Foreword

The states and some counties voluntarily provided information on their waste pesticide collection and disposal programs, i.e., Clean Sweep programs, to the Office of Pesticide Programs in the U.S. Environmental Protection Agency (EPA). This allowed EPA to compile a nationwide summary of Clean Sweep programs. The Office of Pesticide Programs thanks the states and counties for providing this information and, more importantly, for the hard work and accomplishments of their Clean Sweep programs. The point of this report is really to acknowledge and publicize the great work they have done.

The report includes information that EPA received as of October 23, 2001, and includes pesticide collection totals through 2000. There is a clear need to update the information in this report periodically as Clean Sweep programs continue to collect more pesticides and the programs evolve over time. To check for updates, please go to http:www.epa.gov/pesticides or call 703-305-7102.

NOTE: We will periodically update the state profiles in Appendix I on the web site. If you find incomplete or inaccurate information, please provide the correct data to any of the members of Office of Pesticide Program's Disposal Team listed below. In addition, the Disposal Team members would be happy to answer any questions you have about the Clean Sweep Report.

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NB: The above includes mention of the state in figures, tables, and table footnotes. In addition, every state is included in the tables or boxes on pages ix, 7, 31, 35, 37, 38, 51.

Executive Summary

Over the past 20 years, states have been actively promoting environmental protection and pollution prevention by conducting collections of waste chemicals, including agricultural pesticides and household hazardous waste. Since many household hazardous waste programs prohibit farmers from participating, most states have developed programs specifically for farmers. This report is an effort to compile state data into a single document, focusing on collections of unwanted agricultural pesticides, which many states refer to as "Clean Sweep" programs. The report is based on information in existing documents and data voluntarily submitted by state and local governments. The main goals of the report are to:

- ✓ Recognize the proactive efforts of state and local governments;
- ✓ Document the history and achievements of Clean Sweep programs; and
- ✓ Establish a baseline of information in a standard, up-datable format as a resource for those wanting to initiate or improve programs.

Clean Sweep programs are consistent with EPA's mission to protect human health and the environment by preventing potential contamination in air, water, or land. Clean Sweep programs are also consistent with EPA's draft strategy to address persistent, bioaccumulative, and toxic (PBT) pollutants, and with the Convention on Persistent Organic Pollutants (POPs). Many of the 12 substances covered in the POPs Convention are canceled pesticides that are commonly collected and disposed during Clean Sweep programs.

Clean Sweep programs must comply with a number of federal regulations, including those implementing the Federal Insecticide, Fungicide, and Rodenticide Act, the Resource Conservation and Recovery Act (RCRA), and the Clean Water Act. In addition, regulations issued by the Department of Transportation establish standards for the movement of hazardous materials.

This report covers various aspects of Clean Sweep program operations, including the lead agencies, funding sources, participants, materials collected, methods of collection and disposal, and contractual issues. The report also summarizes Clean Sweep program results, including yearly totals of pesticides collected for each state, types of pesticides collected, numbers of participants, quantities per participant, and program safety records.

Clean Sweep Program Operations

Lead agency. In nearly 75 percent of the states with Clean Sweep programs, the state department of agriculture or the pesticide regulatory agency has the lead and takes the initiative and the responsibility for organizing and overseeing the program. Regardless of who has the lead, the collection is nearly always a cooperative effort involving the state extension service, other state agencies, county and local governments, industry associations, and other interested individuals.

Funding. Clean Sweep programs are funded, to varying degrees, by state pesticide registration fees, other fee-based funds, state general funds, participant fees, EPA grants, county funds, in-kind services, and other grants. EPA funds have comprised a small percentage of the total funding for Clean Sweep programs, and have been used principally to 1) provide seed money for new programs; 2) implement targeted programs after the criteria in cooperative agreements were satisfied; 3) support the goals of other EPA programs or international treaties, or 4) support special needs, for example, under the Clean Water Act.

Participants. Although Clean Sweep programs are sometimes, at least initially, limited to farmers and ranchers, states are increasingly opening programs to include other participants, such as pest control businesses, pesticide dealers, golf courses, government agencies (county, state, and federal), greenhouse and nursery operators, schools, parks, and homeowners.

Materials collected. Most Clean Sweep programs only collect pesticides. However, some states also collect household hazardous waste and several programs collect other materials, such as empty pesticide containers, batteries, and wastes from small businesses. These states have found that collecting several waste streams as part of their Clean Sweep programs is more cost effective, since mobilization fees and staff time are reduced by the combination.

Clean Sweep programs have few limits on the pesticides they accept, although most programs will not accept pesticide-contaminated material such as rinsate, soil, and debris and many place limits on pesticides that potentially contain dioxin. Many programs will not accept compressed gas cylinders, explosive or radioactive material, or large quantities of unknown material.

Method of collection. There are three principal methods of collection: single day events, permanent sites, and on-site pick up. Single day events are the most common method and have been used by nearly all of the states. About one-third of the states use more than one collection method, and the methods chosen by a state can change over time, particularly as collection volume increases. Many permanent facilities have created satellite sites to encourage people residing far from the permanent site to participate.

Registration. Having participants register before the Clean Sweep event is essential for programs using on-site pick up and very useful for other collection methods. Most programs require preregistration, although a few states encourage but do not require it. Preregistration allows the contractor to know in advance how many stops must be made and the volume of pesticides that will be collected at each site, in order to determine the number of trucks and personnel needed. However, registration does deter people who prefer anonymity from participating in Clean Sweep programs.

Disposal method. Most collected material is disposed in high temperature hazardous waste incinerators, although materials which cannot be incinerated are sent to permitted hazardous waste landfills. For unopened, legally-usable products, a few states have tried various alternatives to disposal such as product exchanges, redistribution tables, and recycling centers.

Contractors. State or local governments hire a hazardous waste contractor to transport the material for disposal. In nearly all programs, the contractor provides all materials and services for collection, including manifesting, packaging, transport, and disposal, and in many cases, collection at end-user locations if containers are deteriorated enough to make transport dangerous. The contractor assumes all responsibility as the generator of the waste. Some states depend on county grantees to initiate and manage the contracts, while others contract directly with the waste management company and use its services as needed. State program managers have provided contact information for many of the contractors who are currently or recently active in Clean Sweep programs.

Decreasing costs and increasing efficiency. States have found many innovative ways to reduce disposal costs and improve program efficiency, comprising both chemical handling strategies and administrative strategies. The

chemical handling strategies include different methods of packing the collected pesticides for transportation and disposal, which may decrease the cost of disposal. The administrative strategies include specialized programs, regulatory options, and contract management tips that may be available to Clean Sweep program managers.

Clean Sweep Program Results

Number of states. Forty-six states have conducted at least one Clean Sweep program. North Carolina initiated the first program in 1980; and until 1987, the only other states that started programs were Iowa, Maine and North Dakota. These states recognized early on that farmers were accumulating unwanted pesticides and that, without an affordable method of proper disposal, they risked contaminating their land and water when the stored product containers began to deteriorate.

Program categories. Even though some programs are conducted by individual counties, this report classifies the information by state. EPA is unaware of any Clean Sweep programs implemented by tribes or territories. The report divides programs into five funding categories, which reflect the frequency or permanency of the program: permanently funded, continuous, intermittent, one-time, and never.

Total amount collected. Based on data provided by the states, EPA estimates that Clean Sweep programs have collected over 24 million pounds of unwanted pesticides from 1980 through 2000. A number of factors make it difficult to record the exact amount of pesticides collected, such as variation on how states characterize partially full containers, differences in how solids and liquids are recorded, and the lack of precise data from early collections. In spite of these caveats, EPA believes that the overall estimate of about 24 million pounds and the totals for individual states are a good indication of the minimum amounts collected, and are probably underestimates. While 24 million pounds is a substantial amount, it is significantly smaller than the amount of pesticides sold and used in the United States.

