which may be lost or damaged as a result of hazardous substance discharges. NOAA also provides scientific and technical support for responses to spills and hazardous materials in coastal and marine waters.

Department of Interior (DOI) -- The National Contingency Plan designates DOI as Federal Trustee for certain natural resources which may be lost or damaged as a result of hazardous substance discharges. DOI also provides scientific and technical support in the areas of resource damage assessment through participation on National and Regional Response Teams.

Occupational Safety and Health Administration (OSHA) -- OSHA has responsibility for worker protection at Superfund sites. The Health Response Team (HRT) provides assistance to EPA officials and other on-site personnel to protect workers at hazardous waste sites and develops guidelines to improve current methods for worker protection.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS)

1985 Program Request

The Agency requests a total of $9,495,000 from the Hazardous Substance Response Trust Fund appropriation for this program. This increase of $4,495,000 reflects the additional management of health support that EPA anticipates will be needed as the number of sites where EPA is taking action increases in 1985. These resources will enable HHS to develop protocols for site-specific disease registries and conduct birth defect studies at Superfund sites, to support the Headquarters and field core staff necessary to provide scientific and technical advice to EPA on-scene coordinators when assessing the public health hazard at priority sites, and to review environmental test results for indications of human health hazards. On an ongoing basis, HHS will provide health related guidance and will manage laboratory support for emergency response.

1984 Program

In 1984, the Agency is allocating a total of $5,000,000 from the Hazardous Substance Response Trust Fund appropriation to this program for the ongoing activities of HHS. In addition to these 1984 funds, HHS has approximately $2,515,100 in obligational authority remaining from its 1983 appropriation. HHS is collecting the information and developing the procedures necessary to provide continuing health related support to the Superfund program. Included are development of health related field guidance in support of Agency emergency response actions, development of standard guidelines for the conduct of health and epidemiological studies at NPL sites, production of worker health and safety technical guidance and field manuals for individuals involved in response actions, and toxicological testing of chemicals found at NPL sites.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, $7,140,900 was obligated from the Hazardous Substance Response Trust Fund appropriation by HHS. These resources provided health related activities, as mandated by CERCLA. Scientific support and ongoing support for emergency response activities were continued at an increased number of sites. Toxicology testing and worker health and safety research efforts were expanded.

UNITED STATES COAST GUARD (USCG)

1985 Program Request

The Agency requests a total of $2,192,000 from the Hazardous Substance Response Trust Fund appropriation for this program. This decrease of $1,482,400 reflects reduced training requirements by the USCG in 1985. The USCG will ensure CERCLA financial responsibility requirements are met, train emergency response personnel using program modules and simulation drills, staff the CERCLA component of the National Response Center, and maintain records of characteristics of certain chemicals.

1984 Program

In 1984, the Agency is allocating a total of $3,674,400 from the Hazardous Substance Response Trust Fund appropriation for the USCG. These resources will be used to purchase safety equipment, conduct response training for USCG personnel, upgrade capabilities at the National Response Center, and provide field data systems to support response programs.

1984 Explanation of Changes from the Amendment

There was no change to this program.

1983 Accomplishments

In 1983, the Agency obligated $1,514,800 from the Hazardous Substance Trust Fund appropriation for the USCG. These resources provided on-site personnel training and USCG enforcement activities. In addition, these funds supported information systems and the operation of the National Response Center.

DEPARTMENT OF JUSTICE (DOJ)

1985 Program Request

The Agency requests a total of $4,822,000 from the Hazardous Substance Response Trust Fund appropriation. The increase of $1,539,600 will be used to litigate an expanding caseload. There will be additional civil cases to compel responsible party action, and additional criminal and cost recovery cases. DOJ will continue to litigate existing cases. These complex and unprecedented cases remain on the docket longer than anticipated resulting in an increasing caseload. These funds will also be used to support the operation of a system which provides automated data support for complex cases. DOJ will continue to provide legal advice and assistance to EPA in negotiations with responsible parties and issuance of administrative orders and to defend all actions brought against the Fund.

1984 Program

In 1984, the Agency is allocating a total of $3,282,400 from the Hazardous Substance Response Trust Fund appropriation for DOJ. The Department of Justice is continuing to litigate suits previously initiated and is filing precedent setting suits against responsible parties to compel removal and remedial actions and to recover Federal response costs incurred from the Fund. The Department of Justice is also providing assistance in negotiations with responsible parties and in the issuance of administrative orders, and provides the government's defense in cases filed against CERCLA.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, the Agency obligated $1,937,400 from the Hazardous Substance Response Trust Fund appropriation for DOJ. These resources were used for litigation and other enforcement-related activities.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

1985 Program Request

The Agency requests a total of $234,000 from the Hazardous Response Trust Fund appropriation for FEMA's ongoing activities. These resources will be used to support FEMA's Regional Response Team, and to provide management support and oversight for temporary and permanent relocations.

1984 Program

No resources were allocated to this program in 1984.

1983 Accomplishments

No resources were allocated to this program in 1983.

FEDERAL EMERGENCY MANAGEMENT AGENCY - RELOCATION

1985 Program Request

No resources are requested for this program in 1985. Resources for site-specific relocations will be transferred as required from the Hazardous Spill and Site Response program.

1984 Program

In 1984, the Agency is allocating a total of $25,000,000 from the Hazardous Substance Response Trust Fund appropriation for FEMA. These resources will be used to support permanent relocation of residents, businesses or community facilities from the Times Beach, Missouri and Globe, Arizona Superfund sites.

1984 Explanation of Changes from the Amendment

The net increase of +$25,000,000 results from the following action:

-Reprogramming. (+$25,000,000) A reprogramming of +$25,000,000 was transfered to this activity from the Hazardous Spill and Site Response program reflecting the remaining $24,000,000 of the total $33,100,000 designated for the Times Beach, Missouri relocation project and the $1,000,000 for the Globe, Arizona relocation project.

1983 Accomplishments

In 1983, the Agency obligated $7,455,500 from the Hazardous Substance Response Trust Fund appropriation. These resources were used for permanent and temporary relocation of residents at Times Beach, Missouri and other site-specific relocations.

NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

1985 Program Request

The Agency requests a total of $500,000 from the Hazardous Substance Response Trust Fund appropriation an increase of $250,000 from 1984. The additional re-

sources will be used by NOAA to provide and evaluate updated field monitoring methods for sampling and analyzing contaminants discharged into marine environments. NOAA will continue to conduct spill simulations at selected ports, to provide updated protective equipment, and to participate on Regional Response Teams.

1984 Program

In 1984, the Agency is allocating $250,000 from the Hazardous Substance Response Trust Fund appropriation for this program to provide training for the scientific response team, to purchase and maintain protective equipment for personnel, and to maintain field instrumentation.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, EPA obligated $348,300 from the Hazardous Substance Response Trust Fund appropriation for NOAA activities. These resources were used to purchase equipment and to prepare for conducting natural resource damage assessments.

DEPARTMENT OF INTERIOR (DOI)

1985 Program Request

The Agency requests a total of $355,000 from the Hazardous Substance Response Trust Fund appropriation for DOI, an increase of $40,000 from 1984. These additional resources will enable nine Department of Interior bureaus with expertise in their area of concern, to more effectively participate on the National Response Team. DOI will continue to coordinate the activities of these bureaus in support of EPA's basic mission of spill and site response. Funds will also be utilized for the development of State and local contingency plans.

1984 Program

In 1984, the Agency is allocating a total of $315,000 from the Hazardous Substance Response Trust Fund appropriation for DOI. In 1984, the DOI is participating on the Regional and National Response Teams by providing damage assessment expertise.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

In 1983, no resources were allocated for this program.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

1985 Program Request

The Agency requests a total of $222,400 from the Hazardous Substance Response Trust Fund appropriation for OSHA. This increase of $70,800 will allow the OSHA Health Response Team to provide EPA officials and other responsible personnel with additional technical assistance in protecting workers at Superfund sites, and to enforce existing worker safety standards.

1984 Program

In 1984, the Agency is allocating a total of $151,600 from the Hazardous Substance Response Trust Fund appropriation for this program. OSHA will use these resources to provide technical assistance to EPA officials and other responsible on-site personnel in protecting workers at Superfund sites.

1984 Explanation of Changes from the Amendment

There is no change from the amendment.

1983 Accomplishments

No funds were provided for this program in 1983.

SUPERFUND

Hazardous Waste Site Inventory

		ACTUAL 1983	BUDGET ESTIMATE 1984	AMENDMENT 1984	CURRENT ESTIMATE 1984	SUPPLEMENTAL REQUEST 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 VS 1984
				(DOLLARS IN THOUSANDS)				
PROGRAM								
Hazardous Waste Site Inventory								
Hazardous Substance Response Trust Fund			$9,662.5					
	TOTAL		$9,662.5					
TOTAL:								
Hazardous Substance Response Trust Fund			$9,662.5					
Hazardous Waste Site Inventory	TOTAL		$9,662.5					

Hazardous Waste Site Inventory

Budget Request

No funds are requested for this activity in 1985.

Program Description

This was a one time Congressionally mandated program to support State hazardous substances activities under Section 3012 of the Resource Conservation and Recovery Act (RCRA).

Hazardous Waste Site Inventory -- This program provided financial assistance to States for assessment and inspections of hazardous waste sites under Section 3012 of the Resource Conservation and Recovery Act (RCRA). In 1983, the Congress earmarked $10,000,000 for these purposes.

HAZARDOUS WASTE SITE INVENTORY

1985 Program Request

The Agency requests no funds for this activity in 1985.

