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Agency

Office of Solid Waste
and Emergency Response
Washington DC 20460

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The New RCRA A Fact Book

**ENVIRONMENTAL
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The New RCRA

An Introduction by Lee M. Thomas Administrator, EPA

EPA administers two major waste management statutes—the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or Superfund, designed to clean up the Nation's worst abandoned hazardous waste dumps, and the Resource Conservation and Recovery Act (RCRA), which regulates current and planned hazardous waste disposal activities. RCRA was greatly expanded by Congress in 1984, and both the agency and the states face a huge challenge in implementing the new provisions of the law. Success will depend upon the close cooperation of federal, state and local governments, industry, public interest groups and private citizens. This fact book places the new RCRA in historical perspective, summarizes the main provisions of the recent amendments, describes the responsibilities of those who generate, transport, treat, recycle and dispose of regulated wastes, and outlines EPA's new hazardous waste responsibilities.

We will provide additional documentation as the program develops.

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The Historical Perspective

When population centers were relatively compact and produced manageable volumes of conventional waste, the disposal of such material was not a major issue in urban or environmental affairs. In recent decades, however, the tonnage and chemical complexity of the nation's waste has grown dramatically, posing a threat to air, water and land resources, to the balance of nature and even to human health. Congress recognized the problem in 1965, and passed the Solid Waste Disposal Act to fund research and technical assistance for state and local planners.

In 1970, the original legislation was enlarged and restructured in the form of the Resource Recovery Act, which promoted the adoption of sanitary landfills and encouraged a shift from mere disposal toward conservation, recycling and advanced control technology. A cabinet-level interagency resource conservation committee was set up and EPA funded six major resource-recovery projects at a cost of some \$25 million.

During the mid to late 70s EPA invested about \$10 million in direct technical assistance to a host of cities for experiments like separate collection of newsprint, computerized routing and scheduling, and new management systems. Between 1979 and 1981, EPA allocated \$28 million to 63 communities to help them plan the development of large-scale resource-recovery facilities.

Up to this point legislation had focused mainly on the traditional kinds of municipal trash—paper, glass, cans, garbage. However, mounting scientific evidence indicated that wastes generated by chemical and other industrial processes could be

hazardous. That persuaded Congress first to strengthen existing regulations and then, in 1976, to pass the Resource Conservation and Recovery Act (RCRA), which amended the Solid Waste Disposal Act.

Under RCRA, EPA set standards for generators and transporters of hazardous waste and for owners and operators of hazardous waste treatment, storage and disposal facilities. This cradle-to-grave system has identified 52,864 waste generators, 12,000 transporters and about 5,000 treatment, storage and disposal facilities, and has brought a greater degree of order to the management of large-scale wastes.*

Congress reauthorized RCRA late in 1984, imposing new and far-reaching requirements on a vastly larger regulated community, notably the 175,000 enterprises that generate small amounts (between 220 and 2,200 pounds) of waste per month and those that own or operate a million underground storage tanks. Controls for land disposal will be tightened, while certain wastes will be banned from landfills altogether. Burners and blenders of fuels derived from hazardous waste will be subject to EPA regulation.

*The Agency estimates, based on 1981 data, that some 264 million metric tons of hazardous waste are being generated annually in this country. The combined total of all forms of solid waste, hazardous and otherwise, amounts to almost six billion tons per year.

Overview of 1984 Amendments

The new RCRA represents a clear shift in national policy away from land disposal and toward waste reduction, recycling and new treatments for flammable, reactive, corrosive and toxic wastes that now threaten air quality and vital surface and groundwater resources. The amended RCRA embraces more than 70 new provisions and 58 action deadlines. For example, EPA is now required to establish a program to control underground tanks containing petroleum and other designated hazardous substances.

The agency must issue regulations by February 1987 for petroleum tanks, August 1987 for new tanks containing chemical products listed as hazardous under the Superfund, and August 1988 for existing tanks containing such Superfund chemicals. Installation of certain underground tanks is prohibited. The Underground Storage Tank (UST) program may require us to inspect and regulate a million tanks nationwide. New statutory controls may be imposed on as many as 100,000 new tanks installed each year.

The new RCRA bans the land disposal of hazardous wastes unless EPA finds they will not endanger human health and the environment. Landfilling of bulk or non-containerized liquids is now prohibited. By February 1986 EPA must promulgate regulations to minimize the landfilling of containerized liquid hazardous waste.

No bulk liquids may be disposed of in salt domes. Using oil contaminated with hazardous waste as a dust suppressant and injection of hazardous wastes into or above an underground source of drinking water are both outlawed.

The new Act further requires those who produce, burn, distribute or market fuel derived from hazardous wastes to notify EPA of their operations. EPA must then issue record-keeping requirements and technical standards.

In addition, anyone who wants to operate a waste management facility must meet minimum technological requirements, including double liners, leachate-collection systems and extensive ground-water monitoring. Facility owners and operators are required by the new law to take corrective action if any part of a RCRA facility not on a permanent control plan suffers an uncontrolled release. Such action can now be accomplished through new permit requirements or legal remedies.

The amendments also strengthen federal controls over the disposal of non-hazardous municipal wastes: federal enforcement authority can be applied in cases where States do not mandate a permit program for municipal landfills. Finally, RCRA strengthens federal enforcement by expanding criminal offenses and raising maximum penalties. Any citizen can file an "imminent hazard" lawsuit, and EPA is authorized to issue an administrative order to correct any release of hazardous waste from a facility that is or was subject to temporary permit requirements.

Key Programs

One of the purposes of the 1984 RCRA amendments is protection of precious groundwater supplies from contamination by seepage from the land surface. Major parts of regulations governing small quantity generators (SQGs) and underground storage tanks are designed to prevent such damage to aquifers. The law is also intended to control air pollution resulting from combustion of hazardous waste mixed with various fuels and the evaporation of volatile organic materials from landfills and storage depots. The following sections explain the main features of the new RCRA.

Land Disposal

Congress intended to discourage land disposal of hazardous waste because of long-term uncertainties about its persistence, toxicity, mobility and accumulation in plants, animals and human tissue. Certain materials will be banned unless they receive specific EPA approval. Land disposal can be permitted if the waste meets pretreatment levels or standards.

The land disposal program features tight deadlines and "hammers"—automatic bans if EPA fails to meet them.

- Dioxin-containing waste and spent or discarded solvents are banned as of November 6, 1986.

- Wastes listed as hazardous by the State of California, including liquid hazardous wastes containing certain metals, free cyanides up to 1,000 milligrams per liter, PCBs up to 50 milligrams per liter and acids with a pH rating lower than 2.0 are banned after July 8, 1987.

- Liquid hazardous wastes containing arsenic up to 500 milligrams per liter, cadmium up to 100 milligrams per liter, chromium VI up to 500

milligrams per liter, lead up to 500 milligrams per liter, mercury up to 20 milligrams per liter, nickel up to 134 milligrams per liter, selenium up to 100 milligrams per liter and thallium up to 130 milligrams per liter are banned as of July 8, 1987.