Amount per participant. Thirty-one states reported the number of participants in at least some of their collection events. The average amount collected per participant in nearly three-quarters of these states was between 101 pounds and 400

State Clean Sweep Programs by Category

Permanently funded programs: Georgia, Idaho, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nevada, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin

Continuous programs: California, Florida, Illinois, Indiana, Maine, Maryland, Massachusetts, Mississippi, Nebraska, New Jersey, Oregon, West Virginia

Intermittent programs: Alabama, Arkansas, Colorado, Connecticut, Hawaii, Louisiana, Missouri, New York, South Carolina

One-time programs: Delaware, New Hampshire, Rhode Island, Wyoming

Never held a program: Alaska, Arizona, New Mexico, Oklahoma

pounds. States want to know what quantities are typical in order to estimate the people and resources they and the contractor must mobilize for the collection. The information may also help estimate how much unwanted pesticide remains to be collected.

Kinds of pesticides. Most pesticides sold in the United States have shown up at Clean Sweep programs. Both canceled pesticides, some of which have not been sold in the United States for decades, and currently registered products are collected.

Safety record. Information provided to EPA by the states indicates that few, if any, incidents of exposure are associated with Clean Sweep collections, due to the diligence and competence of state employees and contractors. This is particularly impressive considering the large quantity of pesticides transported and collected and the fact that many products are in old or damaged containers. Many states provide guidance or training on specific precautions for Clean Sweep program participants.

Challenges and Opportunities

The challenges faced by Clean Sweep program managers include obtaining funding, complying with the hazardous waste regulations, addressing liability issues, getting information to potential participants, overcoming distrust of government programs, and managing problematic waste streams. As states are trying to increase participation in their programs, they are also working to prevent the buildup of unwanted pesticide stocks in the future.

Funding. Lack of funding is the principal reason noted by states for not operating a continuous Clean Sweep program. Without a permanent funding mechanism, the annual scramble for funds drains staff time and energy that could be used for program implementation.

Regulations. Regulatory compliance is an important challenge. The Universal Waste Rule, an amendment to the RCRA regulations, is intended to ease the regulatory burden on states and businesses and reduce the hazardous waste content of municipal landfills. Most states have adopted this rule.

Liability. Liability prior to and during a collection event is of concern to program managers, who employ a variety of methods to prevent accidents. Clean Sweeps are often set up so that the pesticide agency becomes the official generator of the waste for the purposes of compliance with hazardous waste regulations. At the collection event, trained contractor and government staff unload and process the pesticides. After the collection, the hazardous waste contractor is responsible for stabilizing and securing the site and transporting the waste for disposal. At permanent sites, trained government staff manage the security of stored products.

Public outreach. One of the biggest challenges faced by Clean Sweep program managers is maximizing participation. Collection programs have tried a variety of advertising methods and found that effectiveness varies. Therefore, most programs use multiple methods, such as newspaper ads, posters at pesticide dealerships, letters, announcements on radio and television, efforts by extension agents, and word of mouth. States have relied on public outreach and good relationships between extension agents and growers to gradually diminish the perception by farmers that they could be fined or otherwise punished if it came to the attention of a government agency that they were storing canceled pesticides on their property.

Dioxin-containing wastes. The report discusses the problem of disposal for pesticides that contain dioxin. Most states (and hazardous waste contractors) accept dioxin-containing material only if

a permitted dioxin disposal facility is available, which is not always the case. However, rejecting such pesticides on collection days creates ill will and the potential that such products will be indiscriminately dumped by the participants.

Tracking specific pesticides. Some states track and report the individual pesticides collected. Although tracking costs more staff time and effort, some states want to know exactly what wastes they are collecting in order to assess trends and plan future collection strategies. Data on the specific quantities of canceled and unregistered pesticides also helps document the magnitude of the problem so that funds might be budgeted for Clean Sweep programs. In addition, EPA uses information on the amount of specific pesticides to gauge the impact of certain regulations and to demonstrate the country's commitment to certain international treaties.

Preventing future accumulation. States are actively trying to prevent the future accumulation of unwanted pesticides by providing training and outreach in good management practices and promoting integrated pest management.

Observations

Compiling the information on the structure, funding, and accomplishments of the Clean Sweep programs in all of the states provides an opportunity to make observations about these programs nationwide.

Permanent funding has many advantages. The 21 states with permanent funding have collected over 70 percent of all the waste pesticides collected nationwide. The principal advantage of permanent funding is that program managers tend to have predictable funds every year or every few years, and can devote their energy to program implementation. With permanent funding, managers can think long-term, can plan for phased state-wide collections, and can establish long-term, rather than short-term contracts with waste haulers.

The unit costs of Clean Sweep programs have decreased over the past decade. Based on data from fifteen states, the cost per pound to dispose of unwanted pesticides has decreased significantly over the past decade. The major contractual costs are usually the mobilization fee, the collection and disposal costs, and the analysis of unknown products. However, the cost of Clean Sweep programs is minor compared to the cost of cleaning up the pollution that can result from improper disposal of unwanted pesticides.

Reliable estimates of uncollected pesticides are elusive. No one knows how many pounds of unwanted pesticides have yet to be collected in the U.S. The difficulty in accurately estimating the total amount is due to several factors. First, many farmers are reluctant to fill out government surveys, particularly if they have canceled pesticides stored in their barns, and fear that the survey may result in a fine or penalty. Second, some stocks lie forgotten in barns for years until the owner dies and the barn is bought or inherited. Third, unwanted pesticides are continually accumulating, due to overestimates of pest populations, changing crop patterns and new products. Fourth, in recent years some uses of older products have been canceled due to new risk assessments conducted under the Food Quality Protection Act.

Only a fraction of the pesticides used in states is disposed in Clean Sweep programs. For the immediate future, assuming pesticide management practices are consistent across the country, it is reasonable to expect that the higher a state's pesticide usage, the higher will be its quantities of unwanted stocks. States which use the most pesticides have permanently funded or continuous

Clean Sweep programs, indicating that these states recognize and are addressing the potential problem of unwanted pesticide stocks. States with longer-running programs generally have collected higher quantities of pesticides and a larger proportion of the amount of pesticides used since 1961. Data show that the quantities of unwanted pesticide collected and disposed by Clean Sweep programs is only a fraction of the pesticides used.

Clean Sweep programs will continue to be needed for the foreseeable future. The amount of unwanted pesticide collected per year depends on many factors, such as funding, the number of collection events, the organization and timing of the events, and the categories of people who are allowed to participate. Since even states with long-term, comprehensive Clean Sweep programs are still collecting pesticides, EPA believes that Clean Sweep programs will continue to be needed for the foreseeable future.

Section 1 Introduction

For the past 20 years, state and local governments have collected and safely disposed of more than 24 million pounds of unwanted pesticides. These efforts, now commonly called "Clean Sweep programs," focus on agricultural pesticides but may also include other pesticides, such as those used by homeowners, golf courses, or highway departments along their rights-of-way. There is no federal statutory requirement or mandate to conduct these collections. Clean Sweeps are state and local initiatives, and the states have adopted a variety of approaches to finance and implement their programs. However, all of the states have the same goal: fostering environmental protection and pollution prevention by removing these potentially hazardous materials from the environment.

This report is a salute to the states' successful and largely unheralded contribution to cleaning up the environment.

1.1 What are the goals of this report?

Tell a great story of environmental protection. The potential for soil and water contamination due to the improper management of waste pesticides is high and is widely documented. Many state and local governments recognized and addressed this possible problem and have removed and disposed of over 24 million pounds of potential contaminants.

Recognize the efforts of state and local governments. State and local governments have taken the lead and largely used their own resources to develop procedures for the safe collection and disposal of unwanted pesticides. The federal government has played a limited supporting role. EPA wishes to recognize the states and counties for their accomplishments.

Document Clean Sweep programs and provide an accessible information database. State Clean Sweep programs have many common features, but each state has designed its program to meet its own needs. This report presents information on each state's program in a standard format. It also consolidates all of the information, allowing national totals to be calculated and providing a nationwide perspective on the accomplishments of Clean Sweeps. In addition, EPA plans an on-line version of this report, which will be a living document, periodically updated as established programs change or new ones start.

Serve as a resource for regulators, lawmakers, and the public. This report provides information for federal, state, tribal, county and municipal officials and citizens interested in initiating or improving the collection of agricultural pesticides.

Support national and international efforts to prevent pollution and promote environmental protection. Several national and international efforts attempt to prevent persistent and bioaccumulative toxics (PBTs) from reaching the environment and to remove the PBT contamination that already exists. Clean Sweep programs ensure that existing pesticide stocks, including pesticides categorized as PBTs, are properly collected and disposed.

