

US ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF PESTICIDE PROGRAMS



ACTION PLAN

FOR THE

NATIONAL PESTICIDES MONITORING PLAN

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ACTION PLAN FOR THE NATIONAL PESTICIDES MONITORING PLAN  
FISCAL YEAR 1988

Monitoring Section  
Exposure Assessment Branch  
Hazard Evaluation Division  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
Washington, DC 20460  
May 1988

# I. INTRODUCTION

## I. INTRODUCTION

Each year since the development of the National Pesticides Monitoring Plan (NPMP) in 1985, the Office of Pesticide Programs (OPP) has prepared an Action Plan which consisted of current OPP monitoring projects, milestones for that year and budgetary information for each project. In addition, OPP has held a Pesticide Monitoring Workshop each year to review our progress and plan for the future. At each successive workshop, the base of participation was expanded to broaden the scope of idea exchange. The FY-87 workshop included representatives from other EPA program offices, EPA Regions and the State Federal Interagency Regulatory Group (SFIREG).

Based on our experience with the FY 87 workshop, it is clear that there is a great deal of interest in pesticide monitoring by Federal agencies, States, pesticide registrants, pesticide users, and other parties involved in the consequences of pesticide use. Therefore, in FY 88, OPP is paying increased attention to communication and cooperation among these groups.

To this end, the Action Plan for FY 1988 has been redesigned to function as not only an agenda of activities, but also an information package to be shared with others interested in pesticide monitoring. This newly designed Action Plan contains a brief background of OPP's monitoring program, OPP's current pesticide monitoring priorities, a description of OPP's new database (the Pesticide Monitoring Inventory), current pesticide monitoring projects, current regulatory actions in which monitoring could play an important role, and a list of key individuals interested in pesticide monitoring.

Sharing pesticide monitoring information and developing common goals when possible, will allow sound, cost-effective pesticide regulation. This document is intended as a positive step in that direction.

## II. BACKGROUND

# GOAL

IMPROVE THE SOUNDNESS OF FIFRA RISK/BENEFIT  
REGULATORY DECISIONS

## OBJECTIVES

1. SUPPORT REGULATORY  
DECISION-MAKING FOR  
EXISTING CHEMICALS.
2. SUPPORT REGULATORY DECISION-MAKING  
FOR NEW CHEMICALS AND NEW USES
3. MEASURE COMPLIANCE WITH REGULATORY DECISIONS
4. DETERMINE TRENDS IN THE ENVIRONMENT

NATIONAL PESTICIDES MONITORING PLAN

## II. BACKGROUND

### A. The National Pesticides Monitoring Plan

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires the U.S. Environmental Protection Agency to monitor the environment for pesticide residues [section 20, parts (b) and (c)]. In addition, the Agency has developed a National Monitoring Strategy which coordinates monitoring activities performed by all EPA program offices. The Office of Pesticide Programs' response to both of these needs took the form of the National Pesticide Monitoring Plan (NPMP) which was completed in July of 1985.

The primary goal of the NPMP is to provide information on exposure and effects to enhance the accuracy of pesticide risk assessments and thereby improve the soundness of FIFRA risk/benefit regulatory decisions. There are four major objectives cited in the NPMP:

1. support regulatory decision making for existing chemicals;
2. support regulatory decision making for new chemicals/uses;
3. measure compliance with regulatory decisions; and
4. determine trends in the environment for overall program evaluation and exposure problem alerts.

The first two objectives are derived directly from the primary goal of the NPMP, while the last two are measures of the effectiveness of our efforts and predictors of future needs.

There are nine major data gathering areas which are crucial to pesticide regulation.

1. Use Pattern and Usage - Descriptive information on how, when, where and why pesticide products are used and quantitative data on the kinds and amounts of pesticides used.
2. Enforcement/Compliance - Usage information needed to assess compliance status, trends and emerging problems.
3. Direct Exposure: Applicators and other Agricultural Workers - Levels of pesticides encountered by agricultural and other workers who apply pesticides or work in areas where pesticides have been applied.
4. Environmental Dispersal and Contamination - The type and extent of pesticide residues on-site, any movement off the target site and the exposures that result.



5. Ground and Surface Water - Critical environmental dispersal information on the extent of water contamination by pesticides and estimated human exposures from drinking and other uses of contaminated water.

6. Dietary Residue - Pesticide residue levels in food and feed commodities.

7. Direct Exposure: Indoor and Domestic Outdoor - The pesticide amounts to which individuals are exposed as a result of contemporary pest control practices in residences and from other home or garden uses.

8. Body Burden and Effects - Average pesticide residue levels in humans and various other organisms and data on pesticide-induced illnesses and other harmful incidents such as impacts on endangered wildlife species.

9. Pesticide Disposal - Particular information on pesticide stability and degradation as manufacturing or end use products in disposal sites.

OPP's major thrusts for monitoring have been integration of monitoring into the existing regulatory and registration processes, the use of monitoring to assess the impact of those decisions on the environment, and communication of OPP's needs and requirements to the general monitoring community and registrants.

While EPA has a leadership role in procuring pesticide exposure information, it is clear, both from the language of FIFRA and the risk assessment process which supports pesticide regulation, that generating monitoring information on pesticides should be a cooperative effort. This is a responsibility which is shared by EPA, other Federal Agencies, States, pesticide registrants, pesticide users, and other parties interested in the consequences of pesticide use. Specifically, EPA shares the data generation responsibility with four other sources:

1. Pesticide registrants - EPA will develop monitoring data requirements for registrants which will support both new and existing pesticide product uses and registrations.

2. Other Federal Agencies - The full implementation of the National Pesticide Monitoring Plan requires the support and cooperation of other Federal agencies. OPP is acquiring information on existing monitoring activities from many Federal agencies to determine where pesticide analyses or information collection can be

added without significant modification to the ongoing projects. Opportunities for partnership monitoring activities in which sampling mechanisms must be modified or cooperatively established are also being explored.

3. The States - Many States collect various types of monitoring data that are valuable. OPP will explore ways of accessing this data and will also pursue opportunities for cooperative monitoring. EPA will summarize and periodically review State-generated information to assist in the early detection of pesticide contamination problems. Listings of current pesticide monitoring activities will be developed by OPP and shared with the States.

EPA's Regional Offices have an important liaison role in the Agency's interactions with the States. They may also directly assist in implementing State monitoring programs. Cooperative projects and information sharing with States require Regional Offices to ensure their effective involvement in monitoring program initiatives.

4. Private institutions - Pesticide monitoring data developed by private entities (e.g., pesticide user groups, universities) will also be useful to EPA, particularly if developed cooperatively.

To ensure that OPP's monitoring resources are spent efficiently, monitoring data generated by others must be routinely identified, obtained and utilized. To this end, the majority of OPP's monitoring activities have been directed toward determining the types of monitoring information that are currently available, will be required in the future and the role that this information will play in decision-making.

## B. The Pesticide Monitoring Workshops

The Office of Pesticide Programs (OPP) has held four Pesticide Monitoring Workshops since 1984. The first was held in November of that year to finalize the development of the National Pesticides Monitoring Plan (NPMP). The three subsequent workshops were held June 1986, April 1987 and June 1987 to ensure that the goal and objectives of the NPMP were being addressed. The workshops have evolved from an OPP internal work-group meeting to a formal forum which included other EPA Program offices and external groups.

All of the workshops have focused on the resolution of four major issues.

### 1. Integration of monitoring into the regulatory and registration process.

The purpose of the June 1986 workshop was to review ongoing and planned monitoring activities that support the National Pesticide Monitoring Plan (NPMP) and to ensure that implementation of the Plan is a part of OPP's budget for FY 87. This exercise helped to define monitoring and explain to divisions/branches within OPP how they are participating in monitoring activities. This was also the first workshop planned by the newly formed Monitoring Section. This Section was created shortly after the NPMP was finalized to coordinate its implementation. In addition this Section is a center for information-sharing between OPP and other EPA offices, EPA Regions, other Federal agencies, State agencies and private institutions.

As a direct result of the discussions at this workshop a concrete step was taken to incorporate monitoring, via the new Monitoring Section, into the regulatory process. Previously, monitoring was not considered as a separate entity during the registration/re-registration process of a pesticide. To remedy this situation, the Registration Division redesigned the checklist for the registration meetings so that monitoring is now covered in the risk/exposure assessment discussion and the Monitoring Section is included in product team meetings. The goal of attending these meetings is to determine monitoring data availability and needs. This is especially important for special reviews because monitoring data can provide actual pesticide exposure and effects data for humans and the environment. Along with information on the toxicity of a pesticide, understanding the likely degree and duration of exposure to the chemical is vital to assessing the risks posed by its use.

During the June 1987 workshop, the focus was almost entirely on the regulatory aspects of monitoring. The keynote presentation, given by the Registration Division/OPP, listed areas in which monitoring data could have a great impact on decision-making. The theme of this presentation was that OPP must look more to future data requirements during the registration process. If a chemical appears to be potentially harmful (i.e., ecological impact, ground or surface water contamination, persistence, etc.), appropriate monitoring studies must be required of registrants as a condition of Experimental Use Permits, Registrations and Re-registrations. Conditional regulatory actions should become the norm instead of the exception.

The second half of this presentation placed emphasis on OPP's responsibility to develop clear guidelines stating the parameters that will trigger monitoring and the types of monitoring that will be required. Additionally, OPP must determine how this data will be interpreted and incorporated into regulatory decision-making.

## 2. Cooperation and data-sharing among those responsible for generating and utilizing monitoring data.

A recurrent theme of the workshops was the need for cooperation and data-sharing among all those responsible for monitoring activities. In this way, the limited resources of all those involved can be used in the most efficient way possible. State and local governments are placing increasing importance on monitoring their environment. OPP must play an increasingly active role in assisting these groups in the performance of monitoring activities that will have the greatest regulatory impact. In addition, pesticide registrants will be increasingly required to generate appropriate monitoring data before, during and after the registration process. The types of monitoring data that are most useful in regulatory decision-making must be determined and communicated to monitoring groups. OPP must also establish a routine mechanism for identifying, gathering, analyzing and utilizing data generated by others.

The workshops have offered OPP an opportunity to reach these goals by serving as a forum to share ideas, successes and problems. Thus far, the workshops have included other EPA program offices, Regional offices, SFIREG, and private institutions. In the future, the workshops will include Federal and State agencies in an effort to coordinate our monitoring programs and assist each other in important regulatory decisions.