- Liquid or solid hazardous waste containing halogenated organic compounds up to 1000 milligrams per liter are banned as of July 8, 1987.

- Contaminated soil and debris from CERCLA response or corrective action under RCRA are exempted until November 1988 and waste injected into deep wells until August 8, 1988.

- The deadline for promulgation of EPA waste review schedule is November 8, 1986.

- EPA must review at least one-third of wastes by August 8, 1988, at least two-thirds of wastes by June 8, 1989, and all ranked waste and all "characteristic" waste by May 8, 1990.

These schedules are based on the toxicity and volume of waste disposed on land. The most hazardous are to be examined first. A new leaching test will determine if hazardous waste constituents exceed allowable health thresholds.

If no available treatment methods can safeguard public health, performance standards will be imposed where possible, based on best demonstrably achievable technology. Effective dates of land-disposal bans can be extended by petition for two one-year periods on a case-by-case basis if alternative disposal capacity is not available. However, petitions must demonstrate a reasonable certainty that there will be no migration of constituents as long as wastes remain hazardous.

Small Quantity Generators (SQGs)

Previously, EPA only regulated establishments generating more than 1,000 kilograms (2,200 pounds) of hazardous waste per month. Under the new law, those that generate 100 kilograms (220 pounds), or roughly half a

55-gallon drum) but less than 1,000 kilograms per month will have to comply with rules covering transportation and disposal of wastes hazardous to human health and the environment.

The agency estimates that the new RCRA will increase the number of federally-regulated waste generators from about 15,000 to about 175,000. An EPA survey released in March

1985 suggested that 85% of SQGs are in vehicle maintenance, equipment repair, construction, printing, photography, laboratories, schools, laundries, dry cleaners and pesticide applicators. Most of the remainder are in manufacturing or finishing of metals.

The new requirements will have their greatest impact on firms in the 28 states that do not currently impose some regulation on SQGs.

Starting August 5, 1985, SQGs shipping hazardous waste off premises must, like large-volume generators, attach a manifest required by EPA and the Department of Transportation (DOT) including generator's name, address and signature; DOT waste nomenclature and classification; number and type of containers; weights and quantities being transported and name and address of consignee. The manifest will help prevent confusion and illegal dumping by permitting EPA and the states to track shipments from origin to final disposal.

By March 31, 1986, EPA must issue final regulations protecting human health and environment from small quantities of hazardous waste. At a minimum, the regulations, now in process, must:

- require that hazardous waste from generators of more than 100 kilograms per month be treated, stored or disposed of at an approved hazardous waste facility.
- allow small quantity generators to store waste on premises up to 180 days without a storage permit, or 270 days for waste to be transported more than 200 miles, provided that no more than 6,000 kilograms are stored.

If EPA fails to issue final regulations by March 31, 1986, hazardous waste from SQGs automatically becomes subject to these minimum requirements. In addition, for waste shipped off-site, SQGs will be required to include the name of the transporter on the manifest, retain manifests signed and returned by the hazardous waste facility for at least three years, and notify EPA at least twice per year of any manifests not returned, so the agency can follow up for possible violations.

Because the new provisions regulate a large number of generators for the first time, EPA is conducting a comprehensive education/assistance program to alert SQGs to their responsibilities under the law. For provisions that must be implemented by August 1985 EPA will:

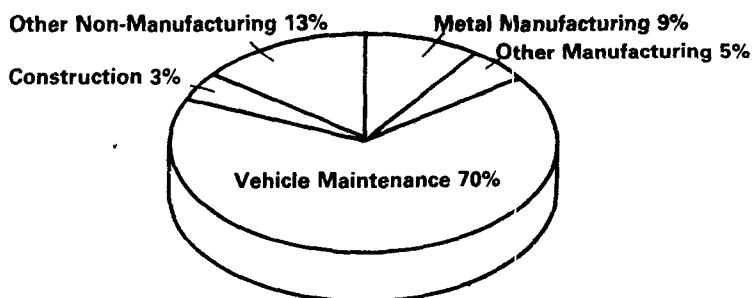
- identify potential SQGs
 - provide information through EPA regional offices, state and local governments, trade associations and other groups to help SQGs determine if they are subject to the regulations. We will identify wastes by trade, chemical and colloquial names, and will correlate the waste with DOT identification numbers wherever possible.
 - inform SQGs of the need to prepare a Uniform Hazardous Waste Manifest to accompany any materials they ship, and explain how and where to obtain forms.
- For the final regulations, to be issued or take effect automatically by April 1, 1986, EPA will:
- alert SQGs to the new regulations plus additional requirements and
 - provide them with complete instructions and industry-specific information to help them comply.

States Regulating Small Quantity Generators As Of February 1984

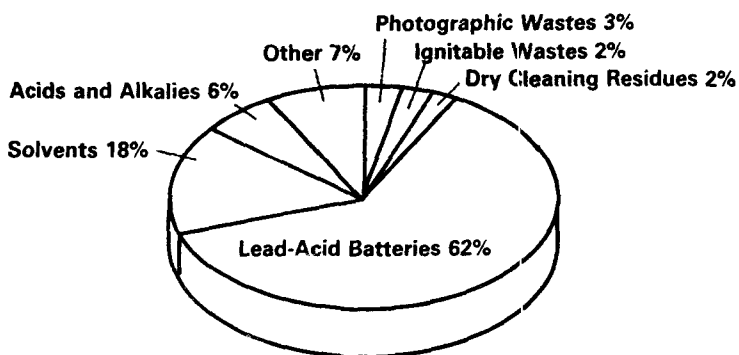


*No exemption for small quantity generators regardless of quantity

Who They Are...



The Wastes They Produce...



Underground Storage Tanks (UST)

One of the most far-reaching of the new RCRA provisions deals with an estimated one million underground storage tanks in the United States containing hazardous substances or petroleum products.

The Underground Storage Tank program breaks new ground in that, for the first time, RCRA applies to storage of useful materials as well as wastes. Under a new Subtitle I, RCRA now regulates underground tank storage of all petroleum products (including gasoline and crude oil) and any substance defined as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the Superfund law), which authorizes cleanup of abandoned or uncontrolled hazardous waste sites. "Underground storage tank" is defined as any tank with at least 10 percent of its volume buried below ground, including any pipes attached. Thus, overground tanks with extensive underground piping may now be regulated.

EPA's UST program does not apply to:

- tanks holding a hazardous waste regulated under the RCRA hazardous waste program (Subtitle C)
- farm and residential tanks holding less than 1,100 gallons of motor fuel
- on-site heating oil tanks
- septic tanks
- pipelines regulated under other laws
- systems for collecting storm and wastewater
- low-through process tanks

- liquid traps or gathering lines related to oil and natural gas operations.

The UST program bans the installation of corrodible tanks, initiates a tank notification program, sets technical standards for all tanks, coordinates federal and state efforts and provides federal inspection and enforcement.