1.2 How do Clean Sweep programs mesh with EPA's priorities and programs?

EPA's mission is to protect human health and safeguard the natural environment -- air, water, and land -- upon which life depends. Clean Sweep programs conducted and led by state and local governments are consistent with this mission. These programs have collected and properly disposed of millions pounds of unwanted pesticides, thereby ensuring that they will not be released as potential contaminants in the environment. This section briefly describes some of the specific EPA programs whose

goals coincide with the Clean Sweep goal of properly collecting and disposing of unwanted pesticides.

Pesticides

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) establishes standards for the regulation, sale, distribution and use of pesticides in the U.S. The Act authorizes EPA to review and register pesticides for specified uses and to suspend or cancel the registration of a pesticide if subsequent information shows that continued use would pose unreasonable risks. Much of EPA's work on pesticides involves:

- Registering, or licensing, pesticides,
- Ensuring that pesticides, when used according to label directions, can be used with a reasonable certainty of not causing harm to human health and not posing unreasonable risks to the environment, and
- Reviewing older pesticides to ensure that they meet current health, safety and environmental standards.

Section 19 of FIFRA establishes standards for the storage, disposal, transportation and recall of pesticides and requires EPA to publish regulations on pesticide container design and residue removal. EPA is currently developing these regulations on pesticide containers and containment structures, which are intended to facilitate the safe use, safe disposal and safe refill of containers.

Persistent, Bioaccumulative and Toxic Chemicals

Persistent, bioaccumulative and toxic (PBT) pollutants persist in ecosystems and accumulate in fish and up the food chain, thereby posing health risks. In 1998, EPA drafted a strategy[1] to overcome the remaining challenges posed by these pollutants, which stem from their ability to travel long distances, to transfer rather easily between air, water, and land, and to linger for decades. Since EPA's traditional single-statute approach is not the full solution to reducing risks from PBTs, EPA created a system that will address the cross-media issues associated with priority PBT pollutants. The priority PBTs are the Level 1 substances identified by Canada and the U.S. in the 1997 Binational Toxics Strategy.[2] For each of the priority PBTs listed in the box below, EPA is developing a PBT national action plan.

Priority PBTs: Level 1 Substances under the Binational Toxics Strategy

Pesticides	*Non-pesticides*
aldrin	benzo(a)pyrene
chlordane	hexachlorobenzene
DDT (+DDD+DDE)	alkyl-lead
dieldrin	mercury and compounds
mirex	octachlorostyrene
toxaphene	PCBs
	PCDD (dioxins) and PCDF (furans)

National action plans draw on the full array of EPA statutory authorities and national programs. EPA may use regulatory action where voluntary efforts are insufficient. EPA may pursue, in the

[1] The draft strategy is titled A Multimedia Strategy for Priority Persistent, Bioaccumulative, and Toxic (PBT) Pollutants (Working Draft), prepared by the US EPA Persistent, Bioaccumulative and Toxic Pollutants (PBT) Plenary Group and the US EPA Office Directors Multimedia and Pollution Prevention Forum, November 16, 1998. It can be found on the web site of EPA's Persistent, Bioaccumulative and Toxics (PBT) Chemical Program at http://www.epa.gov/opptintr/pbt/home.htm.

[2] The full name of the Binational Toxics Strategy is the Canada-United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes Basin. Information can be found on the Binational Toxics Strategy home page at http://www.epa.gov/grtlakes/bns/.

short-term or longer-term, activities for international coordination, place-based remediation of existing PBT contamination, research, technology development and monitoring, community and sector-based projects, and outreach including public advisories.

In EPA's draft *PBT National Action Plan for Level 1 Pesticides*,[3] one of the goals for reducing risks from the Level 1 pesticides is to "facilitate, encourage, and support states, tribes and local governments in their programs to collect and properly dispose of unwanted pesticides, including stocks of Level 1 pesticides." The draft plan acknowledges the important role Clean Sweep programs play in safely removing pesticides – specifically the Level 1 pesticides – from the environment. In fact, this report on Clean Sweep programs is partially financed by funds from the PBT initiative.

Some Clean Sweep programs record information about the specific pesticides collected. This information currently provides the only record of the volume of PBT pesticides collected and the only basis for estimating amounts uncollected. Minnesota, for example, has comprehensive data on amounts of specific pesticides collected. From the late 1980's through 1998, about 6 percent of the pesticides collected in Minnesota were the PBT Level 1 pesticides. The voluntary efforts by state agencies to itemize the pesticides collected have provided very useful data and EPA has urged that these efforts continue.

Persistent Organic Pollutants

On May 23, 2001, the U.S. signed the Convention on Persistent Organic Pollutants (POPs)[4] in Stockholm, Sweden. Under the Convention, countries commit to reduce and/or eliminate the production, use, and/or release of the twelve POPs of greatest concern to the global community (see box) and to establish a mechanism by which additional chemicals may be added to the Convention in the future. The U.S. strongly supported efforts to complete this agreement, which will have wide-ranging environmental and health benefits. The pesticides included in the Stockholm Convention are commonly collected and disposed during Clean Sweep programs.

Persistent Organic Pollutants in the Stockholm Convention	
Pesticides	Non-pesticides
aldrin	PCBs
chlordane	PCDD (dioxins)
DDT	PCDF (furans)
dieldrin	
endrin	
heptachlor	
hexachlorobenzene	
mirex	
toxaphene	

Solid and Hazardous Waste Management

EPA regulates solid and hazardous wastes under the Resource Conservation and Recovery Act (RCRA). RCRA's goals are to protect people from the hazards of waste disposal; conserve energy and

[3] Draft PBT National Action Plan for the Level 1 Pesticides, Public Review Draft, prepared by the US EPA Persistent, Bioaccumulative and Toxic Pollutants (PBT) Pesticides Work Group, August 24, 2000. An announcement about its availability and a request for comments was published in the Federal Register on November 1, 2000 (65 FR 65314).

[4] United Nations Environment Program for POPs: http://irptc.unep.ch/pops

natural resources by recycling and recovery; reduce or eliminate waste; and clean up waste which may have spilled, leaked, or been improperly disposed. Because the RCRA regulations directly affect the design and operation of Clean Sweep programs, they are summarized in more detail in section 1.3.

Water

Water is essential for life and plays a vital role in the proper functioning of earth's ecosystems. Water pollution impacts all living creatures, and adversely affects the use of water for drinking, household needs, recreation, fishing, transportation and commerce. EPA enforces federal clean water and safe drinking water laws, provides support for municipal wastewater treatment plants, and takes part in pollution prevention efforts aimed at protecting watersheds and sources of drinking water. EPA uses both regulatory and voluntary programs to protect the nation's waters. State and local Clean Sweep programs dovetail with EPA's efforts by removing pesticides from the environment and properly disposing of them, thereby preventing potential water pollution.

EPA sees the removal of unwanted pesticides from the environment as a benefit to its efforts to maintain clean water and has assisted Clean Sweeps using the following programs:

319 Program. The 319 program provides grants to states and tribes to implement nonpoint source projects and programs in accordance with the Clean Water Act (CWA). Nonpoint source pollution, such as runoff from agricultural lands, is a diffuse pollution source that does not have a single point of origin or is not introduced into a receiving stream from a specific outlet. Nonpoint source pollution reduction projects are used to protect source water areas and the general quality of water resources in a watershed. Examples of previously funded projects include installation of best management practices (BMPs) for animal waste; design and implementation of BMP systems for stream, lake, and estuary watersheds; basin-wide landowner education programs; lake projects; and Clean Sweep programs.

CWA Section 106. Section 106 of the CWA authorizes annual appropriations of funds for federal grants to assist state and interstate agencies in administering water pollution control programs. Section 106 grants have funded a wide range of water pollution control activities including water quality planning and assessments, development of water quality standards, monitoring the quality of rivers, streams and aquifers, and the issuance and enforcement of permits.