1984 Program

In 1984, the remainder of the $10 million will be obligated. The Agency will not be allocating any additional resources to this program.

1983 Accomplishments

In 1983, a total of $9,662,500 was obligated from the Hazardous Substance Response Trust Fund appropriation for this program. These funds supported State hazardous waste site activities including preliminary assessments, inspections, responsible party searches, inventory completion, and collection of additional information to characterize site problems. A regulation was promulgated describing the policies and procedures for a State to receive some share of the available resources.

ENVIRONMENTAL PROTECTION AGENCY

SPECIAL ANALYSES

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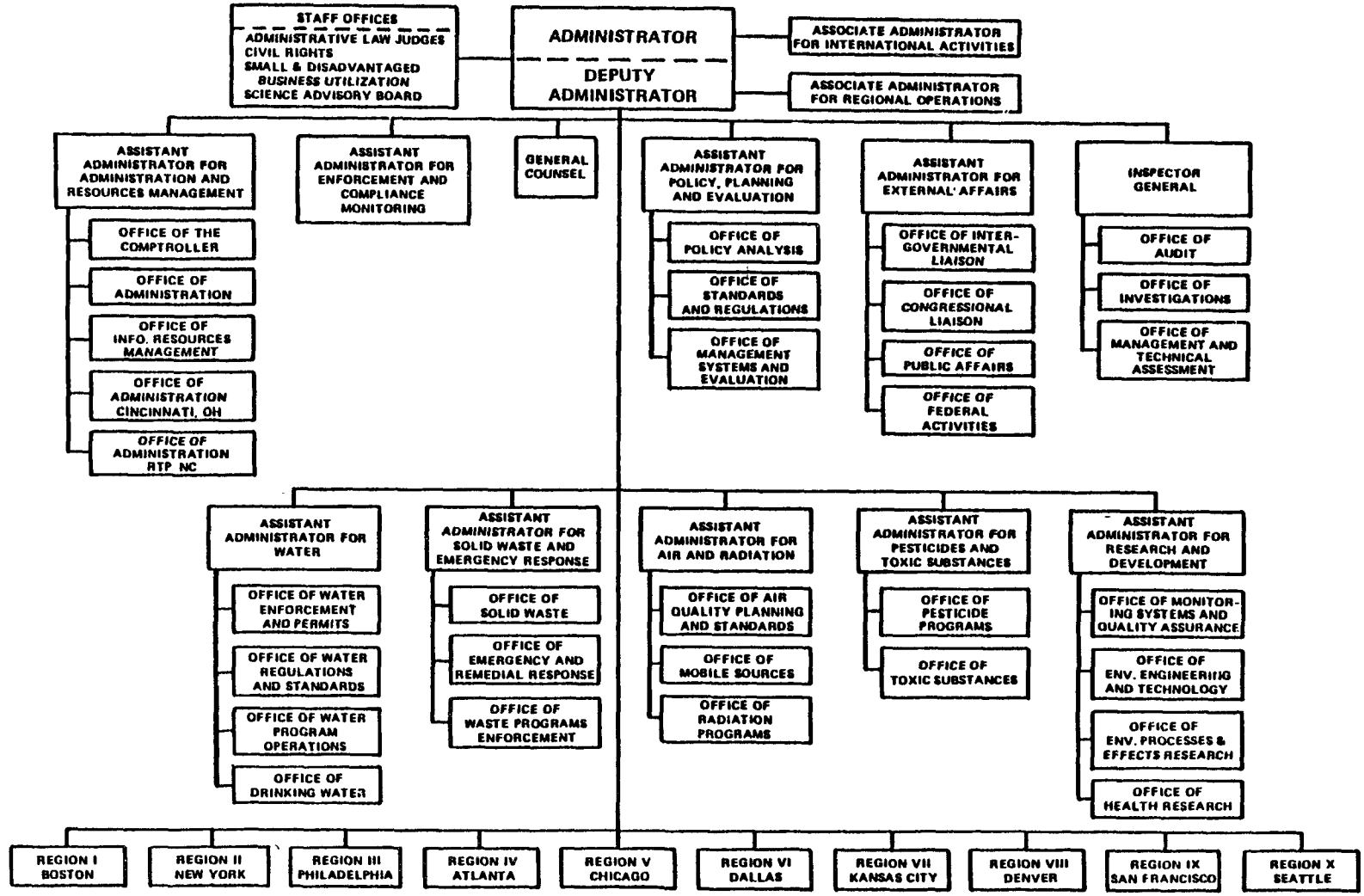
U.S. ENVIRONMENTAL PROTECTION AGENCY



ENVIRONMENTAL PROTECTION AGENCY

REGIONS
Locations and States

Region I	Headquarters, Boston, Massachusetts Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	Region VI	Headquarters, Dallas, Texas Arkansas, New Mexico, Texas, Oklahoma, Louisiana
Region II	Headquarters, New York, New York New Jersey, New York, Puerto Rico Virgin Islands	Region VII	Headquarters, Kansas City, Missouri Iowa, Kansas, Missouri, Nebraska
Region III	Headquarters, Philadelphia, Pennsylvania Delaware, Maryland, Pennsylvania, Virginia, West Virginia, District of Columbia	Region VIII	Headquarters, Denver, Colorado Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
Region IV	Headquarters, Atlanta, Georgia Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	Region IX	Headquarters, San Francisco, California Arizona, California, Hawaii, Nevada, American Samoa, Guam, Trust Territories of Pacific Islands, Northern Mariana Islands
Region V	Headquarters, Chicago, Illinois Illinois, Indiana, Michigan Minnesota, Ohio, Wisconsin	Region X	Headquarters, Seattle, Washington Alaska, Idaho, Oregon, Washington

ENVIRONMENTAL PROTECTION AGENCY

Summary of Resources
By Appropriation
(dollars in thousands)

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Research and Development							
Budget Authority	$121,000.0	$111,669.0	$142,700.0	$139,200.0	$5,500.0	$163,437.0	$24,237.0
Obligations	128,613.0	112,434.0	144,192.1	140,692.1	5,500.0	164,492.0	23,799.9
Outlays	182,690.0	140,764.0	133,012.7	132,312.7	1,100.0	148,941.9*	16,629.2
Abatement, Control and Compliance							
Budget Authority	369,075.0	293,933.0	393,900.0	393,900.0		396,042.0	2,142.0
Obligations	377,272.1	294,871.0	390,456.8	390,456.8		395,999.0	5,542.2
Outlays	455,020.0	366,359.0	416,984.0	416,984.0		415,290.0	-1,694.0
Salaries and Expenses							
Budget Authority	555,613.2	540,389.0	574,900.0	578,400.0		639,275.0	60,875.0
Obligations	545,195.8	540,389.0	574,900.0	578,400.0		639,275.0	60,875.0
Outlays	540,947.0	518,533.0	563,767.0	566,777.0		627,611.0	60,834.0
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3		9,426.1	694.8
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7		10,878.7	400.0
Buildings and Facilities							
Budget Authority	3,000.0	2,600.0	2,600.0	2,600.0		10,500.0	7,900.0
Obligations	4,116.1	2,965.0	4,042.0	4,042.0		9,315.0	5,273.0
Outlays	3,266.0	4,689.0	4,233.0	4,233.0		4,148.0	-85.0
Operations, Research and Facilities							
Obligations	475.3	...	150.0	150.0		150.0	...
Outlays	-525.0	1,439.0	1,250.0	1,250.0		601.0	-649.0
SUBTOTAL, OPERATING PROGRAMS							
Budget Authority	1,048,688.2	948,591.0	1,114,100.0	1,114,100.0	5,500.0	1,209,254.0	95,154.0
Obligations	1,055,672.3	950,659.0	1,113,740.9	1,113,740.9	5,500.0	1,209,231.0	95,490.1
Outlays	1,181,666.0	1,031,784.0	1,119,478.7	1,119,479.7	1,100.0	1,196,707.9	77,229.2
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3	...	9,426.1	694.8
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7	...	10,878.7	400.0

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Hazardous Substance Response Trust Fund							
Budget Authority	210,000.0	310,000.0	410,000.0	410,000.0	50,000.0	640,000.0	230,000.0
Obligations	227,822.4	319,870.0	431,652.0	431,652.0	50,000.0	642,406.0	210,754.0
Outlays	147,803.0	269,000.0	325,000.0	325,000.0	15,000.0	535,000.0**	210,000.0
Permanent Workyears	635.7	619.3	892.0	890.9	50.0	1,249.0	358.1
Total Workyears	724.8	707.1	1,007.1	1,007.1	50.0	1,357.1	350.0
Payment to Hazardous Substance Response Trust Fund							
Budget Authority	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Obligations	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Outlays	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Construction Grants							
Budget Authority	2,430,000.0	2,400,000.0	2,430,000.0	2,430,000.0		2,400,000.0	-30,000.0
Obligations	3,737,469.5	2,400,000.0	2,600,000.0	2,600,000.0		2,400,000.0	-200,000.0
Outlays	2,982,669.0	2,800,000.0	2,500,000.0	2,500,000.0		2,500,000.0	...
Scientific Activities Overseas							
Obligations	11.0	950.0	315.0	315.0		200.0	-115.0
Outlays	232.0	600.0	183.0	183.0		175.0	-8.0
Revolving Fund							
Obligations	768.0	$800.0	588.0	588.0		588.0	...
Outlays	13.0	100.0	15.0	15.0		15.0	...
Enforcement							
Outlays	268.0	...	232.0	232.0		116.0	-116.0
U.S. Regulatory Council							
Outlays	28.0	...	2.0	2.0		...	-2.0
Misc. Contributed Funds							
Obligations	21.7	20.0	30.0	30.0		21.0	-9.0
Outlays	24.0	20.0	25.0	25.0		25.0	...