A provision banning underground installation of unprotected new tanks went into effect on May 7, 1985. After that date no person may install an underground storage tank unless:

- it will prevent release of the stored substance due to corrosion of structural failure for the life of the tank.
- it is protected against corrosion, constructed of noncorrosive material, or designed to prevent release of the stored substance.
- construction or lining materials are electrolytically compatible with the substance to be stored.

The new law provides a state and local notification program that applies to several million tanks owners—to distributors of regulated substances and owners of tanks taken out of operation within the past 10 years but still in the ground—as well as owners of operational tanks.

- by May 1985 state governors must have designated the state or local agency that will receive the notifications.

- by November 1985 EPA must prescribe the form of the notice.

- by May 1986 owners of existing underground storage tanks must notify the state or local agency of each tank's age, size, type, location and uses.

- by May 1986 owners of underground storage tanks taken out of operation after January 1, 1974, but still in the ground, must notify the state or local agency of each tank's age, decommission date, size, type, location and type and quantity of substance left in the tank.

- after May 1986 owners of newly installed underground storage tanks must notify the state or local agency of certain operational data within 30 days of start-up.

- within 30 days of the date on which EPA prescribes the notification form (and for 18 months thereafter), any person who deposits regulated substances in an underground storage tank must inform its owner of the requirement to notify the state or local agency.

- within 30 days of the date on which EPA prescribes the notification form, sellers of tanks must notify purchasers of the need to notify the state or local agency.

Under new RCRA provisions, EPA must develop and promulgate performance standards for new tanks, as well as standards covering leak detection, leak prevention and corrective action for both new and existing underground storage tanks on the following schedule:

	petroleum	hazardous chemicals
standards for new tanks	February 1987	August 1987
regulation of leak detection/prevention and corrective action	February 1987	August 1988
study/report to Congress	November 1985	November 1987

The law specifies that leak detection/prevention and corrective action regulations must require owners/operators of underground storage tanks to:

- be able to detect releases
- keep records of release-detection methods
- take corrective action when leaks occur
- report leaks and corrective action
- provide for proper tank closure
- provide evidence, as EPA deems necessary, of financial capability to take corrective action and compensate third parties for injury or damages from instant or continuous releases. States may finance corrective action and compensation programs by a fee levied on owners and operators

Several states already have or are developing regulatory programs for underground storage tanks. The new law is designed to avoid interfering with those programs and to encourage other states to press ahead on their own. By May 1987 states may apply to EPA for authorization to operate an Underground Storage Tank program. It may cover petroleum tanks or hazardous substance tanks or both. State programs must include all the regulatory elements of the federal program and provide for

adequate enforcement. After a one to three-year grace period, state requirements must be no less stringent than the federal.

Federal and state personnel are authorized to request pertinent information from tank owners, inspect and sample tanks, and monitor and test tanks and surrounding soils, air, surface water and groundwater. EPA may issue compliance orders for any violation of this statute or regulations. Offenders are subject to civil penalties of up to \$10,000 per tank for each day of violation. Criminal penalties are not authorized.

Permitting

The new Amendments apply immediately to facilities in all states, whether or not the state is authorized to administer its own hazardous waste program. If a facility is located in an authorized state, the latter will continue to be responsible for that portion of the RCRA program for which it is already authorized. EPA will be responsible for aspects of the program initiated by 1984 Amendments. So for the time being RCRA permits will need to be issued jointly by states and EPA.

All Treatment, Storage and Disposal Facilities. To receive a final permit for approved operation all facilities will need to take corrective action for releases of hazardous waste or hazardous waste constituents from any solid waste management unit on the property, regardless of when the waste was placed in the unit or whether the unit is closed. If corrective action cannot be completed before a permit is received, EPA may put a compliance schedule into the permit to allow development of data to determine corrective action or to complete it. Owners and operators must provide financial assurance that they can complete corrective action.

New authority allows EPA to add whatever conditions to permits are necessary to protect human health and the environment. After September 1, 1985 a generator with an on-site facility must certify annually a reduction in volume and toxicity of waste to the maximum degree economically practicable, and that management methods minimize risk to the extent technically practicable.

All Land-Disposal Units. A waiver from groundwater monitoring requirements is no longer permissible for units located above the seasonal high-water table, or for units where owners and operators have installed two liners and a leachate collection system or inspect liners.

An application for interim status operation and certification of compliance with groundwater monitoring and financial assurance requirements must be submitted by November 8, 1985, to avoid loss of such status.

Land-disposal permits must be reviewed every five years and modified as needed. Any such modification must consider improvements in the state of control and measurement technology and regulations that then apply to the facility.

Large Quantity Generators, Transporters and Treatment Storage and Disposal Facilities (TSDs) as of July 31, 1985

EPA Region	Generators	Transporters	TSD
1	4,358	557	379
2	11,453	1,559	379
3	4,737	1,177	418
4	6,280	1,542	565
5	10,937	2,909	1,312
6	4,536	1,258	698
7	1,836	481	279
8	659	313	116
9	5,931	1,848	445
10	2,137	699	128
Totals	52,864	12,343	4,961

For further information contact: Jeff Tumarkin at 382-4753

Landfill and Surface Impoundment Exposure Information. After August 8, 1985, each application for interim-status operation must be accompanied by exposure information, which must address potential hazardous waste releases in the course of transportation to or from the waste disposal unit, normal operations and accidents, and potential pathways, magnitude and nature of human exposure to such releases. If an application for interim-status operation has already been submitted, exposure information must be transmitted by August 8, 1985.

EPA will determine whether a facility poses a substantial health risk due to releases of hazardous constituents. If so EPA will make information available to the Agency for Toxic Substances and Disease Registry (ATSDR) in the Centers for Disease Control, which will undertake a health assessment.

New and Expanded Landfills and Surface Impoundments. Permits will require groundwater monitoring and installation of two or more liners with leachate collection above or between liners, as appropriate. Surface impoundments and landfills outside of Alabama can obtain a waiver from the double-liner requirement if alternative design and operating practices, along with location characteristics, are shown to be at least as effective in preventing migration of hazardous constituents to aquifers. Facility owner/operators can also obtain a waiver from the double-liner and leachate collection requirements for certain monofills and foundry wastes. Landfills or surface impoundments that have received approval for interim-status operation and that receive waste into new units and/or lateral expansions or replacements of existing units after May 8, 1984, must meet the double-liner and leachate-collection requirements and waiver conditions.

If liner and leachate collection systems are installed in good faith compliance with EPA regulations or guidance documents, a different system may not be required when a facility receives its first permit, unless EPA has reason to believe the liner is perforated.

If an owner or operator intends to receive waste into new interim-status units on or after May 8, 1985, he must notify EPA at least 60 days before receiving waste. He must submit his Part B permit application within six months of this notification.

Landfills Only. As of May 8, 1985, a facility owner or operator will not be able to dispose of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (regardless of whether absorbents have been added) in a landfill. After November 8, 1985, he will not be able to dispose of any non-hazardous liquid wastes in his landfill. A waiver of this prohibition may be obtained under certain conditions.