### 3. Use of monitoring data as environmental results indicators.

Environmental monitoring data can be used to determine the results of regulatory actions. The workshops have served as 'brain-storming' sessions to develop ways in which existing data sets can be used as a starting point. Possibilities for this include pre- and post-registration monitoring, OPP-sponsored periodic sampling and monitoring performed by other agencies.

### 4. Data quality and analytical methods.

During each workshop there has been considerable discussion concerning the lack of adequate analytical methods for detecting pesticides in food commodities and various environmental media. FIFRA requires pesticide registrants to provide appropriate analytical methodologies for their chemicals as part of the registration process. FIFRA does not provide for the development of multi-residue analytical methods. The availability of functional multi-residue methods is recognized across the pesticide monitoring community as essential in making broad-spectrum ambient pesticide monitoring economically feasible.

The burden of responsibility for development of these methods falls across all segments of the pesticide monitoring community, for all benefit from their availability. The Federal government must take the lead in ensuring that these methods are developed and available for use.

The role of the workshops for this issue has been and will be to bring to the forefront and re-enforce the need to ensure that adequate pesticide analytical methods are developed either by the pesticide registrant as part of registration process or by other appropriate means.

Initially, the workshops helped to define monitoring and make it visible. Many, who thought that they had nothing to do with monitoring, discovered that they were regularly participating in monitoring activities. This change in attitude helped OPP's internal coordination efforts.

The workshops have allowed us to consolidate and clarify major monitoring issues. They offer a forum for organized discussion in which OPP management and project leaders can focus on solving problems and setting priorities.

In the coming years, the scope of the workshops will be expanded to include other Federal Agencies, State and local agencies and private institutions to serve as a focal point for combining OPP's monitoring efforts with the monitoring efforts of these groups.

# III. AGENDA

**III. OFFICE OF PESTICIDE PROGRAMS PESTICIDE MONITORING AGENDA**

**A. OPP Pesticide Monitoring Priorities**

**PREVENT GROUND WATER CONTAMINATION**

**RE-REGISTRATION OF PESTICIDES**

**ENSURE PROPER USE AND APPLICATION OF PESTICIDES**

**COORDINATE THE SHARING OF MONITORING INFORMATION**



## A. OPP Pesticide Monitoring Priorities

### PREVENT GROUND WATER CONTAMINATION

OPP is focusing its registration/re-registration process on assessing the potential for pesticides to reach ground waters. OPP is in the final stages of publishing guidelines that will advise registrants on the development of data needed to predict the potential for pesticides to contaminate ground water. OPP is also supporting the development of new scientific models for predicting the movement of pesticides in the soil into ground water and has developed an Agricultural Chemicals in Ground Water Strategy. The National Pesticide Survey of Drinking Water Wells is underway. Results from the pilot study will be available for analysis shortly. Finally, EPA will continue to publish health advisories for pesticides in drinking water to assist States in dealing with their ground-water problems.

### RE-REGISTRATION OF PESTICIDES

Over 50,000 pesticide products have been registered since the program began in 1947. Most pesticide products were registered before the long-term health and environmental effects of these chemicals were fully understood and must be re-registered considering these effects and others, such as potential for contaminating ground water. This task is complicated by the need to ensure reliable registration data. OPP has established the Registration Standards Process to streamline the re-registration of existing pesticides. Instead of re-registering each of the thousands of pesticide products on a case-by-case basis, OPP is developing comprehensive standards for each of the 600 basic active ingredients used to formulate all pesticide products. The active ingredients scheduled for FY 88 are listed on page 14.

Monitoring data is playing an increasingly important roll in regulatory programs. The responsibility for accurate generation and effective use of this data is shared by all of those who manufacture, market, regulate and use pesticides. Cooperative efforts between and among these groups will improve the quality of monitoring data, eliminate duplicative efforts, and allow the development of cost-effective programs.

## **ENSURE PROPER USE AND APPLICATION OF PESTICIDES**

The purpose of the registration process is to evaluate the risks from particular uses of a pesticide and limit those risks, where necessary. Since the improper use of pesticides can negate this effort, use/usage monitoring has become a very important component of OPP's pesticide monitoring program. EPA continues to support State enforcement and certification and training programs with Federal funds. In addition, OPP has agreements with the U.S. Department of Interior (USDI) and several pesticide user organizations who are interested in sharing information, including the American Mosquito Control Association, the Cotton Insect Research and Control Conference, the National Pest Control Association, and the Council for Pest Control Information. The types of information exchanged includes use patterns, application practices, efficacy, resistance, and assessments alternative control methods. This information can be used to demonstrate whether current regulations are effective and appropriate and whether changes in labeling or regulatory status are warranted.

## **COORDINATE THE SHARING OF MONITORING INFORMATION**

For some time, there has been little coordinated effort to monitor long-term trends of pesticide contamination in the environment. The U.S. Fish and Wildlife Service monitors for some pesticides in fish and birds while EPA monitors for pesticides in human populations. USDA monitors for pesticide residues in meat and poultry. The U.S. Food and Drug Administration performs residue analysis for all other food products. These and other State, local, and private efforts are not well coordinated. The lack of coordinated pesticide monitoring efforts makes it difficult to determine what the nature and extent of pesticide contamination of the environment is. The National Pesticides Monitoring Plan, completed in 1984, now is being implemented and has emphasized coordination of all those producing and utilizing monitoring data and the incorporation of this data into the regulatory process.

## B. The Pesticide Monitoring Inventory

The Pesticide Monitoring Inventory (PMI) is a compilation of monitoring projects being performed by Federal, State and local governments and private institutions. The database contains a short synopsis of each project, including chemicals, substrates and location. It will also list the name, address, and phone number of a person to contact to gain additional information on a specific project. The database does not contain any results or 'hard' data. The PMI is a free service offered by the EPA Office of Pesticide Programs intended to provide a network by which all interested parties may communicate and share monitoring information with each other.

The PMI is located on a personal computer in Crystal City, Virginia and is accessible by dataphone similar to a PC to PC bulletin board. It is completely menu driven and can be learned in a few minutes by anyone. There are no requirements for specialized software, hardware or computer language skills. Users are able to search for projects by chemical, substrate, EPA Region, State and various other criteria.

The database was opened to all users on April 20, 1988. To access the database set your communications package to the following:

TELEPHONE NUMBER: (703) 557-1919  
                                  FTS 8-557-1919  
BAUD RATE:                  1200  
DATABITS:                  7  
PARITY:                      EVEN  
STOP:                        1

If you wish to have more information about the PMI, or if you would like your monitoring projects included in the database, please contact one of the User Support Staff:

Constance A. Hoheisel (703-557-7499)  
Leslie Davies-Hilliard (703-557-7494)  
Thomas E. Dixon (703-557-5455)  
US Environmental Protection Agency  
Office of Pesticide Programs (TS-769C)  
401 M Street SW  
Washington DC 20460

### C. Registration Standards

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 3(g) requires that all currently registered pesticide products be re-registered. To facilitate the re-registration of pesticide products, EPA has instituted a program for the review of pesticide active ingredients, the data supporting the registration of products containing that active ingredient and their uses. This process results in the issuance of a Registration Standard for the active ingredient.

The Registration Standard contains a review and assessment of all previously submitted data and existing tolerances. It explains the EPA's position on the potential of products containing the active ingredient to remain registered and identifies labeling changes or use restrictions needed for the product to remain in compliance with FIFRA. Finally, the Standard lists additional data requirements and submission time frames that must be submitted to support the presently registered uses of products containing that active ingredient.

The following is a list of chemicals for which Registration Standards will be prepared in FY 88:

FIRST QTR	SECOND QTR	THIRD QTR	FOURTH QTR
Phosalone	Malathion	Mevinphos	2,4-D
Propazine	Tetrachlorvinphos	Cryolite	Hexazinone
Sumithrin	Dimethoate	Chlorothalonil	Ethephon
Fenthion	Rotenone	Carbaryl	2,4-DB
Isocyanurates	Terbufos		Maneb
Propoxur	Maleic Hydrazide		Metiram
Bioallethrin	Methomyl		Oxytetra-
Phosphamidon	Metalaxyl		cycline
Dacthal	Ethoprop		Picloram
Asulam			Strepto-
Chlorpropham			mycin
Propanil			Diazinon
			Trichlorfon
			Sufotepp
			Methida-
			thion
			Phorate
			Resmethrin
			Warfarin
			Methoxy-
			chlor

#### D. Special Review

The Special Review process is governed by regulations in 40 CFR Part 154. Through this process the Environmental Protection Agency determines whether the use of a pesticide poses unreasonable adverse effects to humans or the environment. The term "unreasonable" connotes a consideration of the risks and benefits of a pesticide.

A Special Review is required when the use of a pesticide appears to place humans or the environment at significant risk of unreasonable adverse effects. To determine this, EPA reviews validated tests which have been conducted in a manner consistent with accepted scientific procedures. The hazardous effects which may trigger a Special Review, include but are not limited to:

- Oncogenicity
- Heritable genetic mutations
- Teratogenicity
- Fetotoxicity
- Other adverse reproductive effects (e.g. sterility)
- Chronic or delayed toxicity
- Nontarget wildlife or aquatic species effects
- Endangered species effects.

The Special Review process provides an analysis of the estimated hazards, exposures and risks versus the benefits of continued registration of a pesticide, as well as regulatory options and proposed regulatory decisions. These are discussed in publications released by the EPA (Position Documents 1, 2 and 3). The regulated pesticide industry, user groups and the public are given the opportunity to comment on the analysis and proposed decision before a final decision is reached and announced in Position Document 4.

Using Special Review as a tool, the Environmental Protection Agency is able to determine the regulatory fate of a pesticide and thereby accomplish its mission to protect humans and the environment from unreasonable adverse effects due to pesticide exposure.