Coastal Water Protection. Under section 306 of the Coastal Zone Management Act, the National Oceanic and Atmospheric Administration (NOAA) provides funds for water pollution control projects to the 29 states with approved Coastal Zone Management Programs. In a separate but related program, these states must submit a Coastal Nonpoint Pollution Control Program to EPA and the NOAA. The purpose of this program is to implement measures for restoring coastal waters and protecting them from nonpoint source pollution. Coastal Nonpoint Pollution Control Programs are intended to update and expand existing nonpoint source management programs and to coordinate closely with the Coastal Zone Management Programs. States and territories that border an ocean or the Great Lakes are included in coastal protection programs.

Great Lakes Program. The Great Lakes National Program Office (GLNPO), based in EPA's Region 5 office, works in many ways to protect the Great Lakes. One of GLNPO's priorities is to implement the Binational Toxics Strategy with Canada to virtually eliminate certain PBTs from the

environment. To support this effort, GLNPO has consistently funded Clean Sweep programs over the years through Great Lakes-wide initiatives and projects that were specific to individual lakes. Teams devoted to restoring and protecting each of the Great Lakes also sponsor Clean Sweeps to achieve specific toxin reduction goals.

1.3 What laws and regulations apply to Clean Sweep programs?

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and its related regulations establish standards for the registration (licensing), sale, distribution, use and labeling of pesticides. When the decision is made to discard a pesticide, it becomes a waste and therefore is subject to the Resource Conservation and Recovery Act (RCRA).

Under the federal regulations established under RCRA,[5] a discarded pesticide is a solid waste. Solid wastes are defined to include solids, liquids and gases. Although there are regulatory exemptions from being a solid waste, they generally do not apply. The RCRA regulations establish criteria for determining whether a solid waste is a hazardous waste, and therefore subject to more extensive and stringent hazardous waste regulations. Some, but not all, pesticides are considered hazardous waste when disposed. The criteria for defining hazardous waste are complex and should be consulted when determining if a discarded pesticide is a hazardous waste, but some of the most relevant parts of the regulations include the following:

- Some solid wastes, such as household waste, are specifically exempted from the definition of hazardous wastes. Regardless of the composition of a pesticide or its characteristics, a pesticide that is discarded by a household is not regulated as a hazardous waste.
- A solid waste can be defined as a hazardous waste if it is included on one of four specific lists in the regulations. The two most relevant are the list of discarded commercial chemical products that are acute hazardous wastes (with codes beginning with P, e.g., P004 for aldrin) and the list of discarded commercial chemical products that are toxic wastes (the U-coded waste). In addition, the list of hazardous waste from non-specific sources (the F-coded waste) includes one relevant entry for certain discarded unused formulations. Appendix II contains a table with the RCRA-listed pesticides.
- A solid waste can be defined as a hazardous waste by showing one of four characteristics defined in the regulations: ignitability, corrosivity, reactivity or toxicity.

The hazardous waste regulations include requirements for identifying, handling, storing, transporting, tracking (manifesting), treating and disposing of the waste.6 The regulations identify the generator of the hazardous waste – the person who first creates or produces the waste – as the party responsible for correctly identifying it as hazardous waste, complying with storage limits, and ensuring proper treatment and disposal. This regulatory requirement, like many others, affects the structure and procedures of Clean Sweep programs. Some of the key requirements in the hazardous waste regulations are described throughout the report when they relate to a specific aspect of Clean Sweep programs. However, the regulations are

[5] The federal hazardous waste regulations are located in 40 CFR Parts 260 through 273. The definitions of solid waste and hazardous waste are in 40 CFR Part 261. The standards for universal waste management are in 40 CFR Part 273.

[6] See RCRA web site at http://www.epa.gov/epaoswer/hotline/rcra.htm

extensive and a complete summary is beyond the scope of this report.

The hazardous waste regulations also include the Universal Waste Rule, a set of streamlined hazardous waste management regulations governing the collection and management of certain widely generated wastes, known as universal wastes. Universal wastes include batteries, mercury-containing thermostats, certain hazardous waste pesticides including those collected in government-run collection and disposal programs, and hazardous waste lamps. Since the Universal Waste Rule is very important and helpful to the operation of Clean Sweep programs, it is discussed in detail in section 4.2.

In addition, the U.S. Department of Transportation (DOT) has requirements for the transportation, marking and packaging of hazardous materials (which include some pesticides) and hazardous wastes. These DOT regulations, established under the Hazardous Materials Transportation Act, also affect the structure and operations of Clean Sweep programs as described in section 4.1.

1.4 Why do Clean Sweep programs exist?

Over time, pesticide users accumulate pesticides that they no longer want. Improper disposal of these pesticides can lead to environmental problems such as contamination of groundwater, soils, plants, and animals. There are many reasons why pesticides become obsolete or unusable and why quantities accumulate, including but not limited to:

- The pesticide product is canceled and its use suspended;
- The farmer discontinued growing the crop for which the pesticide was bought;
- The pesticide user purchased an excessive amount of the pesticide or has containers with a partial amount of unused pesticide;
- An alternative pesticide becomes available that is safer, more effective and/or cheaper;
- The pesticide formulation is damaged, for example, due to caking or solidification;
- The integrity and effectiveness of the pesticide is compromised due to its age;
- The pesticide container (e.g., an aerosol can) is old and damaged or ripped (e.g., a bag) and can no longer be used, or the label has been obliterated and is unreadable;
- The pesticide's use on a crop has been removed from newer labels and, although farmers may still legally use older products according to the label, they may choose not to;
- The user does not know how to properly dispose of the unwanted pesticides or believes disposal will be too expensive;
- The pesticide is abandoned; for example, by deceased users or found on purchased property.

Government officials and the agricultural community had become increasingly aware that the continued storage of unwanted pesticides was not a desirable situation. They needed a safe way to collect and dispose of canceled, outdated, degraded, unusable or otherwise unwanted pesticides. State and local officials took the lead in this effort, and Clean Sweep programs are the result.

Clean Sweep programs for farmers are analogous to Household Hazardous Waste (HHW) collection programs for homeowners. Many homes have places where unwanted materials such as motor oil, antifreeze, paints, household disinfectants, and lawn and garden pesticides accumulate. These materials are typically stored in garages, basements, storage rooms, and closets. State and local governments have long recognized the need to collect and safely dispose of such materials, which is

why many local governments conduct HHW collection programs. Similarly, officials in many states gradually developed disposal programs for farmers, preventing millions of pounds of pesticides from contaminating the environment.

1.5 What have Clean Sweep programs accomplished?

North Carolina conducted the first Clean Sweep in 1980. Today, Clean Sweep programs conducted in 46 states have collected and destroyed or recycled over 24 million pounds of unwanted pesticides. Some of the collected pesticides had been stored for decades in barns and basements. It is possible that these pesticides would have seeped out of their deteriorating containers and contaminated soil or groundwater.

To date, 11 states have collected over one million pounds of pesticides, with one state collecting over three million pounds. Twenty-one states have Clean Sweep programs with assured funding which permits them to conduct annual collections, and these states have collected more than 70 percent of all the waste pesticides collected nationwide. Twelve other states with less certain funding have conducted Clean Sweep programs for several consecutive years.

Participation in Clean Sweeps has expanded from exclusively farmers and ranchers to include residential and institutional pest control operators, government agencies, golf course owners and others. Collections have included nearly every pesticide manufactured in the United States. Although many of the collected pesticides were canceled years ago, currently registered pesticides predominate, with widely-used herbicides among the most commonly collected products. Clean Sweep programs have an excellent safety record, with few, if any, incidents of unwanted exposure. Many states provide guidance, either on their web site or in printed form, on specific precautions for program participation, and a few require participant training.

1.6 How has EPA categorized Clean Sweep programs?

Forty-six states have conducted Clean Sweep programs and 11 states have conducted collections for at least 10 years. Program frequency is an important measure of a state's program. A second critical measure is reliable state funding. This report uses these two factors to classify Clean Sweep programs into five categories.