Existing Surface Impoundments Only. If an interim-status surface impoundment was in existence on November 8, 1984, two or more liners with leachate collection between the liners must be installed and groundwater must be monitored by November 8, 1988. Permits issued to surface impoundments will require retrofitting within four years, unless the owner/operator applies for and receives a waiver, which is available for units that meet certain criteria.

Waste Piles Only. Interim-status waste piles that receive waste into new units or lateral expansions or replacements of existing units on or after May 8, 1985 must meet current Part 264 standards for liners and leachate collection systems.

Miscellany. Additional provisions that will impact selected facilities (e.g., prohibitions on placing some hazardous waste in salt domes, underground mines or caves until the facility receives a permit) are not outlined in this section because they are germane only to small segments of the regulated community. Moreover this section does not treat provisions that become effective more than one year after enactment of the RCRA amendments.

Enforcement Provisions

EPA already had considerable compliance authority prior to the enactment of the Hazardous and Solid Waste Amendments of 1984. The agency could require information, obtain access for inspections and conduct monitoring. In addition, violators were subject to compliance orders, penalties and criminal fines and imprisonment. Finally, the Administrator could bring an action whenever the handling, treatment, transportation or disposal of a solid or hazardous waste threatened an imminent and substantial endangerment of public health or the environment. The Amendments enlarged most of these authorities, including corrective action.

The Amendments require periodic inspection of facilities. Beginning 12 months after the date of enactment, and no less than every two years thereafter, EPA or authorized States must inspect all treatment, storage and disposal facilities for which a permit is required. EPA must annually inspect every treatment, storage or disposal facility operated by a State or municipality. EPA must and a State may inspect all treatment, storage or disposal facilities owned or operated by a federal agency annually starting 12 months from the date of enactment. No waivers or variances are permitted. Within six months of the date of enactment, EPA had to submit a report to Congress on the potential for private inspectors to support government inspection efforts.

As discussed elsewhere in this fact book, the Amendments established numerous new regulatory requirements. These are subject to conventional enforcement to compel compliance and impose penalties for violations. To eliminate certain substandard operations, temporary operational permits terminate for land disposal facilities unless they certify compliance with all applicable groundwater monitoring and financial responsibility requirements, and submit applications for a final determination regarding issuance of a permit within one year of the date of enactment. Existing interim-status incinerators have until November 8, 1986 to submit Part-B applications to maintain interim status. All other existing interim-status facilities have four years to submit such applications.

Corrective action authorities are a major component of the Amendments. EPA can issue orders requiring corrective action or other response measures at interim-status facilities when the Agency determines that a release of hazardous waste is now or has been taking place. Such orders can include a "suspend or revoke" authorization to operate under interim status. Facilities that fail to comply with the terms and schedules specified in these orders are subject to civil penalties of up to \$25,000 per day of noncompliance. EPA can also initiate a civil action for appropriate relief, including a temporary or permanent injunction.

In addition, EPA must promulgate regulations as promptly as practicable requiring owners or operators of all permitted facilities and regulated units to take

corrective action beyond the property boundary where necessary to protect human health and the environment, unless they can demonstrate to EPA's satisfaction an inability to obtain permission despite their best efforts. Pending such regulations, EPA can issue corrective action orders for this purpose on a case-by-case basis.

In addition, criminal sanctions were expanded by the new amendments. Any treatment, storage and disposal facility or generator and transporter of hazardous waste is subject to criminal penalties for knowing violations of interim-status standards, material omissions and failure to file required reports, transportation without a manifest and causing such waste to be transported to an unpermitted facility. The maximum penalty for these violations is boosted to \$50,000 for each day of non-compliance. The maximum prison sentence for transporting or causing transport to an unpermitted facility, and treating or disposing of wastes without a permit or in violation thereof or of interim-status standards, is raised to five years.

The class of "knowing endangerment" crimes is also expanded. The requirement that those responsible for a "knowing endangerment" display an unjustifiable and inexcusable disregard for, or extreme indifference to, human life before they can be prosecuted is deleted. The maximum prison sentence for any person convicted of "knowing endangerment" is extended to 15 years.

Citizens are authorized to bring actions in cases where past or present management of hazardous waste presents an imminent and substantial endangerment. This right is circumscribed where EPA or a

State is diligently prosecuting an action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), is engaged in a removal action, has initiated an investigation or is proceeding with a remedial action, or has issued an administrative order to compel a cleanup. Citizens are expressly authorized to sue open-dump operations.

Actions or issues for which owners or operators have previously had opportunity to obtain review (the permit process, State authorization) cannot be subject to judicial review in civil or criminal enforcement proceedings. The Administrator's action in issuing, denying, modifying or revoking any permit, or granting, denying or withdrawing authorization is not subject to review in an enforcement action if review could have been obtained elsewhere under the law.

The U.S. Attorney General is authorized to deputize EPA employees to act as marshals in RCRA criminal investigations. EPA is also authorized to conduct criminal investigations and to refer the results to the Attorney General for prosecution.

Under the Amendments, the endangerment provision was clarified. Those contributing to the endangerment, including past and present generators, transporters and owners or operators of treatment, storage and disposal facilities are liable for conditions resulting from past as well as present activities. When EPA proposes to settle such actions, the agency is to provide public notice, an opportunity to comment in writing and a public meeting to discuss proposed settlement terms.

State Programs and Agencies

RCRA required EPA to institute a national program to control hazardous waste. However, it was the intent of Congress that where possible states assume responsibility for controlling such waste within their borders, and federal financial and technical assistance is available for program development. Section 3006 of the Act specifically authorizes states to operate their own hazardous waste programs after approval by EPA.

To receive final approval a state must show that it has the resources to administer and enforce a hazardous waste program equivalent to and consistent with the federal program. Equivalent means "equal in effect." States may set more stringent standards, but they may not impose any requirement that might interfere with the free movement of hazardous wastes across state boundaries to treatment,

storage or disposal facilities holding a RCRA permit.

The deadline for a state to obtain final authorization to administer the national hazardous waste program is January 31, 1986. Eligibility for final authorization will be determined on the basis of standards in effect prior to application or January 26, 1983, whichever is later.

Requirements imposed under the 1984 Amendments apply immediately in all states and will be administered by EPA until the state is authorized to do so. EPA and a state may enter into a cooperative agreement regarding the administration of the program and joint permits may be issued for those requirements not yet incorporated into the state program. As of August 1985, twenty-six states have been granted final authorization to administer the program. Eight other states have submitted applications and two have been granted tentative approval for final authorization.