FY 1988 CHEMICALS SCHEDULED FOR SPECIAL REVIEW

<u>CHEMICAL</u>	<u>MONITORING ISSUE</u>	<u>EXPOSURE DATA COMPLETED</u>	<u>EXPOSURE DATA OUTSTANDING</u>
DDVP/naled/ trichlorfon	Dietary Applicator Resident	SR not yet initiated	Dietary Applicator Resident
Alachlor	Ground Water Surface Water Dietary Applicator	Surface Water Dietary	Ground Water
2,4-D	Applicator	Applicator	none
Pentachloro- phenol (nonwood uses)	Applicator Aquatic	none	Applicator Aquatic
Cyanazine	Applicator Ground Water	Ground Water	none
Linuron	Dietary Applicator	Applicator	none
Dinocap	Dietary Applicator	Applicator	none
Inorganic arsenicals (minor uses)	Applicator	Applicator	none
Chlordimeform	Applicator	Applicator	none
Aldicarb	Ground Water Dietary	Ground Water Dietary	none

CHEMICAL	MONITORING ISSUE	EXPOSURE DATA COMPLETED	EXPOSURE DATA OUTSTANDING
Carbofuran	Avian	Avian	none
Propoxur	Applicator Resident	SR not yet initiated	*
Lindane	Applicator Forestry use Dietary	SR not yet initiated	Applicator  Dietary
Captan	Dietary Applicator	Dietary	none
Parathion	Avian Applicator (re-entry)	SR not yet initiated.	*
Inorganic arsenicals (major uses)	Applicator Dietary	none	Applicator Dietary
TBT	Aquatic	partial	Aquatic
Chlorothalonil	Applicator Dietary	SR not yet initiated.	*
Phosdrin	Applicator Worker	SR not yet initiated	*
EBDC's	Applicator Dietary	none	Applicator Dietary

\* Data required is not currently defined.

#### E. Current Pesticide Monitoring Activities

OPP has begun identifying representatives from Federal and State Agencies and EPA Regional Offices to participate in a cooperative effort that will enhance our pesticide monitoring programs. Each representative will be sent the Action Plan and preparations will be made to meet on a one to one basis with OPP representatives. An Interagency Workshop, to be held in August, will be the culmination of the year's work and will include representatives from EPA program offices, EPA Regions, other Federal and State agencies.

The projects listed in the following tables include ongoing activities or those scheduled to begin in FY 88 funded by OPP, activities that are being followed by OPP but funded elsewhere, and activities that were planned by OPP but remain unfunded due to budgetary constraints.

For each pesticide monitoring project there is a short description, milestones for this year and project management. The projects are categorized to reflect the goal and objectives of the National Pesticides Monitoring Plan.

In providing this list, OPP hopes to generate discussions which will highlight areas in which coordination of efforts with other agencies or groups will be of mutual benefit.



# GOAL

**IMPROVE THE SOUNDNESS OF FIFRA RISK/BENEFIT  
REGULATORY DECISIONS**

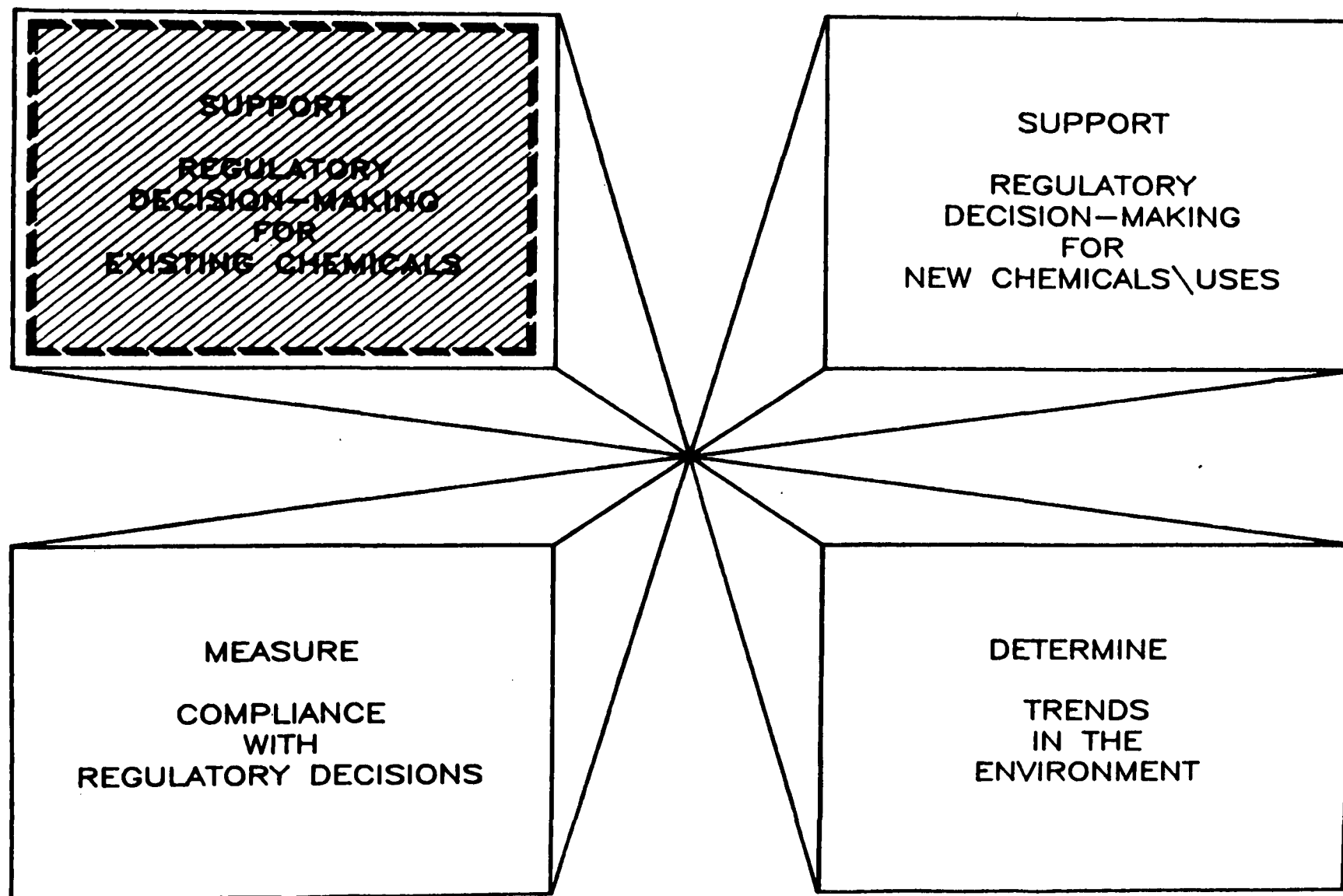
## **OBJECTIVES**

- 1. SUPPORT REGULATORY  
DECISION-MAKING FOR  
EXISTING CHEMICALS.**
- 2. SUPPORT REGULATORY DECISION-MAKING  
FOR NEW CHEMICALS AND NEW USES**
- 3. MEASURE COMPLIANCE WITH REGULATORY DECISIONS**
- 4. DETERMINE TRENDS IN THE ENVIRONMENT**

**NATIONAL PESTICIDES MONITORING PLAN**

# NATIONAL PESTICIDES MONITORING PLAN

## OBJECTIVES



# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective A: Determine the Extent of Current Pesticide Use/Usage				
<p>1) Production and Import DATA System Enhancement</p> <p>The goal of this work activity is to improve the accuracy and overall quality of the information received from pesticide producing establishments or reported through authority contained in Section 7 of FIFRA.</p>	UNFUNDED FOR FY88			Ed Brandt EAB, BUD OPP, EPA
<p>a. Aggregate report on production and use of pesticides.</p> <p>The goal of this activity is to provide information for aggregate pesticide use with respect to type of pesticide, major sector of use and major geographical area.</p>	UNFUNDED FOR FY88			
<p>b. Pesticide distributor survey.</p> <p>This is a survey of EPA registered establishments to determine the source and location of technical production, distribution channels and the geographic extent of sales for establishments producing end use products.</p>	UNFUNDED FOR FY88			

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective A: Determine the Extent of Current Pesticide Use/Usage				
2) EPA Surveys of Urban Non-farm Sites				
a. TBT/Boatyard Survey  This project provided quantitative use information on TBT antifouling paint and alternative antifouling paints for a variety of vessel categories and hull types.		Final report completed	09/88	J. Ferrante BUD
b. Household Survey The purpose of this survey is to identify individual pesticide products used in and around the home, and to determine basic use patterns.				K. Knox BUD
3) USDA Surveys - Agricultural Sit	UNFUNDED FOR FY88			H. Delvo ERS, NRED  USDA

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective A: Determine the Extent of Current Pesticide Use/Usage				
<p>4) The MOU between the U.S. Forest Service and EPA, September 7, 1982</p> <ol style="list-style-type: none"> <li>1. establishes the authority for F.S. Regions to enter agreement with EPA Regions for coordination of programs and projects.</li> <li>2. provides for exchange of personnel on a temporary basis</li> <li>3. provides for establishment of F.S./EPA Action Teams to deal with common issues.</li> </ol> <p>The agreement between F.S. headquarters and BUD has or is providing needed information on usage, use exposure, etc. No funding is necessary. Continuation is anticipated and role could be substantial to monitoring activities.</p>				

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective B: Determine the Extent of Exposure to Workers from Pesticide Application				
<p>1) Pesticide Farm Safety Center</p> <p>The goals of the Pesticide Farm Safety Center are to develop an understanding of pesticide problems among agricultural workers and the farm community and to provide a communication link to this group.</p>	PMSD			P. Breslin PMSD
<p>2) National Exposure Database Project</p> <p>The goal of this project is to establish a large generic database that will permit a realistic estimate of exposure based on large sample size. This is a cooperative effort between NACA, USDA, CDFA, Canada and EPA</p>	HED-17	<p>Complete software development (Canadian contract)</p> <p>Data entry</p>	<p>10/88</p> <p>ongoing</p>	A. Nielsen EAB/HED
<p>3) Youth Study - EPA/DOL</p> <p>Prepare a summary of the EPA/DOL-Youth in agriculture research including results of the harvester exposure studies. This information will be integrated with toxicological studies from HERL/ORD. The study will be made available to NTIS through PMSD.</p>	HED-57	<p>Summarize the harvester exposure studies by contractual support.</p> <p>Summarize the ORD animal toxicity studies.</p> <p>Final report.</p>	<p>12/87</p> <p>12/87</p> <p>12/87</p>	A. Nielsen EAB/HED