The categories, which reflect the frequency or permanency of the program, are: permanently

State Clean Sweep Programs by Category

Permanently funded programs: Georgia, Idaho, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nevada, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin

Continuous programs: California, Florida, Illinois, Indiana, Maine, Maryland, Massachusetts, Mississippi, Nebraska, New Jersey, Oregon, West Virginia

Intermittent programs: Alabama, Arkansas, Colorado, Connecticut, Hawaii, Louisiana, Missouri, New York, South Carolina

One-time programs: Delaware, New Hampshire, Rhode Island, Wyoming

Never held a program: Alaska, Arizona, New Mexico, Oklahoma

funded, continuous, intermittent, one-time, and never. A ***permanently funded*** program is continuous and has reliable, consistent funding in place year after year. Types of permanent funding include state pesticide registration fees, other fee-based funds that support clean up programs and consistent state appropriations. A ***continuous*** program is defined in this report as one that has been implemented for at least three consecutive years, but without permanent funding. Although continuous means "without interruption", a program may still be classified as permanently funded or continuous even if it occasionally skips a year. An ***intermittent*** program is not continuous but has held more than one collection event. A ***one-time*** program has held one collection event. Four states have ***never*** had a collection.

1.7 What information is included in this report?

This initial Clean Sweep Report summarizes the significant accomplishments of the state Clean Sweep programs. It contains yearly totals of pesticides collected nationwide and by each state. The report describes the state programs and identifies state lead agencies, program participants, and materials collected. The report covers collection logistics, the states' various funding mechanisms, constraints, problems and innovative solutions. It also includes a discussion of the regulatory framework for pesticide disposal.

This report is based on information voluntarily provided by state and local governments and on existing documents found on the Internet or obtained from the state and local governments. EPA provided draft state profiles to Clean Sweep managers and incorporated the comments that were received. These profiles, in Appendix I, contain standard information on each state program.

Section 2 Clean Sweep Program Operations

North Carolina conducted the first Clean Sweep program two decades ago. Since then, 45 other states have undertaken Clean Sweeps but no state has followed a set blueprint. This section covers the states' various approaches, describing the lead government agencies, funding sources, allowable participants, materials collected, methods of disposal, and contracting with hazardous waste management companies. In general, the nationwide information is presented in terms of the program categories described in section 1.6.

2.1 *Who organizes and oversees Clean Sweep programs?*

In most cases, the agency within state government that regulates pesticides (usually the state agriculture department) takes the initiative and the responsibility for organizing and overseeing Clean Sweep programs. In six states, the state environmental agency (which regulates waste in those states) is the lead agency. In a few states, like New Jersey and New York, the counties have a significant role with very little oversight from the state government. Wisconsin offers grants from the Department of Agriculture, Trade and Consumer Protection to counties that provide a cost-share match, a local coordinator, volunteers and a collection site.

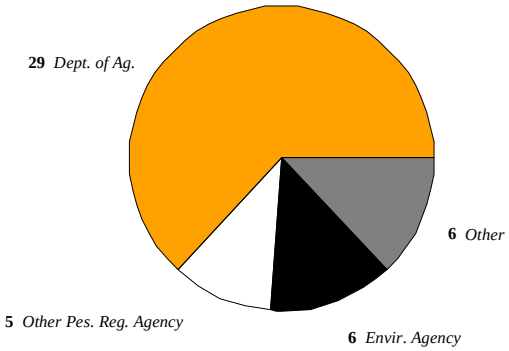
As shown in Table 1 and Figure 1, the state department of agriculture or the pesticide regulatory agency (if different than the department of agriculture) lead Clean Sweep programs in 34 states, nearly 75 percent of the states with programs. In addition, three states in the "other lead agency or agencies" group share the program lead between two agencies, one of which is the agriculture department or a different pesticide regulatory agency.

Regardless of which agency has the lead, collections are nearly always a cooperative effort involving the state extension service, other state agencies, county and local governments, industry associations, and other interested individuals. In

TABLE 1 Clean Sweep Lead Agency by Program Category
Each cell contains (1) the number of states with the indicated lead agency and (2) a listing of those states

Category / Lead Agency	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Department of Agriculture	**(18)** GA, ID, KY, MI, MN, MT, NV, NC, ND, OH, PA, SD, TN, UT, VT, VA, WA, WI	**(6)** IL, MD, MA, MS, NE, WV	**(3)** AL, HI, LA	**(2)** NH, WY	29
Other Pesticide Regulatory Agency		**(2)** IN, ME	**(2)** AR, CT	**(1)** RI	5
Environmental Agency	**(2)** IA, TX	**(2)** CA, OR	**(1)** MO	**(1)** DE	6
Other Lead Agency or Agencies	**(1)** KS	**(2)** NJ, FL	**(3)** CO, NY, SC		6
Number of States	21	12	9	4	46

FIGURE 1 State Clean Sweep Lead Agencies



Department of Agriculture:	*29 states*
Other Pesticide Regulatory Agency:	*5 states*
Environmental Agency:	*6 states*
Other Lead Agency or Agencies:	*6 states*

many cases, local extension agents or industry associations, like the Farm Bureau and state retail associations, have a working relationship with farmers and can build support for Clean Sweeps. They may also have names and mailing addresses of potential participants, and they may be able to solicit volunteers or collection sites. Finally, the lead agency (if it is the pesticide regulatory agency) must develop a close working relationship with the state waste agency to resolve any regulatory issues involved with collecting, transporting and disposing of waste pesticides.

2.2 What are the sources of Clean Sweep program funding?

Clean Sweep programs are funded, to varying degrees, by state pesticide registration fees, other fee-based funds, state general funds, participant fees, EPA grants, county funds, in-kind services, and other grants. States often utilize more than one funding source and the source or sources commonly vary over time.

Pesticide registration fees: States routinely collect registration fees from pesticide companies for each product sold within the state. A state undertaking a comprehensive Clean Sweep program will often raise the registration fee and use the additional money to fund Clean Sweeps and other stewardship-oriented programs. For example, the North Carolina General Assembly enacted legislation in 1993, creating an Environmental Trust Fund to support a statewide agromedicine program and pesticide environmental programs. This legislation received unprecedented broad support in North Carolina from environmental groups, industry groups, commodity organizations, regulatory agencies and legislators. Pesticide companies supported paying additional fees in order to show their commitment to environmental stewardship. Seventy-five percent of the Environmental Trust Fund budget is allocated to the Department of Agriculture and Consumer Services for its pesticide programs, including establishing an empty container management program to enhance its pesticide disposal program. The additional fees from pesticide registration are earmarked for container recycling rather than pesticide disposal.

Also in 1993, Mississippi enacted the Mississippi Waste Pesticide Disposal Law, which authorized an increase in state pesticide product registration fees from $50 to $100 to fund a pesticide collection and disposal program. A sunset clause in the legislation limited the use of pesticide registration fees for funding the disposal program to five years. As a result, the program manager must now seek annual funding from other sources to continue pesticide collections.

In March 2001, the Arkansas General Assembly approved legislation that established an Abandoned Pesticide Disposal Program and authorized the state Plant Board to collect $50 per registered pesticide per year to fund the program. The Abandoned Pesticide Disposal Fee must be

paid beginning in 2002 for products registered and re-registered in Arkansas.

Table 2 identifies each state's funding mechanisms and Figure 2 shows the number of states that have used each kind of funding.

Fee-based funds: Several states dedicate fees collected for certain activities to Clean Sweep programs. For example, Texas uses fees on hazardous waste and industrial solid waste generators and waste management units; Montana uses dealer and certified applicator fees; Iowa uses a Groundwater Protection Fund generated from tonnage fees at landfills and permit fees charged to retailers of hazardous materials; and Delaware used a $2 per ton surcharge on solid waste disposal fees. The Washington state program is funded under its Toxics Control Account, which receives money largely from a tax on hazardous substances, including petroleum products, pesticides and other chemicals. In fiscal year 2000, the Washington State Department of Agriculture spent almost $238,500 on pesticide disposal, which was less than 1 percent of the $26 million expenditures of the State Toxics Control Account.

State funds: Some state legislatures consistently budget funds for Clean Sweep programs while others budget funds intermittently. The North Carolina General Assembly annually funds the Pesticide Disposal Assistance Program of the Department of Agriculture and Consumer Services. Tennessee began its waste collection program in 1998 with funding for seven years as part of the State Management Plan for Protection of Groundwater from pesticides. The Florida Department of Environmental Protection received an appropriation of $300,000 for state fiscal year 2000-2001 to support the first year of a comprehensive waste pesticide collection and disposal program.