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Reimbursements - Salaries and Expenses							
Obligations	15,270.6	20,000.0	20,000.0	20,000.0		20,000.0	...
Permanent Workyears	57.1	53.0	53.0	53.0		53.0	...
Total Workyears	65.5	62.0	62.0	62.0		62.0	...
Reimbursements - Superfund							
Obligations	2,570.3	...	4,164.0	4,164.0		9,621.0	5,457.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY							
Budget Authority	$3,688,688.2	$3,658,591.0	$3,954,100.0	$3,954,100.0	$55,500.0	$4,249,254.0	$295,154.0
Obligations	5,039,605.8	3,692,299.0	4,170,489.9	4,170,489.9	55,500.0	4,282,067.0	111,577.1
Outlays	4,312,435.0	4,101,504.0	3,944,703.7	3,947,013.7	16,100.0	4,231,922.9	284,909.2
Permanent Workyears	9,154.2	8,669.1	9,669.1	9,675.2	50.0	10,728.1	1,052.9
Total Workyears	10,843.7	10,447.8	11,547.8	11,547.8	50.0	12,297.8	750.0

* Includes outlays for Energy supplemental of $2,365.0.
** Includes outlays for Superfund supplemental of $20,000.0.

ENVIRONMENTAL PROTECTION AGENCY

Summary of Resources
By Media
(dollars in thousands)

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Air							
Budget Authority	$214,533.7	$190,991.6	$225,385.5	$224,768.8		$228,768.2	$3,999.4
Obligations	215,980.0	191,337.6	222,997.0	222,440.0		227,996.9	5,556.9
Outlays	221,455.0	199,621.0	211,774.0	212,035.6		225,993.4	13,957.8
Permanent Workyears	1,405.7	1,350.3	1,462.7	1,464.0		1,591.9	127.9
Total Workyears	1,630.7	1,577.1	1,694.7	1,696.1		1,758.0	61.9
Water Quality							
Budget Authority	206,048.0	151,369.3	217,829.5	216,156.9		217,710.8	1,553.9
Obligations	210,188.2	151,818.3	215,582.5	216,004.5		218,805.9	2,801.4
Outlays	282,029.0	205,682.0	234,912.7	235,483.7		239,873.9	4,390.2
Permanent Workyears	1,867.4	1,662.9	1,790.1	1,792.1		1,902.5	110.4
Total Workyears	2,230.9	2,065.5	2,205.2	2,207.2		2,259.4	52.2
Drinking Water							
Budget Authority	75,540.9	66,355.9	79,370.3	78,713.6		79,274.5	560.9
Obligations	75,511.6	66,467.9	78,313.5	78,069.5		79,248.8	1,179.3
Outlays	85,040.0	73,568.0	79,935.9	80,012.1		81,028.2	1,016.1
Permanent Workyears	446.6	465.1	472.9	472.9		508.0	35.1
Total Workyears	522.8	560.8	568.5	568.5		591.5	23.0
Hazardous Waste							
Budget Authority	120,148.3	110,112.7	130,417.0	128,657.0		143,267.9	14,610.9
Obligations	118,584.9	110,194.7	129,362.5	129,051.5		144,054.1	15,002.6
Outlays	127,165.0	114,192.0	126,750.7	126,912.7		137,748.6	10,835.9
Permanent Workyears	627.7	625.8	794.4	799.6		887.3	87.7
Total Workyears	790.7	830.0	1,015.1	1,015.1		1,090.2	75.1
Pesticides							
Budget Authority	53,693.8	52,742.6	57,690.8	57,296.8		63,258.2	5,961.4
Obligations	53,497.9	52,750.6	56,997.6	57,209.6		63,022.4	5,812.8
Outlays	57,888.0	53,430.0	56,018.4	56,233.4		60,680.8	4,447.4
Permanent Workyears	665.1	652.7	694.5	694.5		727.5	33.0
Total Workyears	726.4	736.9	783.7	783.7		808.7	25.0

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Radiation							
Budget Authority	10,278.8	10,854.8	12,410.7	12,320.4		12,090.6	-229.8
Obligations	11,680.4	10,872.8	12,248.2	12,272.2		12,044.2	-228.0
Outlays	14,363.0	11,419.0	12,331.2	12,372.0		13,211.5	839.5
Permanent Workyears	139.0	126.9	142.2	142.2		153.8	11.6
Total Workyears	161.6	146.4	164.6	164.6		164.6	...
Noise							
Budget Authority	...	...	...	...		...	...
Obligations	40.0	...	...	...		...	...
Outlays	1,540.0	663.0	744.0	744.0		485.8	-258.2
Interdisciplinary							
Budget Authority	34,710.0	41,335.6	45,887.8	46,069.1		48,952.8	2,883.7
Obligations	38,026.6	41,595.6	45,851.9	45,481.9		48,911.7	3,429.8
Outlays	24,798.0	29,098.0	32,046.7	32,077.1		43,009.2	10,932.1
Permanent Workyears	444.7	353.4	422.2	425.4		486.1	60.7
Total Workyears	509.4	396.5	469.1	472.7		514.3	41.6
Toxic Substances							
Budget Authority	68,403.8	66,675.7	69,117.8	68,849.5		79,642.1	10,792.6
Obligations	69,979.1	66,891.7	68,913.3	68,782.3		79,641.1	10,858.8
Outlays	79,797.0	71,368.0	67,349.6	67,481.6		74,896.6	7,415.0
Permanent Workyears	618.8	606.2	634.6	632.6		740.0	107.4
Total Workyears	712.1	683.2	717.0	716.0		799.5	83.5
Energy							
Budget Authority	25,209.9	23,530.1	30,489.7	30,449.8	$5,500.0	48,503.5	18,053.7
Obligations	26,716.9	23,742.1	31,064.3	31,086.3	5,500.0	48,755.5	17,669.2
Outlays	64,779.0	42,153.0	35,718.5	35,737.5	1,100.0	40,283.2*	4,545.7
Permanent Workyears	57.8	36.8	44.1	44.1		52.0	7.9
Total Workyears	82.9	54.9	65.9	65.9		72.6	6.7
Management and Support							
Budget Authority	237,121.0	232,022.7	242,900.9	248,218.1		277,285.4	29,067.3
Obligations	231,350.6	232,022.7	248,368.1	249,301.1		277,435.4	28,134.3
Outlays	219,546.0	225,901.0	257,664.0	258,466.0		275,348.7	16,882.7
Permanent Workyears	2,188.6	2,116.7	2,266.4	2,263.9		2,377.0	113.1
Total Workyears	2,685.9	2,627.4	2,794.9	2,788.9		2,819.9	31.0

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Buildings and Facilities							
Budget Authority	3,000.0	2,600.0	2,600.0	2,600.0		10,500.0	7,900.0
Obligations	4,116.1	2,965.0	4,042.0	4,042.0		9,315.0	5,273.0
Outlays	3,266.0	4,689.0	4,233.0	4,233.0		4,148.0	-85.0
SUBTOTAL, OPERATING PROGRAMS							
Budget Authority	1,048,688.2	948,591.0	1,114,100.0	1,114,100.0	$5,500.0	1,209,254.0	95,154.0
Obligations	1,055,672.3	950,659.0	1,113,740.9	1,113,740.9	5,500.0	1,209,231.0	95,490.1
Outlays	1,181,666.0	1,031,784.0	1,119,478.7	1,119,479.7	1,100.0	1,196,707.9	77,229.2
Permanent Workyears	8,461.4	7,996.8	8,724.1	8,731.3	...	9,426.1	694.8
Total Workyears	10,053.4	9,678.7	10,478.7	10,478.7	...	10,878.7	400.0
Hazardous Substance Response Trust Fund							
Budget Authority	210,000.0	310,000.0	410,000.0	410,000.0	50,000.0	640,000.0	230,000.0
Obligations	227,822.4	319,870.0	431,652.0	431,652.0	50,000.0	642,406.0	210,754.0
Outlays	147,803.0	269,000.0	325,000.0	325,000.0	15,000.0	535,000.0**	210,000.0
Permanent Workyears	635.7	619.3	892.0	890.9	50.0	1,249.0	358.1
Total Workyears	724.8	707.1	1,007.1	1,007.1	50.0	1,357.1	350.0
Payment to Hazardous Substance Response Trust Fund							
Budget Authority	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Obligations	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Outlays	(40,000.0)	(44,000.0)	(44,000.0)	(44,000.0)		(44,000.0)	...
Construction Grants							
Budget Authority	2,430,000.0	2,400,000.0	2,430,000.0	2,430,000.0		2,400,000.0	-30,000.0
Obligations	3,737,469.5	2,400,000.0	2,600,000.0	2,600,000.0		2,400,000.0	-200,000.0
Outlays	2,982,669.3	2,800,000.0	2,500,000.0	2,500,000.0		2,500,000.0	...
Scientific Activities Overseas							
Obligations	11.0	950.0	315.0	315.0		200.0	-115.0
Outlays	232.0	600.0	183.0	183.0		175.0	-8.0
Revolving Fund							
Obligations	768.0	800.0	588.0	588.0		588.0	...
Outlays	13.0	100.0	15.0	15.0		15.0	...