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
<b>Subobjective C: Monitor for Pesticides in Ground Water and Surface Water</b>				
<b>1) Ground-water Protection</b>				
<b>a. National Pesticide Survey of Drinking Water Wells</b>	HED-02			J. Kotas ODW
This project is a stratified, statistically designed survey that will monitor community and domestic wells in the country. Seventy pesticides will be analyzed for in the well samples.		Negotiate analytical contract.	9/87	P. Holden OPP
		Negotiate implementation contract	11/87	J. Boland OPP
		Select Communication Systems	5/88	
		ICR to OMB for approval	3/88	
		Workplan/Schedule for full survey	1/88	
		Begin field work	4/88	
		Implement Survey (carries over to FY 89 & 90) 336 wells to be sampled in CY 88	3/88-9/88	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Monitor for Pesticides in Ground Water and Surface Water				
1) Ground-water Protection				
b. Ground Water Vulnerability Project Plans	HED-08			M. Williams EAB
This project encompasses several individual efforts which have in common the goal of characterizing the vulnerability of ground water to contamination by normal use of pesticides. This area includes model development, support for regulatory and strategy activities (including NPHAPS), publication of papers in the field, and general technical assistance for other EPA offices and other government and nonprofit organizations.		Write-up of Aldicarb "integrated approach assessment"		
		Model link-up of PRMZ to saturated zone model		
		Pilot Monitoring Projects-Metribuzin alachlor, simazine, and cyanazine.	ongoing	
		State Projects- --Florida --Cape Cod	3/88	
		Strategy Support, Mapping, General Technical Assistance	ongoing	
		Pesticide well monitoring; computerized data- base	ongoing	



# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Monitor for Pesticides in Ground Water and Surface Water				
1) Ground-water Protection Projects				
c. USGS/EPA IAG				C. Eiden EAB
An interagency agreement was established between the EPA's Office of Pesticide Programs in FY'85. This agreement allows the OPP to call on the USGS Water Resources Division (WRD) for hydrologic expertise. The WRD is paid for services rendered through this disbursement agreement.	UNFUNDED FOR FY88			
d. Iowa Ground Water Study	HED-34	Final report for the 1986-87 survey.	6/88	M. Barrett EAB/HED
This project focuses on activities in four specific Iowa counties: Floyd, Mitchell, Benton, and Green. One effort will be an extension of 12 of the 1986 samplings of 185 farm wells in Floyd and Mitchell counties. Other efforts include new sampling from approximately 20 sites in Benton, and Green Counties. The project, in general will assess the relationship between pesticides in ground water and hydrogeologic vulnerability, time, usage, and other agricultural practices.		1988 project proposal completed	5/88	
		Select analyt. methods for pesticides and metabolites	6/88	
		Site inventory	9/88	
		Agricultural and agrichemical use practices survey	9/88	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Monitor for Pesticides in Ground Water and Surface Water				
1) Ground-water Protection				
f. Dougherty Plains Monitoring Study				L. Mulkey ERL-Athens ORD/EPA
This project is a joint effort of the USEPA and the USGS. The objective of this 5-year study is to develop a data base to test mathematical models for use in evaluating the potential for increased applications of pesticides to contaminate ground water resources. The field study was initiated in an intensive agricultural area in the southeastern United States.		Monitoring of pesticides (aldicarb & metolochlor)	Complete	
		Model varification	FY88	
g. Ground-Water Monitoring Guidance Document	HED-23	Guidence document initiation	3/87	P. Holden EAB/HED
The ground water monitoring guidelines describe three types of studies which can be performed by registrants & others to assess the leaching & occurrence of pesticides in ground water. The three study types are: small-scale prospective, small-scale retrospective, and large-scale retrospective.		Internal review of draft document primary secondary	1/88 3/88	
		External review	6/88	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Monitor for Pesticides in Ground Water and Surface Water				
2) Surface Water Monitoring				
a. Monitoring TBT from antifouling paints.		Completed		R. Hitch EAB/HED
The purpose of this study is to characterize the levels of tributyltin (TBT) in the Chesapeake Bay resulting from its use in antifouling paints. The monitoring plan for this study was designed by OPP and the EPA Chesapeake Bay Liaison Office. The collection and analysis of samples was performed by the Gulf Breeze laboratory.				J. Moore Gulf Breeze

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective D: Determine the Extent of Pesticide Residues in Food and Feed				
1) Pesticide Analytical Manual (PAM Vol II)	HED-11			Quick/ Griffith RCB/HED
2) Residue Data for Risk Assessment		Develop policy for estimating dietary exposure using anticipated (actual) residue data.	7/88	E. Zager
Development of Regulations in Part 158 and Guidelines for obtaining anticipated residue data for improved risk assessment.				
3) Use of a more complete food residue database in pesticide decisions		Identify and retrieve data available from states and other government agencies.	4/88	
The objective of this project is to determine the usefulness of collecting more complete residue data from external sources to support pesticide decisions.		Identify and retrieve data from food processing companies (the National Food Processors Assn. has agreed to be subcontractor)	7/88	
		QA all collected data.	8/88	
		Final report from Cadmas.	9/88	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective E: Determine Exposure from Domestic Indoor and Outdoor Applications of Pesticides.				
<p>1) Termiticide Monitoring Requirements</p> <p>EPA required air monitoring studies of homes treated with registered termiticides under a Special Data Call-In in 1984. The resulting evidence of long-term exposure of occupants to chlordane, heptachlor, and aldrin led to voluntary cancellation of these chemicals. Under an agreement with the manufacturer of chlordane and heptachlor a monitoring study of homes treated by modified application methods may be performed and the registrations can be revived if results show not detectable exposure.</p>		<p>Begin application EPA notified 2 wks in advance.</p> <p>120 days after application regis- trant may apply for condition registra- tion if there are no detections.</p> <p>If there are no detections in 2 yrs after application the registrant may apply for full registration.</p>		J. Roelofs RD/SRB
<p>2) Non-occupational Pesticide Exposure Study (NOPES).</p> <p>The primary objective of the planned study is to obtain an estimation of the cumulative frequency distributions of non-occupational exposures to home and garden pesticides through the air, dermal, drinking water and dietary routes. Secondary objectives are to obtain an estimate of the relative importance of each route to total exposure, identify probable sources of the pesticides, and compare indoor with outdoor air levels.</p>		<p>Nine home pilot study final report</p> <p>Field studies</p> <p>Data analysis</p>	<p>Complete</p> <p>Complete</p> <p>FY88</p>	<p>L. Wallace W. Ott ORD W. Buttler OPP</p>

# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

## **Objective I: Support Regulatory Decision Making for Existing Chemicals**

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
<b>Subobjective F: Determine the Ecological Effects of Pesticides on the Environment</b>				
<p><b>1) Pesticide Ecological Effects Monitoring</b></p> <p>This project will further develop and implement the Ecological Effects Monitoring Plan which provides a process to obtain information on exposure of pesticides to and effects of pesticides on non-target organisms.</p>	<p>UNFUNDED FOR FY88</p>			<p>D. Reider EEB/HED</p>

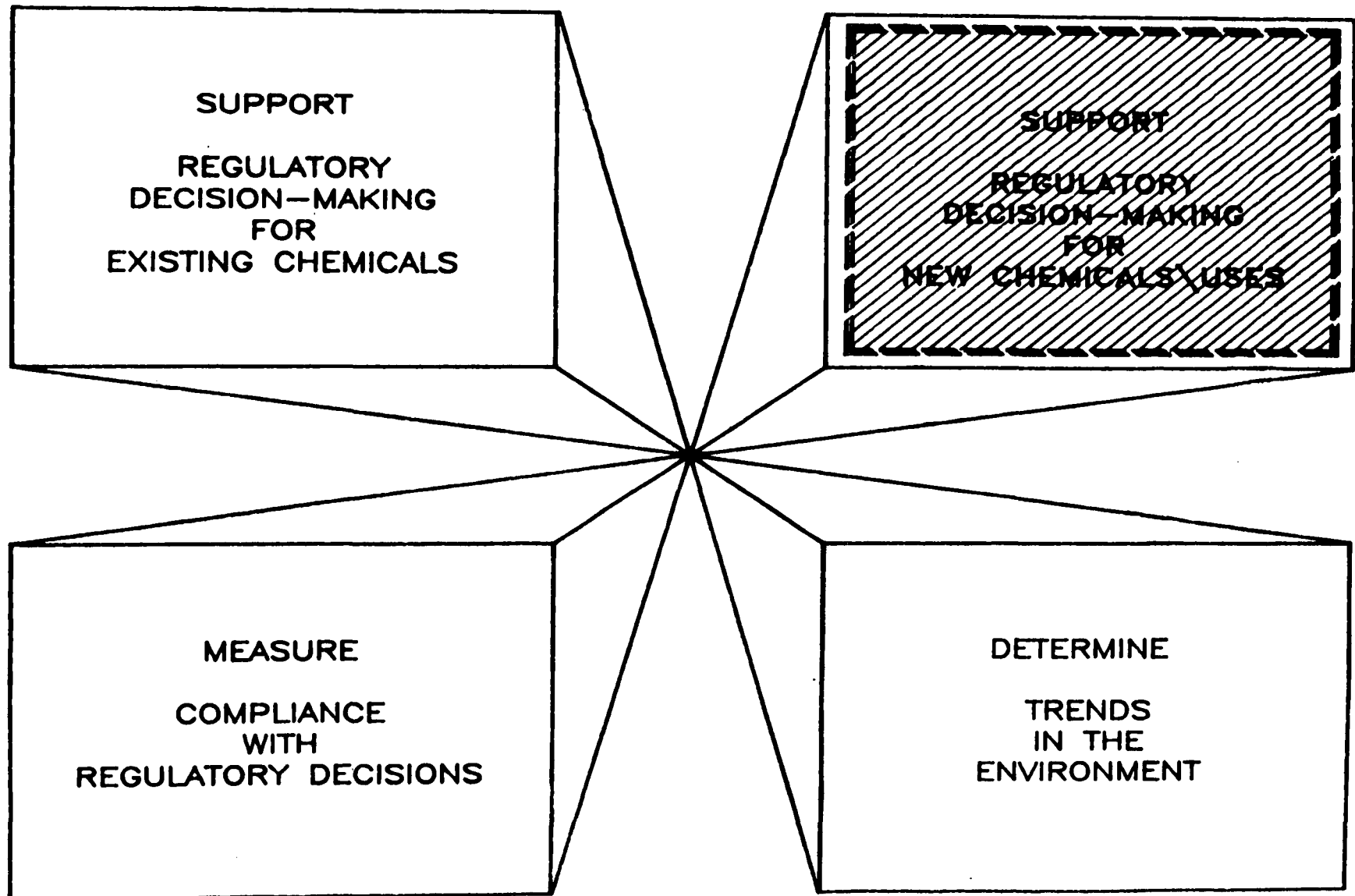
# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective I: Support Regulatory Decision Making for Existing Chemicals

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective F: Determine the Ecological Effects of Pesticides on the Environment				
2) Environmental Analytical Methods	UNFUNDED FOR FY88			T. Dougherty EAB/HED
3) Monitoring TBT in fish and shellfish.  OPP is requiring fish and shellfish monitoring for TBT because of its known ability to bioaccumulate. Most of the monitoring will be done by registrants. OPP's involvement will be the development of detailed design criteria for evaluating the registrants' protocols and investigation of proposed residues methods by the Beltsville Laboratory.				B. Hitch EAB/HED
4) Endangered Species Data Base	UNFUNDED FOR FY88			

# NATIONAL PESTICIDES MONITORING PLAN

## OBJECTIVES





# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective II: Assist in Determining the Impact of Regulatory Decisions to Permit New Chemicals and/or New Uses.