State Solid And Hazardous Waste Agencies

Alabama

Daniel E. Cooper, Director
Land Division
Alabama Dept. of Environmental Management
1751 Federal Drive
Montgomery, Alabama 36130
CML (205) 271-7730

Alaska

Stan Hungerford
Air & Solid Waste Management
Dept of Environmental Conservation
Pouch O
Juneau, Alaska 99811
CML (907) 465-2635

American Samoa

Pati Faiiai, Executive Secretary
Environmental Quality Commission
American Samoa Government
Pago Pago, American Samoa 96799
Overseas Operator (Commercial Call 633-4116)

Randy Morris, Deputy Director
Department of Public Works
Pago Pago, American Samoa 96799

Arizona

Ron Miller, Manager
Office of Waste and Water Quality Management
Arizona Department of Health Services
2005 North Central Avenue
Phoenix, Arizona 85004
CML (602) 257-2305

Arkansas

Vincent Blubaugh, Chief
Solid & Hazardous Waste Div.
Department of Pollution Control and Ecology
P.O. Box 9583
8001 National Drive
Little Rock, Arkansas 72219
CML (501) 562-7444

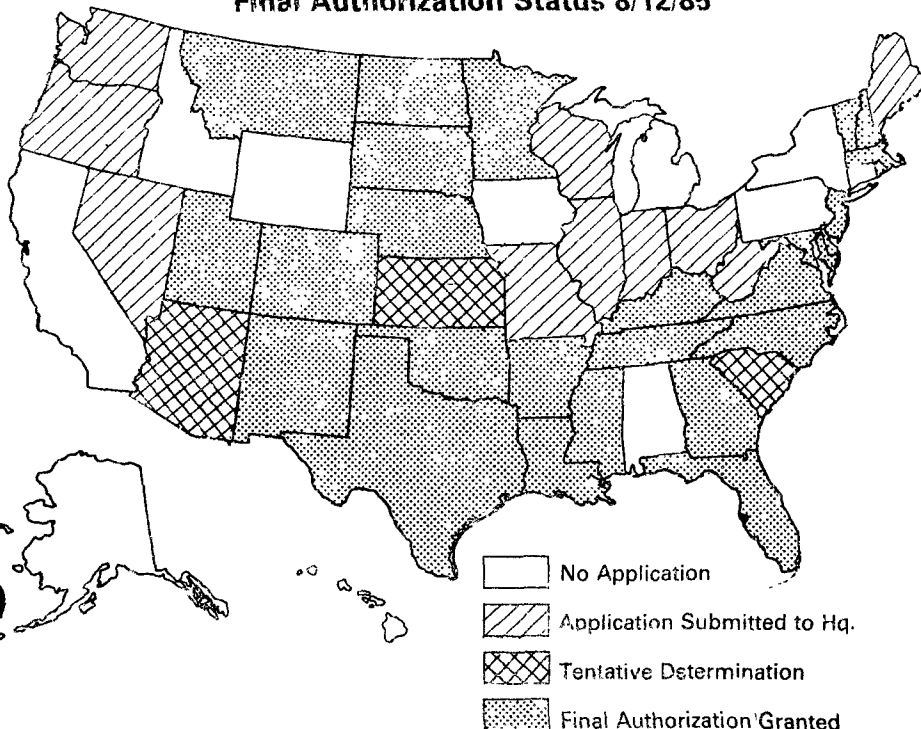
California

Vacant, Deputy Director
Toxic Substances Control Programs
Department of Health Services
714 P Street, Room 1253
Sacramento, California 95814
CML (916) 322-7202

Michael Campos, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95801
CML (916) 445-1553

Sherman E. Roodzant, Chairman
California Waste Management Board
1020 Ninth Street, Suite 300
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Final Authorization Status 8/12/85



Colorado

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Commonwealth Of Northern Mariana Islands

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Department of Public Health and
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Connecticut

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89 Kings Highway
P.O. Box 1401
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District Of Columbia

Angelo Tompros, Chief
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Florida

Robert W. McVety, Administrator
Solid & Hazardous Waste Section
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Twin Towers Office Building
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Georgia

John Taylor, Chief
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270 Washington St. S.W., Room 723
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CML (404) 656-2833

Guam

James Branch, Administrator
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646-8863)

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The 1984 Amendments In Detail

Small Quantity Generators (SQGS)

After August, 1985 SQG waste not managed at a permitted Subtitle C installation may be disposed of only at a State-approved municipal or industrial facility. By March 31, 1986, EPA must promulgate standards for waste generated in quantities between 100-1000 kg/month: the rules may vary from conventional Subtitle C regulations, but must protect human health and the environment.

At a minimum, the standards must not allow on-site storage more than 180 days* without a permit, and all other management of SQG waste must occur at a permitted Subtitle C facility. If EPA fails to promulgate standards on time, SQG waste generated above 100 kg/month becomes subject to the minimum requirements described above plus exception reports and retention of manifests for three years. By August, 1985 waste generated in quantities between 100 and 1000 kg/month must be accompanied by a Uniform Manifest.

By April 1, 1985, EPA must submit a study characterizing the generators, wastes, practices and risks posed by wastes in quantities less than 1000 kg/month. By April 1, 1987, EPA must submit studies on the feasibility of establishing a licensing system whereby transporters

assume the responsibilities of SQGs, the merits of retaining the existing manifest system for SQG waste, and the problems associated with the disposal of hazardous waste generated by educational institutions.

Within 30 months of enactment, EPA must inform SQGs of their responsibilities under the 1984 amendments, for which \$500,000/year is authorized for FY 1985 through 1987.

*The onsite storage period may be extended to 270 days for waste transported more than 200 miles if it does not exceed 6,000 kgs.

Banned Waste

EPA must determine whether to ban the land disposal of a third of wastes listed as hazardous in 45 months, two-thirds of listed wastes in 55 months, all listed and characteristic wastes in 66 months and for wastes listed after enactment, six months after listing.

The land disposal of a hazardous waste must be banned unless EPA determines that the prohibition is not required in order to protect human health and the environment. A petitioner must demonstrate there will be no migration from the disposal unit/ injection zone for as long as the waste remains hazardous. EPA must promulgate regulations specifying levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents such that threats to human health and environment are minimized. "Otherwise banned" wastes so treated are exempt.

Other than for disposal in injection wells, EPA must decide whether to ban the land disposal of dioxins and solvents within 24 months of enactment, and eight months later the "California wastes." The decision whether to ban these wastes from injection wells must be made within 45 months of enactment. Within 24 months EPA must publish a schedule for determining whether to ban the land disposal of listed hazardous wastes. High hazard/high volume wastes must be scheduled first. The schedule is not subject to paperwork reduction or judicial review.

Land disposal prohibitions are effective immediately unless:

- another date is selected because, on a national scale,

alternative capacity is unavailable. Postponement beyond two years is impermissible.

- a variance is granted to an individual facility. Variances can be granted for one year and renewed for an additional year upon a showing of a binding contractual commitment to provide alternative capacity, but disposal in a landfill or surface impoundment must be at a facility in compliance with the minimum technology described infra in #6.

The prohibitions for dioxins, solvents and the California wastes do not apply for 45 months to contaminated soil debris from cleanup and removal actions. If EPA fails to make a determination during the allotted time for the California wastes, dioxins, solvents, the characteristic wastes and the "last third" of the listed wastes, land disposal of such waste is prohibited.