	Actual 1983	Budget Estimate 1984	Amendment 1984	Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Misc. Contributed Funds							
Obligations	21.7	20.0	30.0	30.0		21.0	-9.0
Outlays	24.0	20.0	25.0	25.0		25.0	...
Reimbursements - Salaries and Expenses							
Obligations	15,270.6	20,000.0	20,000.0	20,000.0		20,000.0	...
Permanent Workyears	57.1	53.0	53.0	53.0		53.0	...
Total Workyears	65.5	62.0	62.0	62.0		62.0	...
Reimbursements - Superfund							
Obligations	2,570.3	...	4,164.0	4,164.0		9,621.0	5,457.0
U.S. Regulatory Council							
Outlays	28.0	...	2.0	2.0		...	-2.0
TOTAL ENVIRONMENTAL PROTECTION AGENCY							
Budget Authority	$3,688,688.2	$3,658,591.0	$3,954,100.0	$3,954,100.0	$55,500.0	$4,249,254.0	$295,154.0
Obligations	5,039,605.8	3,692,299.0	4,170,489.9	4,170,489.9	55,500.0	4,282,067.0	111,577.1
Outlays	4,312,435.3	4,101,504.0	3,944,703.7	3,947,013.7	16,100.0	4,231,922.9	284,909.2
Permanent Workyears	9,154.2	8,669.1	9,669.1	9,675.2	50.0	10,728.1	1,052.9
Total Workyears	10,843.7	10,447.8	11,547.8	11,547.8	50.0	12,297.8	750.0

NOTE: The transfer of $3,500.0 thousand for pay raise costs, in 1984 Budget Authority, from the Research and Development appropriation to the Salaries and Expenses appropriation, is not reflected in the above figures.

* Includes outlays for Energy supplemental of $2,365.0.
** Includes outlays for Superfund supplemental of $20,000.0.

ENVIRONMENTAL PROTECTION AGENCY

1984 Workyears and Budget Authority
By Media and Appropriation
(dollars in thousands)

	Salaries & Expenses		Abatement, Control & Compliance	Research & Development	Total	
	Total Workyears	Amount	Amount	Amount	Total Workyears	Amount
Air	1,696.1	$74,825.9	$112,692.8	$37,250.1	1,696.1	$224,768.8
Water Quality	2,207.2	88,177.1	117,509.3	10,470.5	2,207.2	216,156.9
Drinking Water	568.5	24,140.2	40,165.4	14,408.0	568.5	78,713.6
Hazardous Waste	1,015.1	38,947.6	68,120.2	21,589.2	1,015.1	128,657.0
Pesticides	783.7	34,204.4	21,419.4	1,673.0	783.7	57,296.8
Radiation	164.6	8,208.0	3,095.7	1,016.7	164.6	12,320.4
Interdisciplinary	472.7	20,661.9	7,864.4	17,542.8	472.7	46,069.1
Toxic Substances	716.0	33,541.3	23,032.8	12,275.4	716.0	68,849.5
Energy	65.9	3,975.5	...	26,474.3	65.9	30,449.8
Management and Support	2,788.9	248,218.1	...	...	2,788.9	248,218.1
Subtotal	10,478.7	$574,900.0	$393,900.0	$142,700.0	10,478.7	$1,111,500.0
Buildings and Facilities	...	...	...	...	...	2,600.0
Reimbursements	...	...	...	...	62.0	...
Hazardous Substance Response Trust Fund	...	...	...	...	1,007.1	410,000.0
Payment to the Hazardous Substance Response Trust Fund	...	...	...	...	...	(44,000.0)
Subtotal	10,478.7	$574,900.0	$393,900.0	$142,700.0	11,547.8	$1,524,100.0
Construction Grants	...	...	...	...	...	2,430,000.0
Total	10,478.7	$574,900.0	$393,900.0	$142,700.0	11,547.8	$3,954,100.0

NOTE: 1) The transfer of $3,500.0 thousand for pay riase costs, in 1984 Budget Authority, from the Research and Development appropriation to the Salaries and Expenses appropriation, is not reflected in the above figures.

2) EPA is requesting 1984 Supplementals of $5,500.0 thousand for Acid Rain in the Research and Development appropriation and $50,000.0 thousand and 50 workyears for the Hazardous Substance Response Trust Fund.

ENVIRONMENTAL PROTECTION AGENCY

1985 Workyears and Budget Authority
By Media and Appropriation
(dollars in thousands)

	Salaries & Expenses		Abatement, Control & Compliance	Research & Development	Total	
	Total Workyears	Amount	Amount	Amount	Total Workyears	Amount
Air	1,758.0	$81,204.9	$108,902.4	$38,660.9	1,758.0	$228,768.2
Water Quality	2,259.4	96,172.9	110,776.6	10,761.3	2,259.4	217,710.8
Drinking Water	591.5	26,431.8	39,495.4	13,347.4	591.5	79,274.5
Hazardous Waste	1,090.2	45,724.1	75,934.4	21,609.4	1,090.2	143,267.9
Pesticides	808.7	37,361.4	23,168.4	2,728.4	808.7	63,258.2
Radiation	164.6	8,878.2	2,195.7	1,016.7	164.6	12,090.6
Interdisciplinary	514.3	23,705.7	8,718.9	16,528.2	514.3	48,952.8
Toxic Substances	799.5	38,327.1	26,850.2	14,464.8	799.5	79,642.1
Energy	72.6	4,183.5	...	44,320.0	72.6	48,503.5
Management and Support	2,819.9	277,285.4	...	...	2,819.9	277,285.4
Subtotal	10,878.7	$639,275.0	$396,042.0	$163,437.0	10,878.7	$1,198,754.0
Buildings and Facilities	...	...	...	...	...	10,500.0
Reimbursements	...	...	...	...	62.0	...
Hazardous Substance Response Trust Fund	...	...	...	...	1,357.1	640,000.0
Payment to the Hazardous Substance Response Trust Fund	...	...	...	...	...	(44,000.0)
Subtotal	10,878.7	$639,275.0	$396,042.0	$163,437.0	12,297.8	$1,849,254.0
Construction Grants	...	...	...	...	...	2,400,000.0
Total	10,878.7	$639,275.0	$396,042.0	$163,437.0	12,297.8	$4,249,254.0

ENVIRONMENTAL PROTECTION AGENCY

1984 Obligations
by Appropriation and Media
(in thousands of dollars)

	Budget Authority	Unobligated Balance Brought Forward	Unobligated Balance Carried Forward	Transfer of Pay Raise	Total Obligations
Research and Development	$142,700.0	+$5,815.4	-$4,323.3	-$3,500.0	$140,692.1
Air	37,250.1	...	-745.0	-1,122.0	35,383.1
Water Quality	10,470.5	...	-209.4	-315.0	9,946.1
Drinking Water	14,408.0	+250.0	-288.0	-434.0	13,936.0
Hazardous Waste	21,589.2	+2,180.0	-431.8	-650.0	22,687.4
Pesticides	1,673.0	+10.0	-33.5	-50.0	1,599.5
Radiation	1,016.7	...	-20.3	-31.0	965.4
Interdisciplinary	17,542.8	+70.0	-350.9	-528.0	16,733.9
Toxic Substances	12,275.4	+692.0	-245.5	-370.0	12,351.9
Energy	26,474.3	+1,144.0	-529.5	...	27,088.8
Management and Support	...	+1,469.4	-1,469.4	...	...
Abatement, Control and Compliance	393,900.0	+4,434.9	-7,878.1		390,456.8
Air	112,692.8	+1,227.1	-2,253.9	...	111,666.0
Water Quality	117,509.3	+1,985.2	-2,350.2	...	117,144.3
Drinking Water	40,165.4	+441.2	-803.3	...	39,803.3
Hazardous Waste	68,120.2	+319.7	-1,362.4	...	67,077.5
Pesticides	21,419.4	+152.7	-428.4	...	21,143.7
Radiation	3,095.7	+10.0	-61.9	...	3,043.8
Interdisciplinary	7,864.4	+221.0	-157.3	...	7,928.1
Toxic Substances	23,032.8	+78.0	-460.7	...	22,650.1
Salaries and Expenses	574,900.0	...	...	+3,500.0	578,400.0
Air	74,825.9	...	...	+565.0	75,390.9
Water Quality	88,177.1	...	...	+737.0	88,914.1
Drinking Water	24,140.2	...	...	+190.0	24,330.2
Hazardous Waste	38,947.6	...	...	+339.0	39,286.6
Pesticides	34,204.4	...	...	+262.0	34,466.4
Radiation	8,208.0	...	...	+55.0	8,263.0
Interdisciplinary	20,661.9	...	...	+158.0	20,819.9
Toxic Substances	33,541.3	...	...	+239.0	33,780.3
Energy	3,975.5	...	...	+22.0	3,997.5
Management and Support	248,218.1	...	...	+933.0	249,151.1

	Budget Authority	Unobligated Balance Brought Forward	Unobligated Balance Carried Forward	Transfer of Pay Raise	Total Obligations
Buildings and Facilities	2,600.0	+1,832.4	-390.4	...	4,042.0
Scientific Activities Overseas	...	+3,587.7	-3,272.7	...	315.0
Construction Grants	2,430,000.0	+1,210,482.0	-1,040,482.0	...	2,600,000.0
Operations, Research and Facilities	...	+1,156.9	-1,006.9	...	150.0
Hazardous Substance Response Trust Fund	410,000.0	+29,557.9	-7,905.9	...	431,652.0
Total	$3,954,100.0	+$1,256,867.2	-$1,065,259.3	...	$4,145,707.9