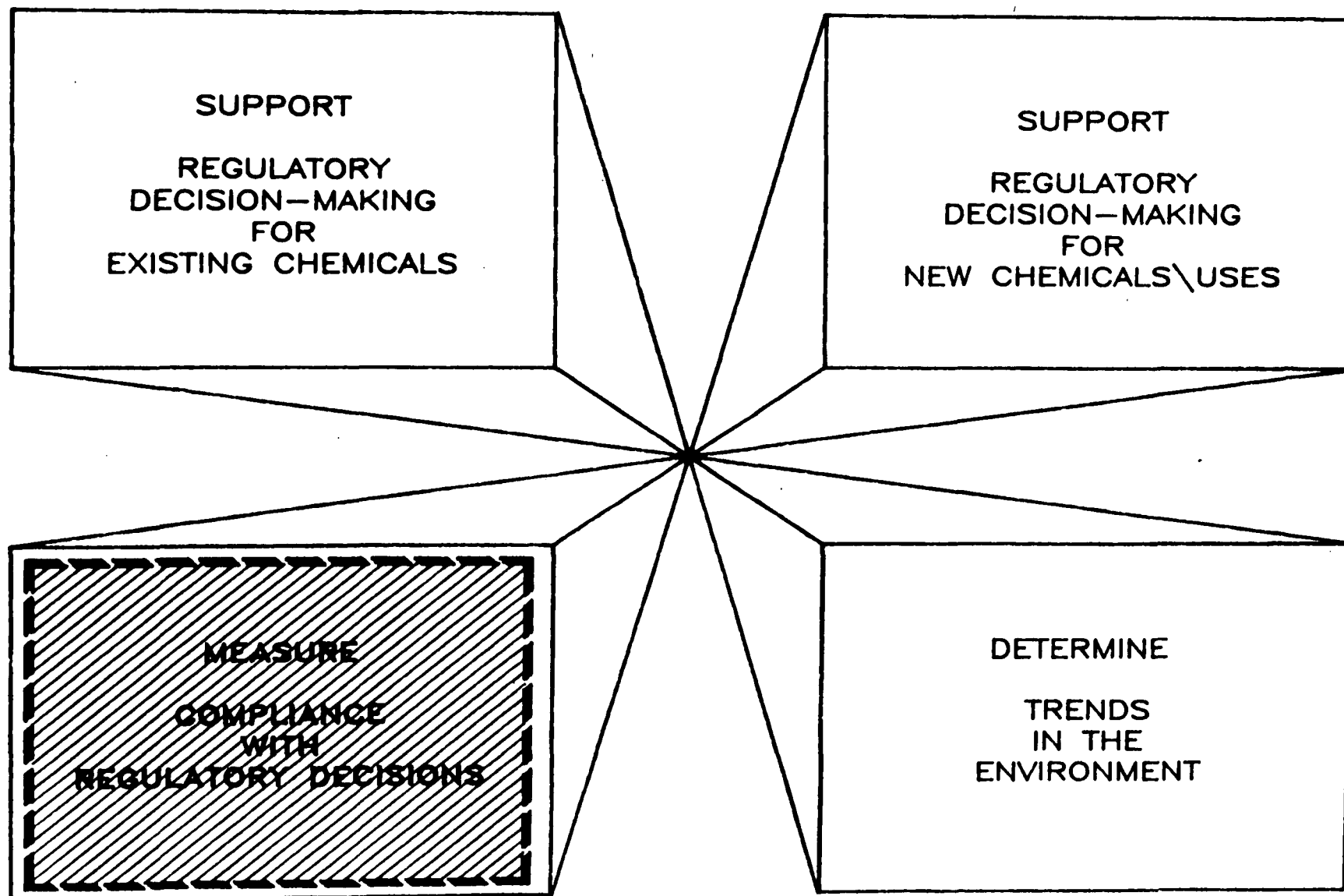
ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective A: Require Monitoring of Specific Chemicals on an As Needed Basis				
Harmony - OPP is in the process of granting a conditional registration for the sulfonylurea herbicide, Harmony. Concerns are twofold: 1) potential to leach to ground water and 2) potential to accumulate in the environment. The registrant will be required to provide multi-year monitoring data and to develop analytical methods to detect this chemical at the low levels recommended for application.				P. Ott HED

# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

**Objective II: Assist in Determining the Impact of Regulatory Decisions to Permit New Chemicals and/or New Uses**

ACTIVITY DESCRIPTION Subobjective B: Biotechnology	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
1) Biotech\Microbial Pesticides Regulatory Initiatives	HED-05			F. Betz SIS
2) Microbial Pest Control Guidelines Revision	HED-26			B. Schneider HED

# NATIONAL PESTICIDES MONITORING PLAN OBJECTIVES



# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective III: Measure Compliance with Regulatory Decisions

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective A: Determine extent to which pesticide users are in compliance with FIFRA product labeling requirements				
<p>1) State FIFRA Programs</p> <p>Approximately 49 states and several territories are participating in the FIFRA cooperative Enforcement Program. The states establish priorities for specific problem areas using the Cooperative Agreement Guidance. This enables states to focus their training compliance, monitoring and enforcement resources on specific pesticide practices which pose a risk to health and the environment. Data gathered</p>		<p>Data is used by: OPP for regulatory actions; States to further restrict use; USDA Cooperative Extension Service to revise Pesticide Applicator Training and Certification materials.</p>	Ongoing	States
<p>2) FDA &amp; USDA Tolerance Programs</p> <p>Tolerances for pesticide residues on food and feed are established by EPA, but enforced by FDA (most commodities) and USDA (meat, poultry and some egg products). FDA and USDA sampling programs help ensure compliance with tolerances by both domestic and foreign pesticide users.</p>		<p>Information on the annual results of these compliance sampling programs is shared with EPA.</p>	Ongoing	FDA & USDA

# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

## **Objective III: Measure Compliance with Regulatory Decisions**

<b>ACTIVITY DESCRIPTION</b> <b>Subobjective B: Determine the extent to which registrants, producers and distributors are in compliance with regulatory decisions and policies.</b>	<b>DIVISION PROJECT NUMBER</b>	<b>MILESTONES</b>	<b>MILESTONE DATES</b>	<b>MANAGEMENT</b>
<p><b>1) State Programs</b></p> <p>States monitor industry compliance with FIFRA through inspections of marketplace and pesticide producing establishments. These inspections include both label evaluation and chemical analysis.</p>		<p>Inspection results can be used to trigger regulatory actions by OPP.</p>	<p>Ongoing</p>	<p>States</p>

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective III: Measure Compliance with Regulatory Decisions

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Determine Quality and Validity of data submitted in support of registrations.				
<p>1) Laboratory Inspection and Data Audit Program</p> <p>The Office of Pesticides and Toxic Substances established the Office of Compliance Monitoring (OCM) as the management focus for laboratory inspection/data audit under both FIFRA &amp; TSCA. OCM plans annual inspection/audit activities in coordination with OPP, OTS, FDA and the National Toxicology Program.</p>		<p>OCM conducts lab inspection to verify compliance with GLP regulations under FIFRA and TSCA.</p> <p>OPP and OCM conduct audits of specific studies to determine validity of data submitted to support pesticide registrations.</p> <p>FDA inspects labs to determine compliance with their GLP regulations. FDA reports are available to EPA. Upon request FDA reviews pesticide studies during an inspection.</p> <p>NTP provides scientific expertise on an as-needed basis.</p>	Ongoing	OCM, OPP, FDA, NTP