If EPA fails to make a determination during the allotted time for the "first and second thirds" of the listed wastes, disposal in a landfill or surface impoundment is permissible only if the generator certifies no alternative capacity and disposal is at a facility in compliance with minimum technology requirements. However, if EPA fails to make a determination within 66 months of enactment, land disposal is prohibited.

Other Land-Disposal Restrictions

Within six months of enactment, the landfilling of bulk or non-containerized liquids is prohibited. Within 12 months the disposal of nonhazardous liquids is prohibited in Subtitle C facilities unless the only reasonable alternative is disposal in a non-Subtitle C landfill or unlined impoundment that contains or may contain hazardous waste, and such disposal will endanger a potable-water aquifer.

Within 15 months EPA must promulgate regulations to minimize landfilling of containerized hazardous liquids, and prohibit the landfilling of liquids absorbed in materials that biodegrade or release liquids when compressed.

The placement of bulk liquids in salt domes, salt beds, underground mines or caves is prohibited until EPA promulgates placement rules and the facility receives a permit. Containerized hazardous waste cannot be dumped therein until the facility receives a permit. The Waste Isolation Pilot Project in New Mexico is not subject to these restrictions. Oil contaminated with hazardous, except ignitable, wastes cannot be used as a dust suppressant.

Within six months of enactment (or sooner if a State has primacy), hazardous waste cannot be injected into or above any formation which contains, within 1/4 mile of the well, a potable water aquifer unless it is part of certain actions under CERCLA or RCRA.

Retrofitting Surface Impoundments

Interim status impoundments must either comply with the double-liner, leachate collection and groundwater monitoring requirements for new impoundments described below in #6 or stop receiving, storing or treating hazardous waste within four years of enactment for current impoundments or within four years of the date such an impoundment becomes subject to Subtitle C. Exempted impoundments, other than wastewater impoundments that no longer qualify for the exemption, must comply within two years of discovery of the disqualifying condition. Subsequently disqualified wastewater impoundments have three years to retrofit.

Impoundments not located within 1/4 mile of a drinking-water aquifer, have at least one liner that complies with the current Part 264 standards for new impoundments and for which there is no evidence the liner is leaking, and are in compliance with the Part 264 groundwater monitoring requirements, are exempt from supra. Wastewater impoundments conducting "aggressive" biological treatment, and various downstream impoundments subject to a §402 CWA permit, in compliance with the Part 264 groundwater monitoring requirements, and part of a facility in compliance with Best Available Technology (BAT) effluent guidelines, are also exempt.

The same applies where no BAT guideline is applicable, the facility is not implementing BAT based on a BPL permit and the impoundment is part of a facility with a §402 CWA permit achieving a significant degradation of hazardous

constituents in the untreated wastestream, and where impoundments are designed, located and operated to prevent the migration of any hazardous constituent into groundwater or surface water at any future time and for which EPA has modified retrofitting requirements. Also exempt: impoundments for which, prior to the date of enactment, EPA or an authorized state had entered into a consent decree, order or agreement mandating corrective action equivalent to double-liner and leachate collection.

If EPA determines an exempted impoundment is likely to leak hazardous constituents to groundwater, it may impose any requirement necessary to protect health and environment including retrofitting. An exempted impoundment, other than a wastewater impoundment found to be leaking, or otherwise no longer qualifying for the exemption, must be retrofitted. An exempted wastewater impoundment found to be leaking must be retrofitted unless EPA determines with three years of enactment that it is not necessary to protect health and environment.

To obtain an exemption owners or operators must apply within 24 months of enactment, submit a Part B application and leakage-to-groundwater monitoring data, and provide certification by a registered professional engineer that the impoundment meets applicable criteria. EPA must provide for notice and comment and process the application within 12 months of receipt. EPA must submit a report to Congress on the environmental consequences of wastewater impoundment exemption and on the feasibility and cost of deleting it.

Storage of Banned Waste

Surface impoundments that store or treat hazardous wastes banned from land disposal units must remove hazardous residues within one year, comply with requirements for new impoundments described below in #6 unless the impoundment meets the conditions for a retrofitting waiver, and be solely for the purpose of accumulating sufficient quantities for proper subsequent management.

Minimum Technology Standards

A landfill unit or impoundment for which a Part B application has not been received by the date of enactment must have a double liner with leachate collection above and between the liners respectively, and monitor ground water. Within two years of enactment, EPA must promulgate implementing regulations or issue guidance documents. Meanwhile, a synthetic or clay liner system may be installed. Where the owner or operator can demonstrate that an alternative design, considering location characteristics, is as effective in preventing migration of hazardous constituents to ground water, a double liner will not be required except in Alabama. Certain monofills containing foundry wastes are also exempt.

Expansions and replacements of interim status landfills,

impoundments and piles that receive waste six months after enactment are subject to the same requirements as supra. Owners and operators of such landfills and impoundments must notify EPA sixty days before the unit receives waste, and submit a Part B application six months afterwards. EPA may not require those who installed double-liner systems in good-faith compliance with regulations or guidance documents to alter these systems in order to receive a permit. However, if a liner is leaking, EPA may require replacement.

Interim status landfills, impoundments, land treatment facilities and piles that received waste after August 26, 1982 are subject to the requirements for groundwater monitoring, unsaturated zone monitoring and corrective action applicable to new facilities.

Incinerators receiving permits after the date of enactment must achieve a 99.99 percent DRE.

Within 18 months of enactment, EPA must publish guidance criteria identifying areas of vulnerable hydrogeology, and write regulations for the acceptable location of new and existing hazardous waste facilities. Within 30 months, EPA must promulgate standards for leak detection and air emissions.

Groundwater Monitoring

Part 264/5 variance from groundwater monitoring standards for certain double-lined facilities is eliminated. EPA is authorized to exempt from groundwater-monitoring requirements land-disposal units designed to prevent liquids from entering the unit and equipped with multiple-leak detection systems.

Corrective Action

EPA must promulgate regulations that require evidence of financial capacity for clean-ups, and as soon as practicable, amend hazardous waste regulations to require corrective action beyond the facility boundary. The regulations will take effect immediately upon promulgation, and apply to all permitted facilities and interim status landfills, impoundments and piles that received waste after August 26, 1982. Until then EPA must issue corrective action orders on a case-by-case basis as necessary to protect health and environs.

All permits issued after the date of enactment must address releases of hazardous waste or constituents regardless of type of unit, when waste was placed in it or whether the unit is closed. Owners and operators must prove their financial ability to clean up. EPA is authorized to issue administrative orders requiring corrective action for releases of hazardous waste from interim status facilities, and to sue those responsible.

Permits

Permits must be renewed every 10 years and land-disposal permits must be reviewed every five years. Renewals are subject to regulations applicable to new permits and must reflect improvements in control and measurement technology. Interim status terminates unless a Part B application is submitted according to the following schedule:

facility	interim status terminates	unless Part B submitted by
land disposal	Oct. 1985	Oct. 1985
incinerators	Oct. 1989	Oct. 1986
other	Oct. 1992	Oct. 1988

Land disposal owner/operators must also certify compliance with groundwater monitoring and financial responsibility requirements to retain interim status. EPA or the States must process permit applications within four, five and eight years of the date of enactment for land disposal units, incinerators and other facilities, respectively. EPA is authorized to issue one-year permits, renewable each year up to four years, for experimental facilities without first issuing permitting standards under §3004.