ENVIRONMENTAL PROTECTION AGENCY

1985 Obligations
by Appropriation and Media
(in thousands of dollars)

	Budget Authority	Unobligated Balance Brought Forward	Unobligated Balance Carried Forward	Total Obligations
Research and Development	$163,437.0	$+4,323.3	-$3,268.3	$164,492.0
Air	38,660.9	...	-772.9	37,888.0
Water Quality	10,761.3	...	-215.3	10,546.0
Drinking Water	13,347.3	+249.0	-267.3	13,329.0
Hazardous Waste	21,609.4	+2,169.0	-432.4	23,346.0
Pesticides	2,728.4	+10.0	-54.4	2,684.0
Radiation	1,016.7	...	-20.7	996.0
Interdisciplinary	16,528.2	+70.0	-330.2	16,268.0
Toxic Substances	14,464.8	+688.0	-289.8	14,863.0
Energy	44,320.0	+1,137.3	-885.3	44,572.0
Abatement, Control and Compliance	396,042.0	+7,878.1	-7,921.1	395,999.0
Air	108,902.4	+2,179.9	-2,178.3	108,904.0
Water Quality	110,776.6	+3,526.2	-2,215.8	112,087.0
Drinking Water	39,495.4	+783.9	-791.3	39,488.0
Hazardous Waste	75,934.4	+568.0	-1,518.4	74,984.0
Pesticides	23,168.4	+271.0	-462.4	22,977.0
Radiation	2,195.7	+18.1	-43.8	2,170.0
Interdisciplinary	8,718.9	+392.3	-173.2	8,938.0
Toxic Substances	26,850.2	+138.7	-537.9	26,451.0
Salaries and Expenses	639,275.0	...	...	639,275.0
Air	81,204.9	...	...	81,204.9
Water Quality	96,172.9	...	...	96,172.9
Drinking Water	26,431.8	...	...	26,431.8
Hazardous Waste	45,724.1	...	...	45,724.1
Pesticides	37,361.4	...	...	37,361.4
Radiation	8,878.2	...	...	8,878.2
Interdisciplinary	23,705.7	...	...	23,705.7
Toxic Substances	38,327.1	...	...	38,327.1
Energy	4,183.5	...	...	4,183.5
Management and Support	277,285.4	...	...	277,285.4

	Budget Authority	Unobligated Balance Brought Forward	Unobligated Balance Carried Forward	Total Obligations
Buildings and Facilities	10,500.0	+390.4	-1,575.4	9,315.0
Scientific Activities Overseas	...	+3,272.7	-3,072.7	200.0
Construction Grants	2,400,000.0	+1,040,482.0	-1,040,482.0	2,400,000.0
Operations, Research and Facilities	...	+1,006.9	-856.9	150.0
Hazardous Substance Response Trust Fund	640,000.0	+7,905.9	-5,499.9	642,406.0
Total.....	$4,249,254.0	+$1,065,259.3	-$1,062,676.3	$4,251,837.0

ENVIRONMENTAL PROTECTION AGENCY

Summary of State Grant Resources
(in thousands of dollars)

	ACTUAL 1983	CURRENT ESTIMATE 1984	ESTIMATE 1985	INCREASE + DECREASE - 1985 vs 1984
AIR				
Section 105.....	$84,968.0	$87,734.7	$87,734.7	---
WATER QUALITY				
Section 106.....	54,144.9	54,200.0	54,200.0	---
Clean Lakes.....	3,000.0	5,000.0	2,500.0	-$2,500.0
DRINKING WATER				
Public Water Systems Program Grants.....	27,654.6	27,450.0	27,450.0	---
Underground Injection Control Program.....	7,039.0	7,500.2	7,500.2	---
Special Studies & Demos.....	1,900.0	1,900.0	---	-1,900.0
HAZARDOUS WASTE				
Hazardous Waste Management..	43,975.0	47,000.0	47,000.0	---
PESTICIDES				
Pesticides Enf. Grants.....	8,717.9	8,703.4	8,703.4	---
Pesticides Cert. & Training.	1,916.8	2,100.0	2,100.0	---
TOXIC SUBSTANCES				
Toxics Enf. Grants.....	---	500.0	500.0	---
SUBTOTAL.....	$233,316.2	$242,088.3	$237,688.3	-$4,400.0
CONSTRUCTION GRANTS.....	3,737,470.0	2,430,000.0	2,400,000.0	-30,000.0
TOTAL.....	$3,970,786.2	$2,672,088.3	$2,637,688.3	-$34,400.0

ENVIRONMENTAL PROTECTION AGENCY

History of State Grant Budget Authority
Part I: 1971 - 1977
(in thousands of dollars)

	1971	1972	1973	1974	1975	1976	1977
AIR	$30,200	$42,900	$50,000	$50,000	$55,268	$51,518	$55,550
Section 105	30,200	42,900	50,000	50,000	55,268	51,518	55,550
Section 175	---	---	---	---	---	---	---
WATER QUALITY	10,000	15,000	70,000	150,000	199,625	112,375	80,000
Section 106	10,000	15,000	20,000	50,000	45,625	44,375	50,000
Section 208	---	---	50,000 1/	100,000 1/	150,000 1/	53,000	15,000
Clean Lakes	---	---	---		4,000	15,000	15,000
DRINKING WATER	---	---	---	---	---	10,000	20,000
Public Water Systems	---	---	---	---	---	7,500	15,000
Underground Injection	---	---	---	---	---	2,500	5,000
Special Studies & Demos	---	---	---	---	---	---	---
HAZARDOUS WASTE	1,629	2,545	3,250	---	---	1,800	2,925
Haz. Waste Management	---	---	---	---	---	---	---
Solid Waste Management	1,629	2,545	3,250	---	---	1,800	2,925
Resource Recovery	---	---	---	---	---	---	---
PESTICIDES	---	---	---	---	---	---	1,000
Pesticides Enf. Grants	---	---	---	---	---	---	1,000
Pesticides Cert. & Training	---	---	---	*	*	*	*
TOXIC SUBSTANCES	---	---	---	---	---	---	---
Toxic Enf. Grants	---	---	---	---	---	---	---
TOTAL	$41,829	$60,445	$123,250	$200,000	$254,893	$175,693	$159,475

1/ CONTRACT AUTHORITY

* Pesticides certification and training data for these years is unavailable.

ENVIRONMENTAL PROTECTION AGENCY

History of State Grant Budget Authority
Part II: 1978 - 1985
(in thousands of dollars)

	1978	1979	1980	1981	1982	1983	1984 Current Estimate	1985 Estimate
AIR	$66,135	$130,025	$82,800	$87,673	$87,735	$85,050	$87,735	$87,735
Section 105	66,135	80,025	82,800	87,673	87,735	85,050	87,735	87,735
Section 175	---	50,000	---	---	---	---	---	
WATER QUALITY	128,110	108,003	101,230	95,696	60,200	57,200	59,200	56,700
Section 106	52,400	52,400	48,730	51,223	51,200	54,200	54,200	54,200
Section 208	59,509	41,028	37,500	33,473	---	---	---	---
Clean Lakes	16,201	14,575	15,000	11,000	9,000	3,000	5,000	2,500
DRINKING WATER	27,110	36,270	34,745	37,598	37,848	36,425	36,850	34,950
Public Water Systems	20,500	26,400	29,450	29,450	29,450	27,450	27,450	27,450
Underground Injection	6,000	7,600	4,395	6,648	6,575	7,075	7,500	7,500
Special Studies & Demos	610	2,270	900	1,500	1,823	1,900	1,900	---
HAZARDOUS WASTE	14,304	44,886	38,600	38,570	41,700	44,068	47,000	47,000
Haz. Waste Management	---	15,018	18,600	26,487	41,700	44,068	47,000	47,000
Solid Waste Management	14,304	15,150	10,000	8,083	---	---	---	---
Resource Recovery	---	14,718	10,000	4,000	---	---	---	---
PESTICIDES	7,280	13,052	12,393	10,972	11,202	10,718	10,803	10,803
Pesticides Enf. Grants	5,000	9,538	8,750	8,020	8,632	8,718	8,703	8,703
Pesticides Cert. & Training	2,280	3,514	3,643	2,952	2,570	2,000	2,100	2,100
TOXIC SUBSTANCES	---	---	---	1,000	500	---	500	500
Toxic Enf. Grants	---	---	---	1,000	500	---	500	500
TOTAL	$242,939	$332,236	$269,768	$271,509	$239,185	$233,461	$242,088	$237,688

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

SALARIES AND EXPENSES

Grades	Actual 1983	Current Estimate 1984	Estimate 1985
Executive Level II	1	1	1
Executive Level III	1	1	1
Executive Level IV	2	10	10
Executive Level V	0	1	1
Subtotal	4	13	13
ES-6	7	8	8
ES-5	30	33	35
ES-4	82	89	95
ES-3	39	39	42
ES-2	25	26	28
ES-1	16	16	17
Subtotal	199	211	225
GS-16	9	9	9
GS/GM-15	514	519	535
GS/GM-14	1,063	1,074	1,116
GS/GM-13	1,570	1,587	1,654
GS-12	1,743	1,762	1,831
GS-11	791	799	820
GS-10	58	59	69
GS-9	454	459	536
GS-8	184	186	217
GS-7	551	557	707
GS-6	446	451	527
GS-5	472	477	557
GS-4	191	193	225
GS-3	52	53	62
GS-2	3	3	4
GS-1	...	...	...
Subtotal	8,101	8,188	8,869