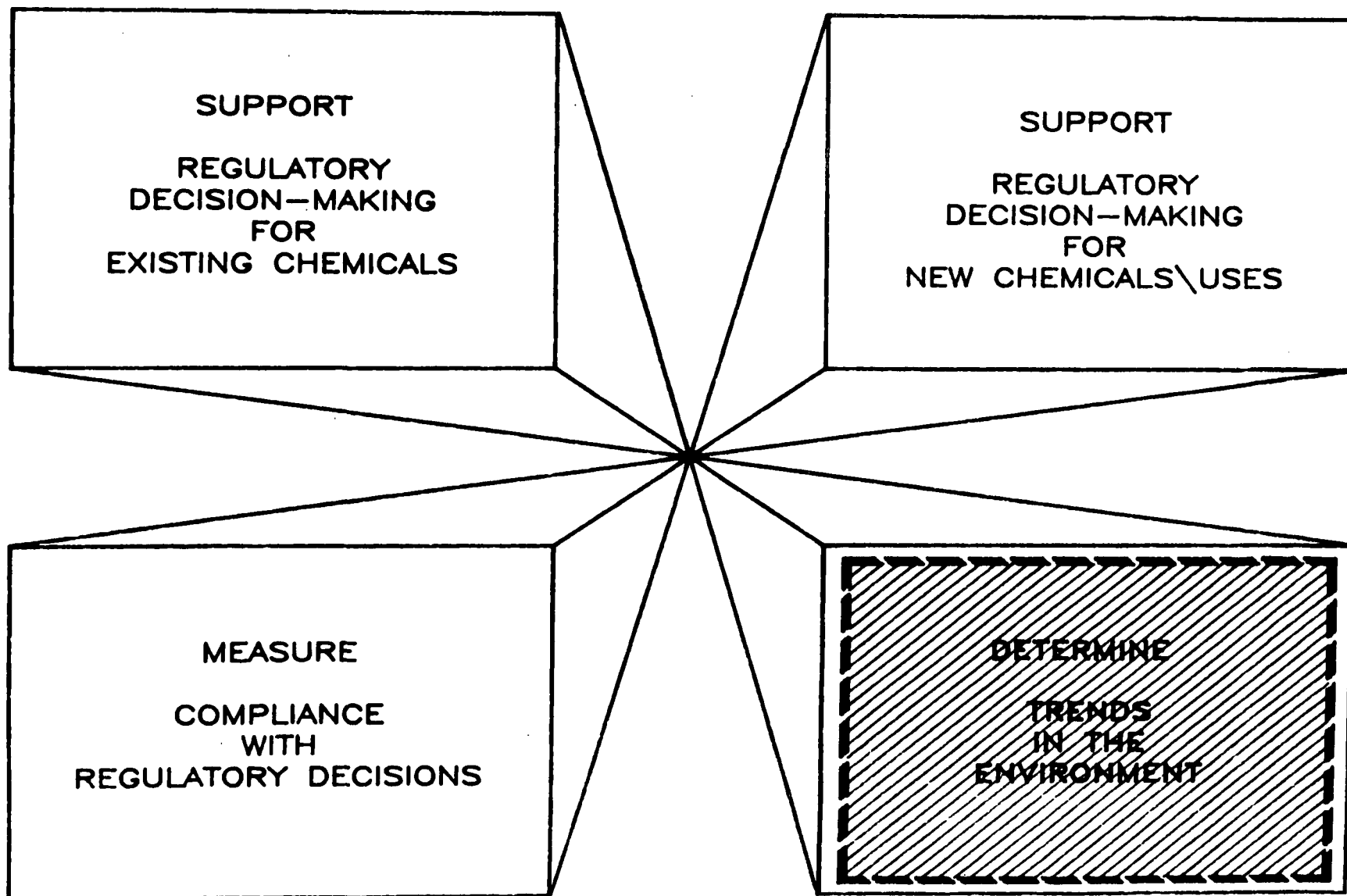
# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

## **Objective III: Measure Compliance with Regulatory Decisions**

<b>ACTIVITY DESCRIPTION</b> <b>Subobjective D: Determine Effectiveness of Pesticide Applicator Certification &amp; Training Program in Protecting the Public from Restricted Use Pesticides</b>	<b>DIVISION PROJECT NUMBER</b>	<b>MILESTONES</b>	<b>MILESTONE DATES</b>	<b>MANAGEMENT</b>
<p><b>1) State FIFRA Programs</b></p> <p>Approximately 49 states and several territories are participating in the FIFRA Cooperative Agreement Program for Pesticide Applicator Certification and Training. The annual cooperative agreement guidance requires the states to establish priorities for the certification and training program.</p>		<p>Determine the extent of misuse of restricted pesticides for possible modifications of C &amp; T programs, labeling or regulatory status.</p>	<p>Ongoing</p>	<p>EPA with States</p>

# NATIONAL PESTICIDES MONITORING PLAN

## OBJECTIVES





# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems

ACTIVITY DESCRIPTION Subobjective A: Establish information indicating trends in use of chemicals and non-chemical approaches.	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
<p>OPP's Integrated Pest Management (IPM) Activities.</p> <p>OPP defines IPM as an ecological, systems approach to pest management, which takes advantage of all appropriate pest control options. Through utilization of such means as biological controls, development of pest-resistant species, altering of cultural practices, as well the use of chemical pesticides, IPM attempts to prevent unacceptable levels of pest damage by the most cost effective means and with the least possible hazard to man and the environment.</p> <p>1) Urban Activities</p> <p>a) Cockroach Program</p> <p>Based on a three-year, joint EPA/DOD study at Aberdeen Proving Ground, OPP's IPM Unit has developed an integrated program for cockroach management. Components of the program include education of building occupants, sanitation and site monitoring, pest population monitoring setting of management objectives and action thresholds, and thorough crack and crevice treatment where thresholds were exceeded.</p>		A package describing the research, a detailed description of components and a cost analysis - sent to EPA Regions, state lead agencies, state extension personnel.	FY 88	B. Currie BUD/IPM

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems

ACTIVITY DESCRIPTION Subobjective A: Establish information indicating trends in use of chemicals and non-chemical approaches.	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
<p>OPP's Integrated Pest Management (IPM) Activities.</p> <p>1) Urban Activities</p> <p>b) Termite Program OPP is cooperating with the US Forest Service and Merck and Co., in a joint demonstration of an innovative method for termite control at the US Capitol. The method consists of subsoil bait blocks and injection of dust at each point of termite entry and mud tubule. Preliminary results are promising.</p> <p>c) Turf Program The goal of this project is to develop and demonstrate an integrated approach to the management of insect, weed, and disease pests on turf, emphasizing a full range of cultural and biological methodologies while reducing reliance on chemical pesticides. The project will involve USDA/CSRS, Extension, several state agencies, universities, US Park Service, and the Golf Course Superintendents Association.</p>				<p>B. Currie BUD/IPM</p> <p>A. Leslie BUD/IPM</p>

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

## Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems

ACTIVITY DESCRIPTION Subobjective A: Establish information indicating trends in use of chemicals and non-chemical approaches.	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
<p>OPP's Integrated Pest Management (IPM) Activities.</p> <p>2) Agricultural Activities</p> <p>a) Grasshopper Program An Interagency Steering Committee and Technical Working Group have been formed to address the issue of the rangeland grasshopper. Represented on the two committees are EPA, USDA, US Park Service, and the Bureau of Land Management.</p> <p>b) Nematodes in Citrus Program The goal of this project is to develop a strategy for the control of nematodes on citrus, which will include aerial identification of unhealthy trees, monitoring of nematode populations, development of an economic threshold, and spot treatment of individual trees. The Agency is also encouraging the development of resistant root stocks and cost-effective biological control agents.</p> <p>c) Chesapeake Bay Foundation EPA has entered into a cooperative effort with the Chesapeake Bay Foundation and the University of Maryland to obtain comparative field data on traditional agricultural methods and IPM methods. Yield, cost, run-off and surface water data will be collected.</p>				<p>B. Currie BUD/IPM</p> <p>R. Wright</p> <p>R. Wright BUD/IPM</p>

# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

**Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems**

<b>ACTIVITY DESCRIPTION</b> <b>Subobjective A: Establish information indicating trends in use of chemicals and non-chemical approaches.</b>	<b>DIVISION PROJECT NUMBER</b>	<b>MILESTONES</b>	<b>MILESTONE DATES</b>	<b>MANAGEMENT</b>
<p><b>OPP's Integrated Pest Management (IPM) Activities.</b></p> <p><b>2) Agricultural Activities</b></p> <p><b>c) National Pest Resistance Monitoring Program</b>  In response to the 1985 Farm Bill, EPA and USDA are developing a nationwide pest resistance monitoring network. EPA is recommending an expansion of the APHIS National Agricultural Pest Information System.</p>				<p><b>A. Leslie</b>  <b>BUD/IPM</b></p> <p><b>R. Wright</b></p> <p><b>R. Wright</b>  <b>BUD/IPM</b></p>

# **ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988**

## **Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems**

<b>ACTIVITY DESCRIPTION</b> <b>Subobjective B: Advance General Understanding of Agricultural and Other Worker Exposure to Pesticides</b>	<b>DIVISION PROJECT NUMBER</b>	<b>MILESTONES</b>	<b>MILESTONE DATES</b>	<b>MANAGEMENT</b>
<p><b>1) National Exposure Database Project</b></p> <p>The goal of this project is to establish a large generic database that will permit a realistic estimate of exposure based on large sample size. This is a cooperative effort between NACA, USDA, CDFA, Canada and EPA</p>	<p><b>HED-17</b></p>	<p>Complete software development (Canadian contract)</p> <p>Data entry</p>	<p>10/88</p> <p>ongoing</p>	<p><b>A. Nielsen</b> <b>EAB/HED</b></p>

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.

ACTIVITY DESCRIPTION Subobjective C: Identify Trends in General or Ambient Environmental Contamination	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
1) Pesticide Monitoring Inventory (PMI)  To establish, maintain, and update OPP's computerized database for monitoring projects generated by the general monitoring community.	HED-16	Open the data base to initial users	2/88	C.Hoheisel EAB/HED
		Create a chemical index for the PMI	11/87	
		Develop a communications strategy.	12/87	
		Revise PMI based on initial user trial period.	2/88	
		Open PMI for use by general public	4/88	
		Project collection, user support.	ongoing	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Identify Trends in General or Ambient Environmental Contamination				
2) National Human Adipose Survey (NHATS)				J. Breen OTS, EPA
The NHATS collects and chemically analyzes adipose tissue specimens from the general U.S. population for selected toxic substances. A new analytical protocol for TSCA-related compounds has replaced the pesticide protocol previously used.	UNFUNDED FOR FY 88	Complete a comparison study of old/new analytical protocol using FY84 specimens	6-88	
3) National Blood Network				M. Halper OTS, EPA
The NBN will collect and chemically analyze blood specimens obtained from blood donors through the cooperation of national blood collection agencies. Initial focus is on volatile organic compounds, with method development planned for semivolatile compounds and elements.	UNFUNDED FOR FY 88	Conduct pilot study on volatile compounds.	3-88	
		Initial full scale study.	FY89	
4) Hispanic Health and Nutrition Examination Survey (HHANES)				T. Dixon EAB/HED
	UNFUNDED FOR FY88	Laboratory work completed.	FY88	
		Data evaluation.		

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

**Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.**

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective C: Identify Trends in General or Ambient Environmental Contamination				
<p>5) The Third National Health and Nutrition Examination Survey (NHANES III)</p> <p>This study will be conducted over a six year period using sixty thousand participants.</p>				G. Provenzano ORD
<p>6) Monitoring DDT in Soil from the Trans Pecos.</p> <p>In 1984 and 1985 hundreds of soil samples were collected under the guidance of EPA Region VI to help determine the source of high DDE levels in local wildlife. In one local area, investigators found residues which appeared inconsistent with the recognized degradation kinetics of DDT and the recorded use of the pesticide. The Exposure Assessment Branch designed a soil metabolism study to determine if unusually slow DDT degradation might be the cause of prolonged contamination of the Southwestern U.S.</p>		Completion of sample analysis by Beltsville Lab.	12/87	R. Hitch EAB/HED



# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.