EPA grants: As discussed in Section 2.3, EPA funds have comprised a small percentage of the total funding for Clean Sweep programs and have been used to provide seed money for new programs, implement targeted programs after the criteria in cooperative agreements were satisfied, support the goals of other EPA programs or support special needs.

Participant fees: California, Colorado, Connecticut, Massachusetts, Michigan, Montana, and Oregon have charged fees to all Clean Sweep participants to wholly or partially cover the cost of collection and disposal, but such fees may be a deterrent to participation. Massachusetts charges from $1.10 to $1.35 per pound for solids and $9 per gallon for liquids, which is considerably less than the cost of independent disposal by individual farmers. However, during 1998, many Massachusetts farmers suffered significant losses and were unlikely to give pesticide disposal a high priority with their limited incomes. The 1998 collection, the first in eight years, produced a relatively low collection volume of approximately 39,000 pounds compared with more than 85,000 pounds collected in 1990. State representatives attribute this low total at least partially to the participant fee. Colorado has completely financed its Clean Sweep program with participant fees of $2.25 to $2.65 per pound. California wholly funds its program with participant fees, while participant fees in Connecticut and Michigan only cover a portion of the program costs. In Montana, participants pay $1 per pound for the first 200 pounds and $0.50 per pound for amounts in excess of 200 pounds. This accounts for about 25 percent of Montana's funding.

County funds: In New Jersey and New York, counties organize and fund farm pesticide collection programs. At least 14 New Jersey counties allow farmers to participate in their household hazardous

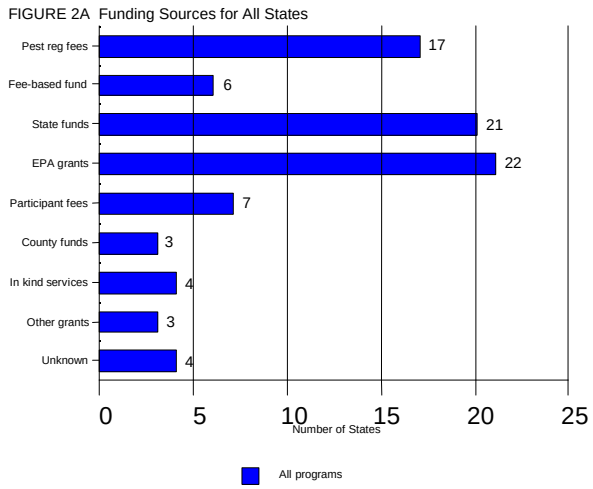
TABLE 2 Clean Sweep Funding Sources by State

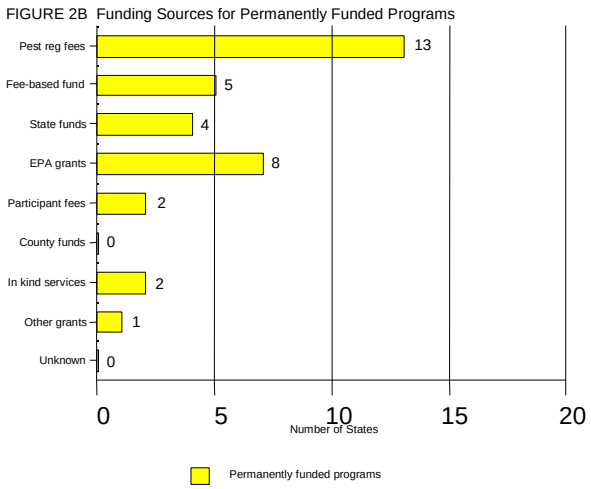
$ indicates source of funds

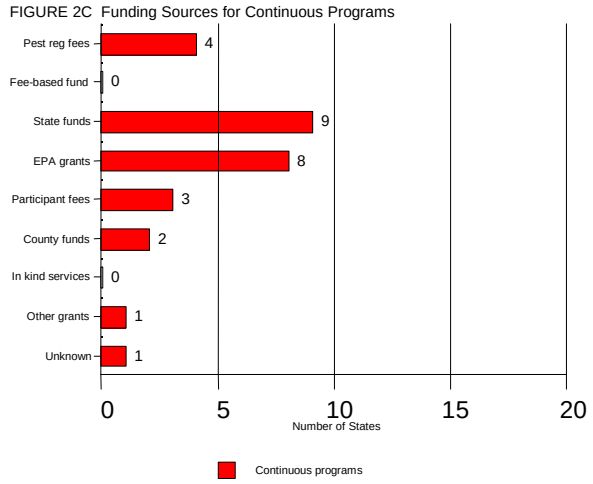
Sources / States	Pesticide reg. fees	Fee-based fund	State funds	EPA grants	Participant fees	County funds	In kind services	Other grants	Unknown
Permanently Funded Programs									
Georgia			$	$					
Idaho			$						
Iowa		$							
Kansas		$		$					
Kentucky	$								
Michigan	$			$	$		$		
Minnesota	$			$					
Montana		$			$				
Nevada	$								
North Carolina			$						
North Dakota	$								
Ohio	$			$					
Pennsylvania	$								
South Dakota	$								
Tennessee	$		$	$					
Texas		$					$	$	
Utah	$								
Vermont	$								
Virginia	$			$					
Washington		$							
Wisconsin	$			$					
Subtotal	**13**	**5**	**4**	**8**	**2**	**0**	**2**	**1**	**0**
Continuous Programs									
California					$				
Florida			$			$			$
Illinois			$	$					

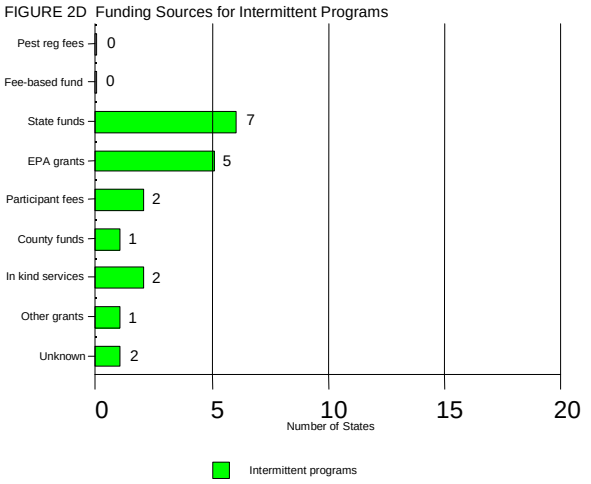
Sources / States	Pesticide reg. fees	Fee-based fund	State funds	EPA grants	Participant fees	County funds	In kind services	Other grants	Unknown
Indiana			$	$					
Maine	$		$	$					
Maryland			$	$					
Massachusetts			$	$	$				
Mississippi	$			$				$	
Nebraska	$		$	$					
New Jersey			$			$			
Oregon				$	$				
West Virginia	$		$						
Subtotal	**4**	**0**	**9**	**8**	**3**	**2**	**0**	**1**	**1**
Intermittent Programs									
Alabama			$	$				$	
Arkansas			$						$
Colorado			$	$	$				
Connecticut					$				$
Hawaii			$	$					
Louisiana			$				$		
Missouri			$	$					
New York			$	$		$			
South Carolina							$		
Subtotal	**0**	**0**	**7**	**5**	**2**	**1**	**2**	**1**	**2**
One-Time Programs									
Delaware		$							
New Hampshire			$						
Rhode Island									$
Wyoming				$					
Subtotal	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**1**
All Programs (Permanently funded, continuous, intermittent and one time)									
Total	**17**	**6**	**21**	**22**	**7**	**3**	**4**	**3**	**4**

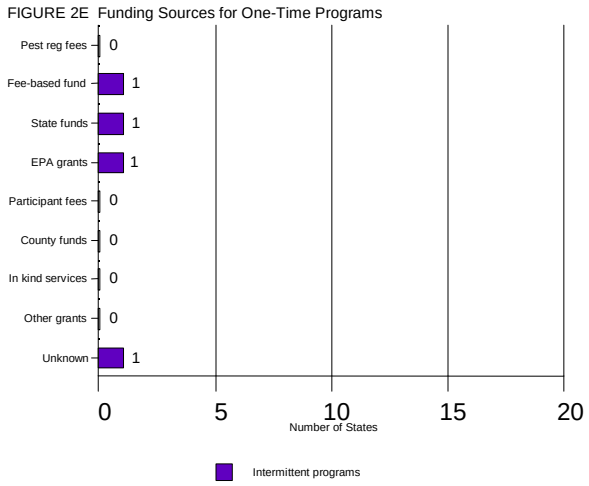
FIGURE 2 Clean Sweep Funding Sources by Source











waste collections, and a few charge a fee depending on the amount of pesticide.