Grades	Actual 1983	Current Estimate 1984	Estimate 1985
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Assistant Surgeon General, $39,016 to $54,253	...	...	...
Director grade, $28,916 to $49,945	70	72	72
Senior grade, $23,130 to $40,761	112	114	114
Full grade, $19,495 to $34,085	39	40	40
Senior assistant grade, $18,117 to $29,477	9	9	9
Assistant grade, $15,796 to $21,819	1	1	1
Subtotal	231	236	236
Positions established by act of November 16, 1977 (42 U.S.C. 201) compensation for which is not to exceed the maximum rate payable for a GS-18	16	19	19
Ungraded	59	64	64
TOTAL PERMANENT POSITIONS	8,610	8,731	9,426

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

HAZARDOUS SUBSTANCES RESPONSE TRUST FUND

Grades	Actual 1983	Current Estimate 1984	Estimate 1985
ES-5	1	2	2
ES-4	1	2	3
ES-1	1	2	3
Subtotal	3	6	8
GS/GM-15	28	41	56
GS/GM-14	52	76	105
GS/GM-13	145	212	295
GS-12	189	277	346
GS-11	79	116	159
GS-10	...	...	...
GS-9	20	29	50
GS-8	8	12	24
GS-7	20	29	53
GS-6	21	31	53
GS-5	18	26	44
GS-4	14	21	35
GS-3	2	3	5
Subtotal	596	873	1,225
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Director grade, $28,916 to $49,945	2	2	3
Senior grade, $23,130 to $40,761	3	3	4
Full grade, $19,495 to $34,085	4	3	4
Senior assistant grade, $18,117 to $29,477	3	3	4
Subtotal	12	11	15
Ungraded	2	1	1
TOTAL PERMANENT POSITIONS	613	891	1,249

ENVIRONMENTAL PROTECTION AGENCY

Permanent Positions By Grade

REIMBURSABLES

(SALARIES AND EXPENSES)

Grades	Actual 1983	Current Estimate 1984	Estimate 1985
ES-5	...	...	...
ES-4	...	...	...
ES-1	...	...	...
Subtotal	...	...	...
GS/GM-15	5	5	5
GS/GM-14	2	2	2
GS/GM-13	3	3	3
GS-12	5	5	5
GS-11	8	8	8
GS-10	2	2	2
GS-9	11	10	10
GS-8	1	1	1
GS-7	3	3	3
GS-6	2	2	2
GS-5	...	...	...
GS-4	...	...	...
GS-3	...	...	...
Subtotal	42	41	41
Positions established by act of July 1, 1974 (42 U.S.C. 207):			
Director grade, $28,916 to $49,945	7	7	7
Senior grade, $23,130 to $40,761	3	3	3
Full grade, $19,495 to $34,085	...	...	...
Senior assistant grade, $18,117 to $29,477	...	...	...
Subtotal	10	10	10
Ungraded	2	2	2
TOTAL PERMANENT POSITIONS	54	53	53

ENVIRONMENTAL PROTECTION AGENCY

Average Employment and Salary

Appropriation/Pay Plan	Actuals 1983	Current Estimate 1984	Estimate 1985
Salaries and Expenses			
Average ES Salary	$66,983	$68,696	$69,327
Average GS Grade	10.275	10.275	10.275
Average GS Salary	$32,165	$32,987	$33,291
Average Salary of Ungraded Positions	$18,204	$18,669	$18,841
Revolving Fund			
Average GS Grade	10.275	10.275	10.275
Average GS Salary	$32,165	$32,987	$33,291
Superfund			
Average ES Salary	$62,554	$64,154	$64,743
Average GS Grade	10.914	10.914	10.914
Average GS Salary	$32,479	$33,309	$33,616
Reimbursables			
Average GS Grade	9.939	9.939	9.939
Average GS Salary	$32,280	$33,105	$33,410
TOTAL AVERAGE			
Average ES Salary	$66,814	$68,523	$69,152
Average GS Grade	10.315	10.315	10.315
Average GS Salary	$32,204	$33,027	$33,331
Average Salary of Ungraded Positions	$18,204	$18,669	$18,841

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

RESEARCH AND DEVELOPMENT

OBJECT CLASSES	Actual 1983	Amendment/ Current Estimate 1984	Supplemental	Estimate 1985
23.2 Communications, utilities, and other rent.	$134.0	...	...	...
25.0 Other services.....	76,661.0	$83,909.0	$5,500.0	$108,129.0
26.0 Supplies and materials.....	4.0	...	...	...
41.0 Grants, subsidies, and contributions.....	51,814.0	56,783.0	...	56,363.0
Total obligations.....	$128,613.0	$140,692.0	$5,500.0	$164,492.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Communications, utilities and other rent.....	$134.0	...	...	...	...	
There is no change in the 1984 estimate and no request for 1985.						
Other services.....	$76,661.0	$69,236.7	$83,909.0	$5,500.0	$108,129.0	
The increase in the 1984 current estimate results from the following:			+$14,672.3			
Congressional add-on to the health effects program.....			(+2,990.0)			
Congressional add-on to air, water and hazardous waste control technology.....			(+5,700.0)			

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Congressional add-on for drinking water research			(+1,000.0)			
Congressional add-on for the Great Lakes program			(+119.0)			
Congressional add-on for indoor air pollution			(+2,000.0)			
Congressional add-on for dioxin and chemical research			(+730.0)			
Congressional add-on for LIMB			(+5,000.0)			
Congressional add-on for air and water quality monitoring			(+500.0)			
EPA's application of the $5,031.0 Congressional add-on was distributed in this object class as follows:						
Hazardous waste - scientific assessments			(+100.0)			
Interdisciplinary - exploratory research core program			(+1,400.0)			
Energy - multi-media - environmental engineering and technology			(+281.0)			
The decrease in the 1984 estimate reflects an internal shift from contracts to grant programs and a revised rate of obligations			(-5,147.7)			
The 1984 Supplemental request is for a National Lake Survey in the acid rain program.				+$5,500.0		
The increase in the 1985 request results primarily from an increase in R&D contracts in air, water quality, hazardous waste and the acid rain programs.						+$24,220.0
Supplies and materials	$4.0	...	...	...	...	
There is no change in the 1984 estimate and no request in 1985.						

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Grants, subsidies, and contributions.....	$51,814.0	$43,197.3	$56,783.0	...	$56,363.0	
The increase in the 1984 current estimate results from the following:			+$13,585.7			
Congressional add-on for health effects.....			(+1,010.0)			
Congressional add-on to air, water and hazardous waste control technology.....			(+1,300.0)			
Congressional add-on for the Great Lakes program.....			(+1,381.0)			
Congressional add-on to the National Crop Loss Assessment Network (NCLAN).....			(+1,500.0)			
Congressional add-on for dioxin and chemical research.....			(+1,270.0)			
Congressional add-on for drinking water aquifers			(+500.0)			
Congressional add-on for lake quality maintenance (Acid Rain).....			(+1,000.0)			
EPA's application of the $5,031.0 Congressional add-on was distributed in this object class as follows:						
Air health effects.....			(+3,000.0)			
Energy - acid rain.....			(+250.0)			
An increase in the 1984 estimate results primarily from a shift from grant programs to contracts, partially offset by a revised rate of obligations.....			(+2,374.7)			
The slight decrease in the 1985 request results from a shift to contracts instead of grants.						-$420.0

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

ABATEMENT, CONTROL AND COMPLIANCE

OBJECT CLASSES	Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Personnel Services	$82.0	...	...
Other Objects:			
21.0 Travel and transportation of persons	...	$195.0	$195.0
23.2 Communication, utilities, and other rent..	.2	...	...
24.0 Printing and reproduction	17.2	...	...
25.0 Other services	136,771.7	140,512.0	152,415.0
26.0 Supplies and materials	5.9	...	...
31.0 Equipment	31.0	...	...
41.0 Grants, subsidies, and contributions	240,364.1	249,750.0	243,389.0
Total other objects	$377,190.1	$390,457.0	$395,999.0
Total obligations	$377,272.1	$390,457.0	$395,999.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Personnel services	$82.0	...	...	...	

There is no change in the 1984 estimate and no request in 1985.

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Travel and transportation of persons.....	...	$195.0	$195.0	$195.0	
There is no change in the 1984 estimate or the 1985 request. This level of funding continues to reflect the need for travel in support of the drinking water program for direct implementation of the Underground Injection Control and Public Water Systems Supervision programs in States that do not have primacy.					
Communication, utilities, and other rent.....	$.2	...	...	...	
There is no change in the 1984 estimate and no request in 1985.					
Printing and reproduction.....	$17.2	...	...	...	
There is no change in the 1984 estimate and no request in 1985.					
Other services.....	$136,771.7	$120,516.2	$140,512.0	$152,415.0	
The increase in the 1984 current estimate results from the following:			+$19,995.8		
Congressional add-on for the Great Lakes program.....			(+500.0)		
Congressional add-on for the hazardous waste program.....			(+1,000.0)		
Congressional add-on for nonpoint source water pollution control.....			(+2,000.0)		
Congressional add-on for the academic training program.....			(+685.0)		
Congressional add-on for the dioxin study.....			(+3,400.0)		
Congressional add-on to the Chesapeake Bay program.....			(+1,000.0)		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Congressional add-on for air grants.....			(+1,229.8)		
Congressional add-on for drinking water (PWSS) grants.....			(+626.9)		
EPA's application of the $15,025.0 Congressional add-on was distributed in this object class as follows:					
Air quality and emission data analysis.....			(+1,335.0)		
Air emission standards and technical assessment.....			(+400.0)		
Water quality effluent standards and guidelines.....			(+6,530.0)		
Water quality monitoring and analysis.....			(+610.0)		
Drinking water criteria, standards and guidelines.....			(+500.0)		
Hazardous waste regulations, guidelines and policies.....			(+4,187.5)		
Interdisciplinary technical support - Office of Enforcement and Compliance Monitoring....			(+400.0)		
Toxic substances enforcement.....			(+562.5)		
Change in the rate of obligations for contracts.			(-4,970.9)		
The increase in contracts in the 1985 request supports additional water criteria standards work, pesticides registration, stepped-up efforts in the Chesapeake Bay program, and the finalization of data testing and data auditing in the chemical testing programs.					+$11,903.0
Supplies and materials.....	$5.9	...	...	...	
There is no change in the 1984 estimate and no request in 1985.					