ACTIVITY DESCRIPTION	DIVISION	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective D: Document the Occurrence of Pesticide-Induced Illness and Other Impacts.	PROJECT NUMBER			
1) National Pesticide Telecommunication Network (NPTN)	HED-06	Annual report on NPTN activities.	10-87	F. Davido EAB/HED
To provide emergency response and other assistance services to the medical profession, State and Federal Officials (including OPP, EPA) and the general public through a 24 hour toll free telephone service. There are an average of 25,000 calls/yr.		Compilation of monthly summaries characterizing NTPN users.	Monthly	
		Report on chemicals most frequently called in to NTPN.	Quarterly	
		Supports HHS/IAG in direct referral of suspected migrant poisonings needing laboratory confirmation to Dr. Sheldon Wagner.	As requested	
2) Medical Consultation	HED-07	Provide basic & clinical toxicology information on pesticides via telephone communication from all inquiries.	ongoing	F. Davido EAB/HED
This activity provides for a rapid response to pesticide incidents in form of highly skilled technical assistance to physicians treating persons suspected of being adversely affected due to pesticide exposure.		Provide written pesticide tox. information.	ongoing	
		Provide quantitative laboratory measurements of pesticides.	ongoing	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective D: Document the Occurrence of Pesticide-Induced Illness and Other Impacts.				
3) Pesticide Poisoning Treatment Manual	HED-25			J. Blondell EAB/HED
Review and publication of the fourth edition of "Recognition and Management of Pesticide Poisonings."		Completion of Chapters 1-15	2/88	
		Peer review of Chapters 1-15	6/88	
		Final version of book ready for printer	8/88	
		Book sent to printer	9/88	

# ACTION PLAN FOR THE NATIONAL PESTICIDE MONITORING PLAN - FY 1988

Objective IV: Determine Trends of Pesticides in the Environment to Evaluate Program Effectiveness (Environmental Results) and Identify Emerging Problems.

ACTIVITY DESCRIPTION	DIVISION PROJECT NUMBER	MILESTONES	MILESTONE DATES	MANAGEMENT
Subobjective D: Document the Occurrence of Pesticide-Induced Illness and Other Impacts.				
4) Annual Statistical Survey of Pesticide Exposure Incidents.  Survey is to provide national regional statistical estimates of pesticide induced illness/poisonings with respect to various factors (e.g., site or route of exposure). Results will be used to monitor exposure trends and compare population subgroups with respect to these factors.	UNFUNDED FOR FY88	Colorado National Hospital Survey (1977-1982)  California Pesticide Poisoning Summaries  New Jersey Agricul- tural Poisoning Survey  Annual Stat. Survey CPSC  Annual Stat. Survey Ag.		J. Blondell EAB/HED

For the year Jan.—Dec. 31, 1987, or other tax year beginning

1987, ending

19

OMB No. 1545-0074

## Label

Use IRS label.  
Otherwise,  
please print or  
type.Your firm: **QN 513-44-3213****S28 40**Present **RETO A ENGLER****1329 F ST NE****WASHINGTON DC**

City, to:

**20002****043R**  
**\*\*PPRS**

Your social security number

Spouse's social security number

For Privacy Act and Paperwork Reduction Act Notice, see Instructions.

## Presidential Election Campaign

Do you want \$1 to go to this fund?

☒

Yes

No

Note: Checking "Yes" will not change your tax or reduce your refund.

If joint return, does your spouse want \$1 to go to this fund?

Yes

No

## Filing Status

Check only  
one box.

1

☒ Single

2

☐ Married filing joint return (even if only one had income)

3

☐ Married filing separate return. Enter spouse's social security no. above and full name here.

4

☐ Head of household (with qualifying person). (See page 7 of Instructions.) If the qualifying person is your child but not your dependent, enter child's name here.

5

☐ Qualifying widow(er) with dependent child (year spouse died ▶ 19 ). (See page 7 of Instructions.)

## Exemptions

(See  
Instructions  
on page 7.)

Caution: If you can be claimed as a dependent on another person's tax return (such as your parents' return), do not check box 6a. But be sure to check the box on line 32b on page 2.

6a

☐ Yourself

6b

☐ SpouseNo. of boxes  
checked on 6a  
and 6b

1

c

Dependents

(1) Name (first, initial, and last name)

(2) Check  
if under  
age 5(3) If age 5 or over, dependent's  
social security number

(4) Relationship

(5) No. of months  
lived in your home  
in 1987No. of children  
on 6c who lived  
with youNo. of children  
on 6c who didn't  
live with you due  
to divorce or  
separationNo. of parents  
listed on 6cNo. of other  
dependents  
listed on 6cIf more than 7  
dependents, see  
Instructions on  
page 7.

d If your child didn't live with you but is claimed as your dependent under a pre-1985 agreement, check here.

☐Add numbers  
entered in  
boxes above

1

e Total number of exemptions claimed (also complete line 35)

## Income

Please attach  
Copy B of your  
Forms W-2, W-2G,  
and W-2P here.If you do not have  
a W-2, see  
page 6 of  
Instructions.Please  
attach check  
or money  
order here.

7 Wages, salaries, tips, etc. (attach Form(s) W-2)

7

65358

8 Taxable interest income (also attach Schedule B if over \$400)

8

65

9 Tax-exempt interest income (see page 10). DON'T include on line 8

9

1600

10 Dividend income (also attach Schedule B if over \$400)

10

3777

11 Taxable refunds of state and local income taxes, if any, from worksheet on page 11 of Instructions

11

4277

12 Alimony received

12

13 Business income or (loss) (attach Schedule C)

13

14 Capital gain or (loss) (attach Schedule D)

14

2452

15 Other gains or (losses) (attach Form 4797)

15

16a Pensions, IRA distributions, annuities, and rollovers. Total received

16a

16a

b Taxable amount (see page 11)

16b

(6417)

17 Rents, royalties, partnerships, estates, trusts, etc. (attach Schedule E)

17

(21070)

18 Farm income or (loss) (attach Schedule F)

18

19 Unemployment compensation (insurance) (see page 11)

19

20a Social security benefits (see page 12)

20a

20a

b Taxable amount, if any, from the worksheet on page 12

20b

21 Other income (list type and amount—see page 12)

21

22 Add the amounts shown in the far right column for lines 7, 8, and 10–21. This is your total income

22

48442

Adjustments  
to Income(See  
Instructions  
on page 12.)

23 Reimbursed employee business expenses from Form 2106

23

24a Your IRA deduction, from applicable worksheet on page 13 or 14

24a

b Spouse's IRA deduction, from applicable worksheet on page 13 or 14

24b

25 Self-employed health insurance deduction, from worksheet on page 14

25

26 Keogh retirement plan and self-employed SEP deduction

26

27 Penalty on early withdrawal of savings

27

28 Alimony paid (recipient's last name

28

and social security no.

29 Add lines 23 through 28. These are your total adjustments

29

Adjusted  
Gross Income

30 Subtract line 29 from line 22. This is your adjusted gross income. If this line is less than \$15,432 and a child lived with you, see "Earned Income Credit" (line 56) on page 18 of the Instructions. If you want IRS to figure your tax, see page 15 of the Instructions

30

48442

**SCHEDULES A&B**  
**(Form 1040)**

Department of the Treasury  
Internal Revenue Service (4)

**Schedule A—Itemized Deductions**

(Schedule B is on back)

▶ Attach to Form 1040. ▶ See instructions for Schedules A and B (Form 1040).

OMB No. 1545-0074

**1987**  
Attachment  
Sequence No. 07

Name(s) as shown on Form 1040

**RETO A. ENGLER**

Your social security number

**513 44 3213**

**Medical and  
Dental Expenses**

(Do not include  
expenses  
reimbursed or  
paid by others.)

(See  
Instructions  
on page 21.)

**1a** Prescription medicines and drugs, insulin, doctors, dentists, nurses, hospitals, insurance premiums you paid for medical and dental care, etc.

**b** Transportation and lodging

**c** Other (list—include hearing aids, dentures, eyeglasses, etc.)

▶

**1a**

**1b**

**1c**

**2** Add lines 1a through 1c, and enter the total here

**3** Multiply the amount on Form 1040, line 31, by 7.5% (.075)

**4** Subtract line 3 from line 2. If zero or less, enter -0-. **Total medical and dental** ▶ **4**

**Taxes You  
Paid**

(See  
Instructions  
on page 22.)

**Note:** Sales taxes are no longer deductible.

**5** State and local income taxes

**6** Real estate taxes

**7** Other taxes (list—include personal property taxes) ▶

**5**

**6**

**7**

**8** Add the amounts on lines 5 through 7. Enter the total here. **Total taxes** ▶ **8**

**Interest You  
Paid**

(See  
Instructions  
on page 22.)

**Note:** If you borrowed any new amounts against your home after 8/16/86 and at any time in 1987 the total of all your mortgage debts was more than what you paid for your home plus improvements, attach Form 8598 and check here. ▶ ☐

**9a** Deductible home mortgage interest you paid to financial institutions (report deductible points on line 10)

**b** Deductible home mortgage interest you paid to individuals (show that person's name and address) ▶

**10** Deductible points

**11** Deductible investment interest

**12a** Personal interest you paid (see page 22) **12a**

**b** Multiply the amount on line 12a by 65% (.65). Enter the result

**13** Add the amounts on lines 9a through 11, and 12b. Enter the total here. **Total interest** ▶ **13**

**Contributions  
You Made**

(See  
Instructions  
on page 23.)

**14a** Cash contributions. (If you gave \$3,000 or more to any one organization, report those contributions on line 14b.)

**b** Cash contributions totaling \$3,000 or more to any one organization. (Show to whom you gave and how much you gave.) ▶

**15** Other than cash. (You must attach Form 8283 if over \$500.)

**16** Carryover from prior year

**17** Add the amounts on lines 14a through 16. Enter the total here. **Total contributions** ▶ **17**

**Casualty and  
Theft Losses**

**18** Casualty or theft loss(es) (attach Form 4684). (See page 23 of the Instructions.) ▶ **18**

**Moving  
Expenses**

**19** Moving expenses (attach Form 3903 or 3903F). (See page 24 of the Instructions.) ▶ **19**

**Miscellaneous  
Deductions  
Subject to 2%  
AGI Limit**

(See  
Instructions  
on page 24.)