Interim status is granted to facilities that become subject to Subtitle C as a result of the 1984 amendments or implementing regulations. A permit is required before construction of a hazardous waste facility can begin, except for PCB incinerators approved under TSCA.

Exposure Assessments

Within nine months of enactment, permit applications for landfills and surface impoundments must be accompanied by an assessment of the potential public exposure to hazardous substances. Facilities whose applications have already been submitted have nine months to submit the assessment. The Agency for Toxic Substance and Disease Registration (ATSDR) is to conduct health assessments of communities where evidence indicates substantial risk.

Waste Minimization

After September 1, 1985, manifests must contain generator certification that volume and or quantity and toxicity of waste has been reduced to the maximum degree economically practicable. Thereafter, generators must annually certify their efforts to reduce waste volume and the reduction actually achieved. By October 1, 1986, EPA must submit a report to Congress on the feasibility and desirability of establishing waste minimization rules.

Listing And Other Measures To Add New Wastes

EPA must determine whether to list the following wastes within the following dates of enactment: six months: chlorinated dioxins and dibenzofurans; 12 months: other halogenated dioxins and dibenzofurans; 15 months: coal slurry pipeline effluent, coke byproducts, chlorinated aliphatics, dioxin, dimethyl hydrazine, TDI, carbamates, bromacil, linuron, organobromines, solvents, refining wastes, chlorinated aromatics, dyes and pigments, inorganic wastes, lithium batteries and paint-production wastes.

In addition, EPA and ATSDR must identify wastes hazardous solely because they contain, for example, recognized carcinogens at levels beyond which human health is endangered. Within 2 years of enactment EPA must identify additional characteristics, including measures of toxicity. Within 28 months the agency must select media that accurately predict leaching potential of wastes that threaten health and environs when mismanaged.

Delisting

EPA must consider factors in addition to those for which the waste was listed when processing delisting petitions, and must provide notice and comment beforehand. Temporary delistings not finalized within 24 months of enactment lapse summarily. To the extent practical, new petitions must be processed within 24 months of the date EPA receives a complete application. Temporary exclusions are prohibited without prior notice and comment.

Burning/Blending

Within 15 months of enactment, individuals who produce, burn, and distribute or market hazardous waste-derived fuel must notify EPA. Within 15 months EPA must promulgate recordkeeping requirements for such activity, and within two years EPA must promulgate technical standards for them and those who transport such fuel. Within 90 days of enactment, invoices for hazardous waste-derived fuel must bear a warning label, except for fuels from petroleum refining operations where oil-containing hazardous wastes are reintroduced to the refining process.

Until regulations are promulgated, certain cement kilns cannot burn hazardous waste-derived fuel unless they comply with incinerator standards. Hazardous-waste derived coke is exempt from labeling and recordkeeping requirements and regulations for producers, burners and distributors, provided the coke is derived from onsite refinery wastes and does not meet any of the listing characteristics. EPA may exempt from these requirements facilities burning "de minimis" quantities of hazardous waste, provided they meet certain requirements.

Used Oil

Within 12 months of enactment, EPA must propose whether to list used automotive oil as hazardous waste and, within 24 months, make a final determination regarding automotive and other used oil. The performance standard for used oil regulations under §3014 is to protect human health and the environment (as well as to promote recycling). Recycled used oil is exempt from the §§ 3002 and 3003 standards for generators and transporters. Instead, EPA must promulgate within 24 months of enactment special standards and subject recyclers to conventional §3004 standards.

Generators who enter into an agreement to deliver used oil to a permitted recycling facility are exempt from the manifest requirements, provided they do not mix hazardous waste with the oil and keep records as the Administrator deems necessary. EPA is authorized to abjure issuance of class permits for certain generators and transporters who treat or recycle used oil, but may tailor permits to individual cases.

Burning Of Municipal Solid Waste

The combustion of municipal solid waste at a resource recovery facility is exempt from the Subtitle C requirements, provided that the owner or operator takes precautions to ensure that hazardous wastes are not burned. As soon as practicable, EPA must submit a report to Congress on the risk of dioxin emissions from resource recovery facilities that burn municipal solid wastes and on means to control them.

Domestic Sewage

Within 15 months of enactment, EPA must report to Congress on hazardous wastes exempt from Subtitle C because mixed with domestic sewage or other wastes that pass through sewers to POTWs. Then, within 18 months, EPA must promulgate rules to assure that these wastes are adequately controlled to protect human health and the environment. Within 36 months of enactment, EPA must submit a report to Congress on wastewater lagoons at POTWs and their effect on groundwater. RCRA inspection and notification requirements apply as much to solid or dissolved materials in domestic sewage as to other hazardous wastes.

Hazardous Waste Exports

Within 24 months of enactment, no one may export hazardous waste unless he has filed a notification, the receiving country has agreed in writing to accept the waste, a copy of the consent is attached to the manifest and shipment conforms to terms of consent. Within 12 months of enactment EPA must promulgate implementing regulations. Bilateral agreements between the U.S. and the receiving country establishing hazardous waste export procedures supercede supra, but exporters must file annual reports to EPA.

Mining Waste, Utility Waste And Cement Kiln Dust

EPA is authorized to modify certain requirements for these wastes to take into account their special characteristics and sites, provided that health and environs are protected. This discretion is restricted to three aspects of Section 3004 requirements for landfills and surface impoundments: double-liners (including retrofitting for surface impoundments), prior releases and land-disposal restrictions.

Uranium Mill Tailings

Regulations under UMTRCA for mill tailings are not effected by the 1984 RCRA amendments.

State Implementation

For final authorization, States must meet standards in effect prior to State application or January 23, 1983, whichever is later. To obtain or maintain authorization, States must make available to the public information they have obtained on TSDFs to the extent such information would be available if EPA were running the program. The deadline to obtain final authorization is extended by one year.

Any requirement imposed under the 1984 amendments applies immediately in authorized States until their programs are revised to incorporate the requirements. EPA administers the requirements until the States receive authorization; States with provisions substantially equivalent to the new requirements may apply for interim authorization to administer them. EPA is authorized to enter into cooperative agreement with States to assist in the administration of the 1984 amendments. EPA is also authorized to jointly issue permits with the States for those requirements not yet incorporated into State programs.

States are authorized to require that copies of manifests for intra-State shipments be sent to them.

RCRA Subtitle D Criteria

Within 36 months of enactment, EPA must submit a report to Congress determining whether the §§1008(a) and 4004 criteria are adequate to protect health and environs from groundwater contamination, and recommending whether additional authority is needed to enforce them. By March 21, 1988, EPA must revise the criteria for facilities that may receive hazardous household or SQG waste. The criteria must protect health and environs. At a minimum, EPA will require groundwater monitoring, establish location criteria and provide for corrective action as appropriate.