In kind services: While Louisiana and South Carolina have used partnerships and in-kind services to implement earlier programs, Texas is the only state currently using this method. Texas has enlisted regional recyclers to provide collection services for materials other than pesticides, such as batteries and used oil, and has obtained container granulation services from a pesticide container recycler in collaboration with the Ag Container Recycling Council (ACRC).

Other grants: Texas has successfully garnered funds and partnerships from state agencies and private organizations including the South Texas Agricultural Chemical Association, the ACRC, the Texas Agricultural Extension Service, the Texas Department of Agriculture, and local environmental groups. Alabama and Mississippi have received grants from the Tennessee Valley Authority for their programs.

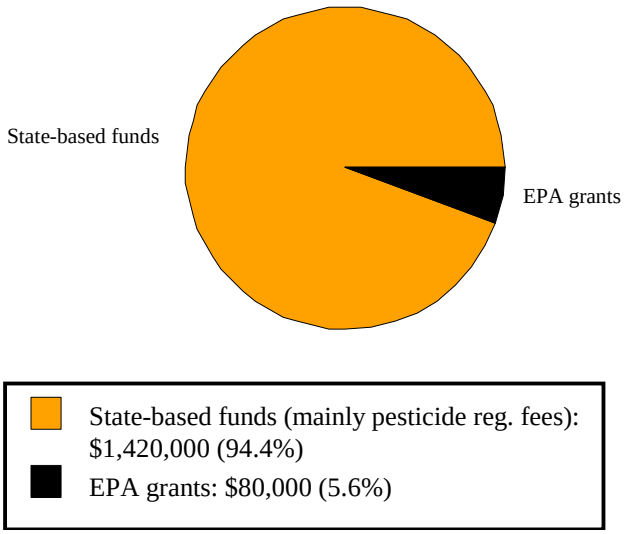
2.3 To what extent has EPA provided funding to Clean Sweep programs?

EPA has funded only a small percentage of the total cost of Clean Sweep programs. Since detailed cost and funding data for every state's Clean Sweep program are not available, it is not possible to provide the total amount and proportion of EPA funding. However, information on Ohio's funding is available and is typical of other states. From 1993 through 2000, Ohio spent more than $1.5 million to collect and dispose of over one million pounds of pesticides. With the exception of $80,000 received from EPA under the Coastal Environmental Management Program for collections in Lake Erie counties, the Ohio Department of Agriculture has paid all program costs. The majority of the project funding was generated from state pesticide registration fees and the EPA grant comprised less than 6 percent of Ohio's total funding, as shown in Figure 3.

The limited EPA funds used to support state and locally run Clean Sweep programs generally fall into one or more of the following general categories.

Providing Seed Money. In several cases, EPA has funded pilot projects, which were intended to demonstrate the necessity and effectiveness of Clean Sweep programs to government officials and the public. An EPA grant of $75,000 under the Clean Water Act for a pilot project was coupled with

Figure 3 Ohio Funding Sources



Colorado's commitment of a $50,000 in-kind match to fund the state's first Clean Sweep in 1995. Since then, participant fees have funded three years of collections in Colorado. Similarly, Georgia received an EPA grant in 1993 of $48,000 for a pilot collection, and a second grant of $40,000 for a 1996 collection. These events were so successful that the Georgia Department of Natural Resources provided a solid waste grant of $50,000 to conduct the 1997 collection. State funds have funded subsequent collections and the Georgia General Assembly plans to allocate up to a total of $2.5 million. Maryland's Clean Sweep program began in 1995 with an EPA grant of $75,000 and state funds carried the program through 1999. EPA's Region 5 provided seed money for Clean Sweep programs in the late 1980's, and now most of the Region 5 states – Michigan, Minnesota, Ohio, and Wisconsin – have programs that are funded through state pesticide registration fees.

Satisfying Criteria in Cooperative Agreements. FIFRA gives EPA authority to enter into cooperative agreements with and to provide grants to states to implement federal pesticide regulatory requirements.

The grants support enforcement and compliance efforts on the use of pesticides and field programs. There are three examples of field programs: (1) applicator certification and training; (2) ground water programs; and (3) worker protection efforts. If a state meets the standards set by the cooperative agreement, it has the discretion to request funds for activities outside the normal scope of the agreement, provided the activity furthers the overall goal of protecting public health and the environment from pesticides. Some states have taken this opportunity to request funds to supplement their Clean Sweep programs.

Supporting the Goals of Another EPA Program. As described in section 1.2, the objectives of Clean Sweep programs are consistent with the goals of several existing EPA programs, including removing PBT chemicals from the environment and protecting the nation's waters. Occasionally, these other EPA programs have supported state Clean Sweep efforts because EPA determined that such assistance would benefit the environment and support the specific program's goals. For example, Kentucky's Clean Sweep program, which has been continuously funded since 1995 by pesticide registration fees, received almost $17,000 of EPA funding in 1999 from the PBT Initiative. This incremental funding, less than ten percent of Kentucky's total funding, provided an incentive for Kentucky to begin tracking quantities of certain PBT pesticides collected in the state's Clean Sweep program. The Great Lakes Initiative accomplished specific environmental goals and seeded new programs through its funding of Clean Sweeps. In 1992, Region 5 provided assistance ranging from $27,000 to up to $174,000 to counties in the Great Lakes Basin and areas affected by the Mississippi River flooding. In addition, EPA's Coastal Environmental Management funds under the Clean Water Act provided an additional $210,000 for assistance to the entire region.

Supporting Special Needs. Occasionally, EPA provides funding to states in an area that suffered a natural disaster. In the Midwest, EPA goals have been achieved by funding Clean Sweeps in areas of concern in the Great Lakes Basin and along the Mississippi River during flood years.

2.4 Who may participate in Clean Sweep programs?

Since Clean Sweep programs are defined as the collection of unwanted or waste agricultural pesticides, they are directed – at least initially – at farmers. In eight states, the programs are limited to farmers and ranchers. Five states limit participation to farmers and households. The other states allow businesses other than farmers to participate, although some businesses must pay at least part of the disposal cost. Kansas allows dealers, manufacturers and distributors to participate on a cash-on-delivery basis and Maine and Florida require payment of the contracted disposal rate ($1.30 to $2 per pound). In Colorado and Oregon, larger businesses and retailers may participate and must pay the same fee as farmers and other pesticide users.

Other participants allowed by various states include golf courses, pest control operators, government agencies (county, state and federal), greenhouse and nursery operators, schools, and parks. Permanently funded programs allow a wide range of participants. As shown in Table 3 and Figure 4, all of the 21 permanently funded programs allow farmers and at least three other kinds of participants in their Clean Sweeps. Seven, or 58 percent, of the continuous programs also allow a wide range of participants. The majority of intermittent and one-time programs allow only farmers or farmers and households.