**20** Unreimbursed employee business expenses (attach Form 2106)

**21** Other expenses (list type and amount) ▶

**22** Add the amounts on lines 20 and 21. Enter the total.

**23** Multiply the amount on Form 1040, line 31, by 2% (.02). Enter the result here

**24** Subtract line 23 from line 22. Enter the result (but not less than zero) ▶ **24**

**Other  
Miscellaneous  
Deductions**

**25** Miscellaneous deductions not subject to 2% AGI limit (see page 24). (List type and amount.) ▶ **25**

**Total Itemized  
Deductions**

**26** Add the amounts on lines 4, 8, 13, 17, 18, 19, 24, and 25. Enter the total here and on Form 1040, line 33a. ▶ **26**

## IV. MONITORING CONTACTS

# SETTINGS

PHONE NUMBER:

(703) 557-1919

FTS 8-557-1919

BAUD RATE: 1200

DATABITS: 7

STOP: 1

PARITY: EVEN

DUPLEX: FULL

# PESTICIDE

# MONITORING

# INVENTORY



US ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDE PROGRAMS

## USER SUPPORT GROUP

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User Support Hours:  
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US Environmental Protection Agency  
Office of Pesticide Programs  
(TS-769C)  
401 M Street S.W.  
Washington, D.C. 20460

## PMI

The Pesticide Monitoring Inventory is a compilation of monitoring projects being performed by Federal, State and local governments and private institutions. The database contains a short synopsis of each project, including chemicals, substrates and location. It also lists the name, address, and phone number of a person to contact to gain additional information on a specific project. The PMI is a **FREE** service offered by EPA, Office of Pesticide Programs intended to provide a network by which all interested parties may communicate and share monitoring information with each other.

The PMI is located on a personal computer and is accessible by data-phone similar to a PC-to-PC bulletin board. It is completely menu driven. Users may search for projects by chemical, substrate, EPA Region, State and various other criteria.

## FEATURES

### *USER FRIENDLY*

The PMI is completely menu driven and very easy to use. An instruction manual can be downloaded to your computer and each menu has an on-line help option.

### *AVAILABILITY 24 HOURS/DAY 7 DAYS/WEEK*

The PMI may be down between 1:00 PM and 3:00 PM EST on any weekday when updating or maintenance is required.

### *MAILBOX*

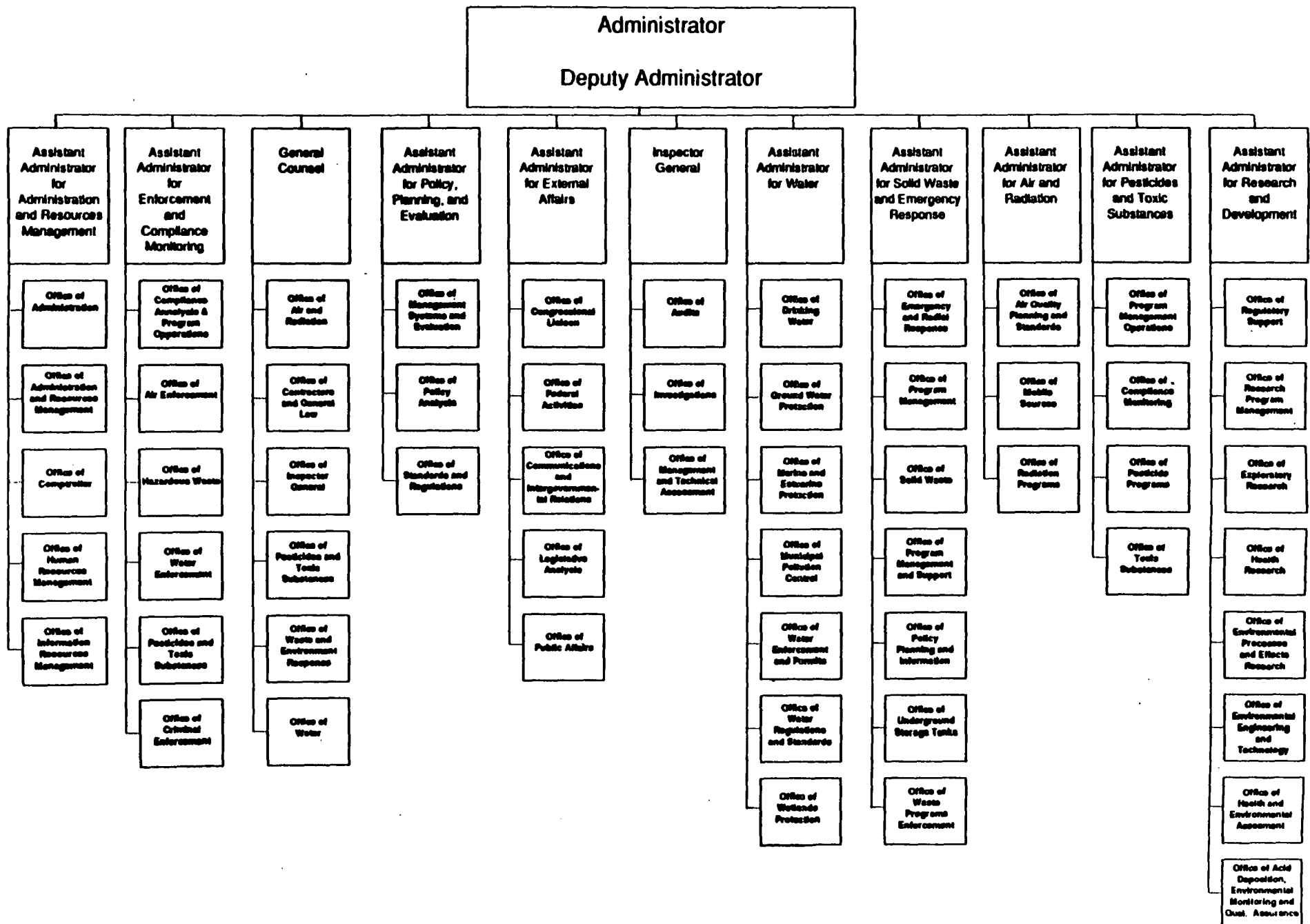
The Mailbox feature allows a user to send messages to any other user or to send a public message to all users. The public mailbox is also used to publicize EPA news.

### *CHEMICAL INDEX*

The PMI Chemical Index allows the user to quickly find the correct chemical name, chemical class, or chemical category to be used when searching for monitoring projects.



# U.S. ENVIRONMENTAL PROTECTION AGENCY



#### IV. MONITORING CONTACTS

##### A. ENVIRONMENTAL PROTECTION AGENCY

1. Office of Pesticides and Toxic Substances  
Office of Pesticides  
Office of Toxic Substances  
Office of Compliance Monitoring .
2. Office of Air and Radiation  
Office of Air Quality Planning and Standards
3. Office of Policy Planning and Evaluation  
Office of Management Systems and Evaluation
4. Office of Research and Development  
Office of Environmental Processes and Effects Research  
Office of Acid Deposition, Environmental Monitoring, and  
Quality Assurance
5. Office of Water  
Office of Drinking Water  
Office of Ground Water Protection  
Office of Marine and Estuarine Protection  
Office of Water Regulations and Standards

##### B. EPA REGIONS

###### Region 1

Air Management Division  
Water Management Division  
Environmental Services Division

###### Region 2

Air and Waste Management Division  
Water Management Division  
Environmental Services Division

###### Region 3

Air Management Division  
Water Management Division  
Environmental Services Division  
Hazardous Waste Management Division

###### Region 4

Air, Pesticides and Toxics Management Division  
Water Management Division  
Environmental Services Division

**Region 5**

**Air, Pesticides and Toxics Management Division**  
**Water Management Division**  
**Environmental Services Division**

**Region 6**

**Air, Pesticides and Toxics Management Division**  
**Water Management Division**  
**Environmental Services Division**

**Region 7**

**Air and Toxics Management Division**  
**Water Management Division**  
**Environmental Services Division**

**Region 8**

**Air and Toxics Management Division**  
**Water Management Division**  
**Environmental Services Division**

**Region 9**

**Air Management Division**  
**Water Management Division**  
**Toxics and Waste Management Division**

**Region 10**

**Air and Toxics Management Division**  
**Water Management Division**  
**Environmental Services Division**

**C. FEDERAL AGENCIES**

- 1. Centers for Disease Control**  
**National Institute for Safety and Health**
- 2. Consumer Product Safety Commission**
- 3. Department of Agriculture**  
**Animal and Plant Health Inspection Service (APHIS)**  
**United States Forest Service (USFS)**  
**Soil Conservation Service (SCS)**  
**Agricultural Research Service (ARS)**  
**Cooperative State Research Service (CSRS)**  
**Food Safety Inspection Service**
- 4. Department of Commerce**  
**National Oceanic and Atmospheric Administration (NOAA)**
- 5. Department of Defense**  
**Army Environmental Hygiene Agency**

6. Department of Housing and Urban Development
7. Department of the Interior
  - Fish and Wildlife Service (FWS)
  - United States Geological Survey (USGS)
  - National Park Service
  - Bureau of Land Management (BLM)
  - Bureau of Reclamation
  - Bureau of Indian Affairs
8. Department of State
  - Agency for International Development
9. Department of Transportation
  - United States Coast Guard
  - Interstate Transport Commission
10. Food and Drug Administration
11. Tennessee Valley Authority

**D. STATE AGENCIES**

1. State Environmental Protection Agencies
2. State Pesticide Control Agencies
3. State Health Agencies

US ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES  
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Pesticide Monitoring Inventory

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**OFFICE OF TOXIC SUBSTANCES**

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Ada, OK 74820  
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REGION 10

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Robert Burd  
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Water Division  
US Environmental Protection Agency  
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REGION 10

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FEDERAL AGENCIES

CENTERS FOR DISEASE CONTROL

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CENTERS FOR DISEASE CONTROL

NATIONAL INSTITUTE OF SAFETY AND HEALTH

Richard Lemen M.D.  
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Division of Standards Development and  
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CONSUMER PRODUCT SAFETY COMMISSION

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DEPARTMENT OF AGRICULTURE

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