Within 36 months of enactment, each State must develop a program to ensure that municipal facilities comply with existing criteria. Within 18 months of promulgation of the revised criteria, States must develop a program to ensure compliance; if States fail to do so EPA may enforce them. \$15M of the 1985 appropriation for State grants and \$20M per year of the 1986-88 appropriation can be used to implement the criteria.

Other RCRA Subtitle D-Related Provisions

State solid waste plans for waste-to-energy facilities must consider present and future needs of recycling and resource recovery interests, including those created by the implementation of §6002. By October 1, 1986, EPA must submit a report to Congress on methods for extending the useful life of sanitary landfills and for putting closed landfills to more efficient use.

Procurement Guidelines

Each procuring agency is required to push the preferential purchase of items containing recovered materials. EPA must promulgate guidelines for paper within 180 days of enactment, and for three additional products (including tires) by October 1, 1985. The Office of Procurement Policy must submit biennial reports to Congress on federal progress in promoting the use of recovered materials.

Inventory Of Injection Wells

Within six months of enactment EPA must submit to Congress an inventory of hazardous-waste injection wells.

Inventory of Federal TSD Facilities

Each federal Agency must submit to EPA biennially an inventory of each treatment, storage or disposal facility (TSD) it owns or operates. Agencies need not resubmit information already submitted under §103 of CERCLA or §§3005 and 3010 of RCRA. EPA must conduct this inventory where Federal agencies decline to do so.

Inspections

EPA must inspect annually each hazardous-waste facility operated by a State or municipality. EPA must, and authorized States may, inspect each federally owned or operated TSD facility annually. At least every two years, EPA (or authorized States) must inspect privately-operated facilities. EPA will promulgate regulations governing the minimum frequency and manner of such inspections. Within six months EPA was required to submit a report to Congress on the merits of using private inspectors to supplement government inspections.

Federal Enforcement

EPA is authorized to assess civil penalties administratively for past as well as present violations of RCRA. EPA was provided new corrective-action order authority regarding releases. In addition, the broad imminent and substantial endangerment authority is clarified. Section 7003 applies to past generators and to situations or sites where past acts or failures to act may have contributed to present endangerment of health and environs. EPA must notify local officials and post a sign at sites posing an imminent and substantial threat to health and environs. EPA must provide for public notice and comment before entering into a settlement or covenant not to sue under §7003.

The maximum criminal penalties are raised and criminal actions are expanded to include violations of interim-status standards, failure to file required reports, and transportation of hazardous waste without a manifest. The category of actions subject to the

"knowing endangerment" provision of §3008(e) is also expanded.

The Attorney General is authorized to deputize EPA employees to act as special marshals in RCRA criminal investigations. EPA is authorized to conduct criminal investigations and refer the results to the Attorney General for prosecution.

Review of Permits in Enforcement Proceedings

Defendants in enforcement proceedings cannot challenge permit terms and conditions of State program provisions that could have been challenged at the time of permit issuance.

Citizens Rights

Citizen Suits

- Citizens are authorized to bring actions under §7003 in cases where past or present management of hazardous waste presents an imminent hazard. This right is circumscribed in several ways (e.g., where EPA or the State is diligently bringing and prosecuting an action under §7003 of RCRA or §106 of CERCLA, or has settled the action by entering into a consent decree).

- Common carriers are immunized from citizen suit

for imminent hazards arising after shipments are delivered to the consignee.

- Citizens are authorized to bring an action against persons engaged in open dump activities.

- **Imminent Hazard:** Section 7003 applies to past generators and to situations or sites where past acts or failures to act may have contributed to a present endangerment to HH&E. The Administrator is prevented from bringing an action against common carriers for imminent hazards arising after delivery of the shipment to the consignee.

Immediate Notice: EPA must notify local officials and post a sign at sites posing an imminent and substantial threat to HH&E.

Public Participation: EPA must provide for public notice and comment before entering into a settlement or covenant not to sue under §7003.

Ombudsman: EPA must establish an Office of Ombudsman to provide information, receive complaints and assist in their resolution. The Office terminates four years after enactment.

Direct Action

Claimants are provided a right of direct action against guarantors, guarantors may invoke as a defense the terms and conditions of the guarantor's insurance policy with the owner/ operator, and the guarantor's liability under RCRA is limited to the amount the guarantor provided as evidence of financial responsibility.

Groundwater Commission

A commission is established until January 1, 1987 to assess groundwater issues and to submit several reports to Congress. \$7M is authorized for 1985-87.

Underground Tanks

EPA was required by March 1, 1985 to issue regulations under Subtitle C of RCRA for underground tanks containing hazardous wastes. Within 48 months of enactment, EPA must modify these regulations to include the standards required under Subtitle I. The latter establishes a program to control underground tanks containing regulated substances (i.e., petroleum and CERCLA hazardous-chemical products).

Only tanks with 10% or more of their volume underground (including the volume of pipes) are covered. Excluded, among other entities, are farm and residential tanks storing motor fuels, noncommercial heating-oil tanks, septic tanks, pipelines regulated under other Acts, surface impoundments, stormwater and wastewater collection systems, and flow-through process tanks.

Notification is as follows:

Month	
6	States identify agency responsible for receiving notification form
12	EPA and the States design notification form
12	owners of currently-used tanks notify designated state agency
18	owners of tanks decommissioned within past ten years notify state agency
13-31	suppliers of regulated substances inform tank owners/operators of their responsibility to notify states/EPA
31+	tank sellers inform tank purchasers of their responsibility to notify states/EPA within 30 days of start-up.

Within 180 days of enactment, and until the effective date of the standards infra, a tank may be installed or brought into use only if it will prevent releases due to corrosion or structural failure throughout its operational life; it is cathodically protected, constructed of or steel-clad with noncorrosive material, or designed in a manner to prevent the release of the stored substance; the material used in constructing or lining the tank is compatible with the substance to be stored; or in lieu of supra the tank is located in soil of resistivity greater than 12,000 ohm/cm.

EPA must issue regulations that protect health and the environment on the following schedule:

Month	
27	petroleum tanks
33	new non-petroleum tanks
45	existing non-petroleum tanks

For existing tanks the regulations must include requirements for leak detection or inventory-control systems, recordkeeping and reporting, corrective actions, financial responsibility for corrective action and third-party liability and closure. For new tanks the regulations must include requirements for design, construction, installation, release-detection and compatibility standards.

Within 30 months States may apply to administer the underground tank program in lieu of EPA, but their requirements must be no less stringent than ours. Grace periods are provided for States that must adopt regulatory or legislative changes to meet this standard. Within 12 months of enactment EPA must conduct a study of petroleum tanks, and within 36 months studies of tanks containing other regulated substances and certain exempted tanks.

There are no criminal penalties. The civil penalties: \$25K for noncompliance with an administrative order

\$10K for knowing violation of notification rules

\$10K for noncompliance with all other requirements

During 1985-88, \$40M is authorized for EPA to develop the program and \$100M for State grants.