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Equipment	$31.0	...	...	...	
There is no change in the 1984 estimate and no request in 1985.					
Grants, subsidies, and contributions	$240,364.1	$174,159.8	$249,750.0	$243,389.0	
Changes to this object class include:			+$75,590.2		
Congressional add-on for air grants			(+16,550.2)		
Congressional add-on for water quality grants			(+30,200.0)		
Congressional add-on for drinking water (PWSS) grants			(+5,619.1)		
Congressional add-on for drinking water (UIC) grants			(+1,406.0)		
Congressional add-on for hazardous waste grants			(+4,500.0)		
Congressional add-on for pesticides enforcement grants			(+1,785.0)		
Congressional add-on for the rural water association			(+1,900.0)		
Congressional add-on for Clean Lakes program			(+5,000.0)		
Congressional add-on to the Great Lakes program			(+500.0)		
Congressional add-on for wastewater treatment operator training			(+2,625.0)		
Congressional add-on for the academic training program			(+815.0)		
Congressional add-on to the Chesapeake Bay program			(+3,000.0)		
Congressional add-on for the dioxin study			(+600.0)		
EPA's application of the $15,025.0 Congressional add-on to this appropriation for toxic substances enforcement grants			(+500.0)		
Change in the rate of obligations for grant programs			(+589.9)		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The decrease in the 1985 request primarily reflects reduced grant levels for the training programs, the special studies and demonstrations program and the Clean Lakes program.					-$6,361.0

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

SALARIES AND EXPENSES

OBJECT CLASSES		Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
Personnel Services		$363,893.4	$382,160.0	$411,694.8
Other Objects:				
21.0	Travel and transportation of persons	$13,024.6	$15,507.1	$16,600.0
22.0	Transportation of things	1,648.3	1,880.6	2,057.2
23.1	Standard level user charges	20,398.0	23,763.0	30,671.0
23.2	Communications, utilities, and other rent.	36,620.0	46,956.7	47,110.2
24.0	Printing and reproduction	3,893.0	5,642.1	6,572.0
25.0	Other services	72,370.8	75,436.1	93,114.8
26.0	Supplies and materials	11,187.5	11,114.5	12,047.8
31.0	Equipment	21,258.4	15,439.4	19,057.2
32.0	Lands and structures	43.1	...	...
41.0	Grants, subsidies, and contributions	798.9	500.0	350.0
42.0	Insurance claims and indemnities	59.8	.5	...
	Total other objects	$181,302.4	$196,240.0	$227,580.2
	Total obligations	$545,195.8	$578,400.0	$639,275.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Personnel services	$363,893.4	$350,260.9	$382,160.0	$411,694.8	

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The increase in the 1984 current estimate results from the following:			+$31,899.1		
Transfer of $3,500.0 from the Research and Development Appropriation to personnel services in the Salaries and Expenses Appropriation covering the cost of the 1984 pay raise			(+3,500.0)		
Congressional add-on for AWT reviews			(+376.5)		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory			(+444.0)		
Congressional add-on for Office of Inspector General			(+1,347.5)		
Congressional add-on for toxic chemical activities and dioxin assessment			(+1,000.0)		
Congressional add-on for the pesticides program.			(+2,946.0)		
Congressional add-on for the health risk chemical analytic work			(+1,683.5)		
Congressional add-on for the LIMB project			(+250.0)		
Congressional add-on for the Chesapeake Bay Study			(+250.0)		
Congressional add-on for air and water quality monitoring and enforcement activities			(+1,000.0)		
EPA's application of the $24,211.0 Congressional add-on provided to support the additional 800 workyears			(+18,787.6)		
Adjustment to reflect revised salary estimates			(+314.0)		
The increase in the 1985 request reflects the additional personnel costs required as a result of increased workyears.					+$29,534.8
Travel and transportation of persons	$13,024.6	$14,307.1	$15,507.1	$16,600.0	
The increase in the 1984 current estimate results from the following:			+$1,200.0		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Congressional add-on for AWT reviews.....			(+23.5)		
Congressional add-on for Office of Inspector General.....			(+52.5)		
Congressional add-on for the pesticides program.			(+54.0)		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory.....			(+15.0)		
EPA's application of the $24,211,000 Congressional add-on provided to support the additional 800 workyears.....			(+1,055.0)		
The increase in the 1985 request reflects the amount required to cover increased travel costs associated with the additional workyears.					+$1,092.9
Transportation of things.....	$1,648.3	$2,110.9	$1,880.6	$2,057.2	
Changes to this object class in 1984 include:			-$230.3		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory.....			(+11.0)		
Adjustments to cost estimates using 1983 actual costs as a base.....			(-241.3)		
The increase in the 1985 request again reflects estimates based on 1983 actual costs and expected increases for the shipping of materials.					+$176.6
Standard level user charges.....	$20,398.0	$27,488.0	$23,763.0	$30,671.0	
The decrease in the 1984 current estimate reflects the reduction in rent charges as a result of a GSA limit on SLUC charges to no more than 14 percent over the 1983 rates.			-$3,725.0		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The increase in the 1985 estimate reflects the increase in SLUC rates from 1983 to 1985, together with the additional costs for increased space requirements for the increased workyears.					+$6,908.0
Communications, utilities, and other rent.....	$36,620.0	$44,967.7	$46,956.7	$47,110.2	
Changes to this object class in 1984 include:			+$1,989.0		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory.....			(+100.0)		
Increased support costs associated with the additional workyears provided by Congress.....			(+1,889.0)		
The increase in the 1985 request reflects the amount required to cover increased costs in communications and utilities.					+$153.5
Printing and reproduction.....	$3,893.0	$6,366.0	$5,642.1	$6,572.0	
The decrease in the 1984 current estimate results from the following:			-$723.9		
Congressional add-on for the health risk chemical analytic work.....			(+40.0)		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory.....			(+2.0)		
Reduction reflects adjustments to 1984 estimate based on 1983 actual costs for printing and reproduction.....			(-765.9)		
The increase in the 1985 request primarily reflects printing needs in the water quality program for new regulation publications and the printing of the NEEDS survey; and in the pesticides program for the extensive studies to be generated for Generic Chemical Reviews as well as the production of new registration and tolerance fee schedules.					+$929.9

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Other services	$72,370.8	$71,141.6	$75,436.1	$93,114.8	
The increase in the 1984 current estimate results from the following:			+$4,294.5		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory			(+358.0)		
Congressional add-on for the health risk chemical analytic work			(+92.5)		
Increase reflects adjustments to the 1984 estimate based on projected need for administrative and ADP support costs			(+3,844.0)		
The increase in the 1985 request reflects the funds required to support the operation of the National Computer Center due to rising demands for ADP services as well as ADP support costs associated with economic benefits research.					+$17,678.7
Supplies and materials	$11,187.5	$11,914.8	$11,114.5	$12,047.8	
Changes to this object class in 1984 include:			-$800.3		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory			(+20.0)		
Congressional add-on for the health risk chemical analytic work			(+119.0)		
Reduction reflects an adjustment based on 1983 actual costs for supplies			(-939.3)		
The increase in the 1985 request primarily reflects increases for supplies and materials in the management and support area, specifically regional management needs and support costs related to laboratories.					+$933.3

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Equipment	$21,258.4	$11,332.0	$15,439.4	$19,057.2	
Changes to this object class in 1984 include:			+$4,107.4		
Congressional add-on to the Great Lakes program for the Grosse Ile laboratory			(+50.0)		
Congressional add-on for the health risk chemical analytic work			(+65.0)		
Increase reflects the funds required for the modernization of the Washington Distribution Center, the telecommunications network, and support for the micro-computer systems			(+3,992.4)		
The increase in the 1985 request reflects major increases in headquarters support services with smaller increases in water quality, pesticides and agency management.					+$3,617.8
Lands and structures	$43.1	...	...	...	...
There is no change in the 1984 estimate and no request for 1985.					
Grants, subsidies, and contributions	$798.9	$500.0	$500.0	$350.0	...
There is no change in the 1984 estimate.					
The decrease in the 1985 estimate primarily reflects reduced funding for construction grant audits in the Office of Inspector General.					-$150.0

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Insurance Claims and Indemnities.....	$59.8	...	$.5	...	...
The increase in the 1984 current estimate is associated with the regional support services program for personal property loss.			+$.5		
The decrease in the 1985 estimate reflects the absence of need in this object class.					-$.5

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

BUILDINGS AND FACILITIES

OBJECT CLASSES		Actual 1983	Amendment/ Current Estimate 1984	Estimate 1985
21.0	Travel and transportation of persons.....	$25.5	$40.0	$100.0
25.0	Other services.....	3,504.1	360.0	3,253.0
31.0	Equipment.....	19.2	...	...
32.0	Lands and structures.....	567.3	3,642.0	5,962.0
	Total obligations.....	$4,116.1	$4,042.0	$9,315.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Travel and transportation of persons.....	$25.5	$40.0	$40.0	$100.0	

There is no charge in the 1984 estimate.

The increase in the 1985 estimate reflects increased travel needs for new facilities in connection with the design and construction of the Montgomery Laboratory (+$50,000) and repairs and improvements (+$10,000), to address the backlog of maintenance and repair projects which were delayed in previous years. +$60.0

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Other services	$3,504.1	$2,812.0	$360.0	$3,253.0	
The decrease in the 1984 current estimate reflects a revised carryover estimate and a transfer of funds to the lands and structures object class.			-$2,452.0		
The increase in the 1985 estimate reflects the contractual support for construction of the radiation laboratory in Montgomery, Alabama.					+$2,893.0
Equipment	$19.2	$3.0	...	...	...
The decrease to the 1984 estimate reflects the shift to the other services object class.			-$3.0		
There is no change in the 1985 estimate.					
Lands and structures	$567.3	$110.0	$3,642.0	$5,962.0	
The increase in the 1984 current estimate primarily reflects the shift from the other services object class to this object class, as well as a revised carryover estimate. Among the projects to be funded is the installation of a heating and cooling system and electrical supplies at our Edison, New Jersey facility and emergency situations at other sites.			+$3,532.0		
The increase in the 1985 estimate is primarily for construction of a modern and safe radiation laboratory in Montgomery, Alabama.					+$2,320.0

ENVIRONMENTAL PROTECTION AGENCY

Object Classification
Includes Direct Obligations Only
(in thousands of dollars)

HAZARDOUS SUBSTANCE RESPONSE TRUST FUND

OBJECT CLASSES	Actual 1983	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985
Personnel Services	$28,861.0	$44,562.0	$1,838.0	$59,243.0
Other Objects:				
21.0 Travel and transportation of persons	2,600.0	3,673.0	140.0	6,504.0
22.0 Transportation of things	119.0	179.0	19.0	806.0
23.1 Standard level user charges	1,459.0	2,264.0	138.0	3,802.0
23.2 Communications, utilities, and other rent.	3,503.0	3,771.0	429.0	5,275.0
24.0 Printing and reproduction	238.0	389.0	23.0	840.0
25.0 Other services	143,521.0	319,843.0	28,484.0	450,969.0
26.0 Supplies and materials	1,522.0	1,850.0	178.0	6,396.0
31.0 Equipment	4,094.0	3,864.0	224.0	4,707.0
32.0 Land and structures	13.0	...	...	...
41.0 Grants, subsidies, and contributions	41,892.0	51,257.0	18,527.0	103,864.0
Total other objects	$198,961.0	$387,090.0	$48,162.0	$583,163.0
Total obligations	$227,822.0	$431,652.0	$50,000.0	$642,406.0

EXPLANATION OF INCREASES AND DECREASES TO OBJECT CLASSIFICATIONS

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Personnel Services	$28,861.0	$35,039.2	$44,562.0	$1,838.0	$59,243.0	
The increase in the 1984 current estimate results from the following:			+$9,522.8			

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
Congressional add-on to cover the 10 positions in uncontrolled waste sites research.....			(+450.0)			
Congressional add-on to cover the 10 positions in the Inspector General's Office.....			(+400.0)			
EPA's application of the $73 million general increase that supports 180 additional workyears and the $25 million increase for feasibility studies that supports 100 additional workyears.....			(+10,287.1)			
Adjustment to reflect revised salary estimates..			(-1,614.3)			
This increase supports the 50 workyears included in the 1984 Supplemental request.				+$1,838.0		
The increase in the 1985 request is to support the 350 additional workyears included in the Superfund appropriation request.						+$14,681.0
Travel and transportation of persons.....	$2,600.0	$2,786.0	$3,673.0	$140.0	$6,504.0	
The increase in the 1984 current estimate results from EPA's application of the $73 million general Congressional add-on to this appropriation.			+$887.0			
This increase supports the travel associated with the 50 workyears included in the 1984 Supplemental request.				+$140.0		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The increase in travel in the 1985 request will support increased site clean up and stronger enforcement efforts.						+$2,831.0
Transportation of things.....	$119.0	$220.8	$179.0	$19.0	$806.0	
The decrease in the 1984 current estimate results from the following:			-$41.8			
EPA's application of the $73 million general Congressional add-on.....			(+143.4)			
Adjustments to reflect revised needs in the hazardous substance technical enforcement program and some smaller amounts in other programs.....			(-185.2)			
This increase supports transportation costs associated with the 1984 Supplemental request.				+$19.0		
The increase in the 1985 request is to support the 350 additional workyears added to the Superfund appropriation.						+$627.0
Standard level user charges.....	$1,459.0	$1,992.0	$2,264.0	$138.0	$3,802.0	
The increase in the 1984 current estimate is EPA's application of the $73 million general Congressional add-on in the Superfund appropriation. Additional facilities rental and other office and building costs will be incurred as a result of these additional workyears.			+$272.0			
This increase supports additional SLUC costs associated with the 1984 Supplemental request.				+$138.0		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The increase in the 1985 request is to support the 350 additional workyears requested for this appropriation.						+$1,538.0
Communications, utilites and other rent.....	$3,503.0	$2,953.0	$3,771.0	$429.0	$5,275.0	
The increase in the 1984 current estimate results from the following:			+$818.0			
EPA's application of the $73 million general Congressional add-on to support the 300 additional workyears in the Superfund appropriation. Additional facilities rental and other office and telecommunications costs will be incurred as a result of the increase in workyears.....			(+906.2)			
Adjustments made to this object class.....			(-88.2)			
This increase supports rent and communication costs associated with the 1984 Supplemental request.				+$429.0		
The increase in the 1985 request will support the 350 additional workyears requested for this appropriation. Additional facilities rental, Federal telecommunications system, utilities and office building and information management services costs will be incurred as a result of the additional workyears.						+$1,504.0
Printing and reproduction.....	$238.0	$286.0	$389.0	$23.0	$840.0	
The increase in the 1984 current estimate is a result of the following:			+$103.0			

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
EPA's application of the $73 million general Congressional add-on to this appropriation....			(+75.9)			
An increased need in the interagency Superfund program.....			(+27.1)			
This increase supports additional printing costs associated with the 1984 Supplemental request.				+$23.0		
The increase in the 1985 request will support printing needs associated with an increasing Superfund program.						+$451.0
Other services.....	$143,521.0	$172,914.0	$319,843.0	$28,484.0	$450,969.0	
The increase in the 1984 current estimate results from the following:			+$146,929.0			
EPA's application of the $500,000 increase for the Inspector General's Office.....			(+50.0)			
EPA's application of the $73 million general increase and $25 million increase for feasibility studies added on by Congress.....			(+81,968.9)			
Increase results from a change in the rate of obligations for contracts which is primarily offset by the reduction in grant obligations.			(+64,910.1)			
This increase in contracts, included in the 1984 Supplemental request, will initiate additional remedial investigations for eventual Fund-financed response, additional designs and begin construction at additional sites. Also, contract funding will support additional enforcement investigations.				+$28,484.0		

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
The increase in contract funding in the 1985 estimate will support additional remedial and enforcement action that EPA plans to be involved in from the National Priorities List.						+$131,126.0
Supplies and materials	$1,522.0	$1,115.0	$1,850.0	$178.0	$6,396.0	
The increase in the 1984 current estimate results from the following:			+$735.0			
EPA's application of the $73 million general increase and $25 million increase for feasibility studies added on by Congress			(+990.4)			
Reduction as the result of 1983 actual experience			(-255.4)			
This increase supports the cost of supplies associated with the 50 workyear increase in the 1984 Supplemental request.				+$178.0		
The increase in the 1985 request is primarily to support the 350 additional workyears requested in the Superfund program.						+$4,546.0
Equipment	$4,094.0	$2,122.0	$3,864.0	$224.0	$4,707.0	
The increase in the 1984 current estimate results from the following:			+$1,742.0			
Congressional add-on for waste site research			(+50.0)			
Congressional add-on for the Inspector General's Office			(+50.0)			
EPA's application of the $73 million general increase and the $25 million increase for feasibility studies added on by Congress			(+2,412.1)			
Reduction based on current needs			(-770.1)			

	Actual 1983	Budget Estimate 1984	Amendment/ Current Estimate 1984	Supplemental 1984	Estimate 1985	Increase + Decrease - 1985 vs 1984
This increase supports the equipment needs associated with the 1984 Supplemental request.				+$224.0		
The increase in the 1985 request is to support the equipment needs associated with the increase in the Superfund program.						+$843.0
Lands and structures.....	$13.0	...	...	...	...	
There is no change in the 1984 estimate and no request in 1985.						
Grants, subsidies and contributions.....	$41,892.0	$100,442.0	$51,257.0	$18,527.0	$103,864.0	
The decrease in the 1984 current estimate is a result of changes in the rate of obligations for grants which is offset by an increase in obligations in contracts.			-$49,185.0			
This increase, included in the 1984 Supplemental request, will fund the expected level of grant obligations for site response actions.				+$18,527.0		
The increase in the 1985 request is in anticipation of increased State participation in ongoing response actions. EPA expects that States will enter into more cooperative agreements and will assume greater responsibility for development and operation of their own response programs.						+$52,607.0