Many states began their programs with farmers only and expanded to include other groups as they gained experience and capacity. Florida began with farmers in 1995 and has expanded to include golf course superintendents, pest control operators and other end-users. Pesticide retailers and distributors may also participate, but must make arrangements in advance and pay the contract price for disposal. Illinois included only farmers until 1998, when it opened participation to the state's structural pest control operators. Wisconsin has opened its program from farmers only to include agricultural businesses, government agencies, private schools, manufacturers, independent and commercial applicators, agricultural cooperatives, golf courses, landscape companies, real estate management companies, lumberyards, marinas, hardware stores, and others. These businesses and other

FIGURE 4 State Clean Sweep Participants

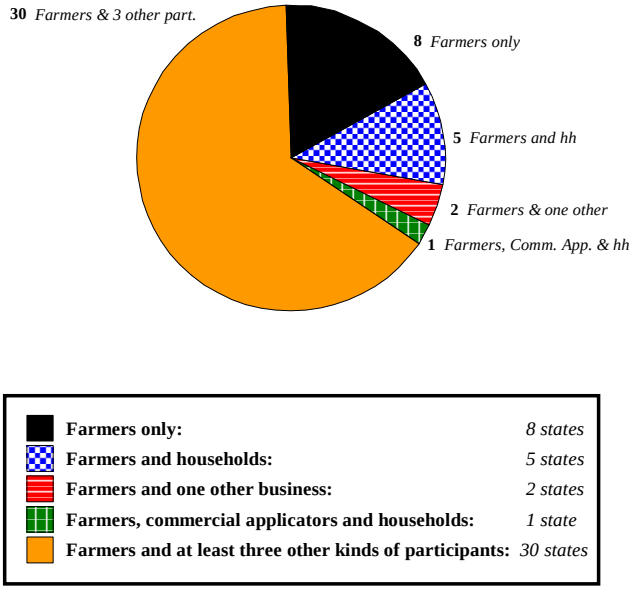


TABLE 3 Clean Sweep Participants by Program Category

Each cell contains (1) the number of states with the identified participants and (2) a listing of those states

Participants \ Category	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Farmers[1] only		(3) CA, MD, WV	(4) AR, CT, LA, MO	(1) NH	8
Farmers[1] and households		(1) NJ	(3) AL, HI, SC	(1) DE	5
Farmers[1] and one other business		(1) IL		(1) RI	2
Farmers[1], commercial applicators and households				(1) WY	1
Farmers[1] and three or more of the following: commercial applicators, retailers, golf courses, households, governments (county, state or federal), CESQG, manufacturers, distributors, private landowners, pest control operators, nurseries, garden centers, greenhouses, landscapers, schools, parks	(21) GA, ID, IA, KS, KY, MI, MN, MT, NV, NC, ND, OH, PA, SD, TN, TX, UT, VT, VA, WA, WI	(7) FL, IN, ME, MA, MS, NE, OR	(2) CO, NY		30
Number of States	21	12	9	4	46

Note: (1) Farmers = farmers and ranchers.

participants pay half the disposal cost for agricultural pesticides and the full disposal costs for other wastes. Even with paying the full disposal costs, they generally save 20 percent to 30 percent of the cost of having a waste hauler pick up waste chemicals at their location.

2.5 *What materials are collected in Clean Sweep programs?*

Clean Sweep programs are intended to collect unwanted pesticides, and 34 of the states with Clean Sweep programs collect only pesticides. All of these states collect agricultural pesticides, while Colorado, Idaho, Michigan, Montana and North Carolina also collect pesticides from households. Eight other states collect pesticides and all kinds of household hazardous waste as part of their Clean Sweep programs. Four states collect items other than pesticides and household hazardous waste. Texas collects empty pesticide containers, batteries, used oil and oil filters, and, at several past events, metal and wire. Wisconsin collects unwanted chemicals from non-pesticide businesses. In 1997, Oregon began to collect waste pesticides as universal waste in conjunction with its household hazardous waste collections. Oregon also included wastes from businesses that generate small quantities of hazardous waste, called conditionally exempt small quantity generators (CESQGs). In Oregon's program, one contractor collects the different waste streams at one location, thereby reducing the collection cost, but keeps the waste streams separate. Mississippi has collected tires, waste oil and batteries in the past.

In 2001, Wisconsin began accepting sludge from mixing and loading pad sumps and weigh-scale pits. As fertilizer trucks and pesticide application equipment are filled or cleaned, dirt, debris, fertilizers, pesticides and other chemicals collect in the sumps and create disposal problems. Agricultural cooperatives and farm chemical dealers requested assistance in getting rid of these materials in an environmentally sound manner. The state agreed to accept this waste with the condition that participants pay one-half of the disposal costs. Companies are asked to remove as much water as possible from the sludge before bringing it to the Clean Sweep event.

Information on the materials collected by each state in its Clean Sweep program is provided in Table 4 and Figure 5.

Most states also conduct, or have conducted, empty pesticide container collection and recycling programs, often with the assistance and collaboration of the Ag Container Recycling Council (ACRC), a non-profit organization. The ACRC is composed largely of pesticide manufacturers, who each contribute to the Council an amount of money proportional to the quantity of plastic containers the company uses to distribute its pesticides. The ACRC assists pesticide container collection programs by providing training, funding, guidance

FIGURE 5 State Clean Sweep Materials Collected

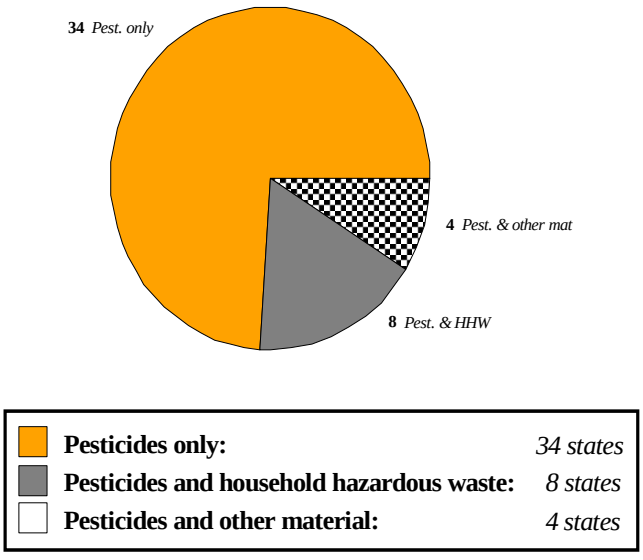


TABLE 4 Clean Sweep Materials Collected by Program Category
Each cell contains (1) the number of states which collect the indicated material and (2) a listing of those states

Materials \ Category	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Pesticides only[1]	**(17)** GA, ID, KS, KY, MI, MN, MT, NV, NC, ND, OH, PA, SD, TN, UT, VA, WA	**(9)** CA, FL, IL, IN, ME, MD, MA, NE, WV	**(5)** AR, CO, CT, LA, MO	**(3)** NH, RI, WY	34
Pesticides and household hazardous waste	**(2)** IA, VT	**(1)** NJ	**(4)** AL, HI, NY, SC	**(1)** DE	8
Pesticides and other material	**(2)** TX, WI	**(2)** MS, OR			4
Total	21	12	9	4	46

Note: (1) All states collect agricultural pesticides. Several also collect pesticides from households (CO, ID, MI, MT and NC). Depending on allowable participants, states may also collect pesticides from other sources, such as golf courses, pest control operators and parks.

and public outreach materials. ACRC enters into contractual agreements with independent companies which consolidate containers from collection sites and then ship them to facilities where they are granulated and recycled into other products. ACRC also conducts research to find more uses for granulated plastic, such as plastic pallets for pesticide storage. The ACRC has helped states and counties collect and recycle more than 46 million pounds of plastic pesticide containers since it was founded in 1992.[1]

2.6 Are all pesticides accepted in Clean Sweep programs?

While Clean Sweep programs accept a broad range of pesticides, most programs will not accept pesticide-contaminated material such as rinsate, soil and debris. Also, many programs place limits on pesticides that potentially contain dioxin, which include 2,4,5-T, Silvex, Ronnel and pentachlorophenol. Because of the difficulty in disposing of these pesticides (discussed in Section 4.5), some states no longer collect them and others only collect small quantities, typically less than 5 gallons, to avoid paying long-term storage costs. State policy may change from year to year, depending on contractor specifications and the availability of an incinerator which accepts dioxin-containing materials. States are concerned about rejecting these pesticides, which might then be discarded in an unsafe manner. However, states do not want to commit their limited funding to long-term storage while awaiting the availability of an appropriate incinerator. Some states ask participants to store the dioxin pesticides until further notice and provide overpack materials to facilitate their safe storage.

[1] ACRC web site: http://www.acrecycle.org/

Some programs reject certain products or containers. For example, South Carolina did not accept gaseous fumigants or compounds containing mercury. Texas will not accept unrinsed or improperly rinsed containers. Many programs will not accept compressed gas cylinders, explosive or radioactive material, or large quantities of unknown material.

2.7 How is the material collected during Clean Sweep programs?

There are three basic collection methods:

Single day events: Single day events are well advertised one-day Clean Sweep collections held at convenient locations. The events are usually carefully coordinated with the local authorities and use a hazardous waste management contractor to collect and dispose of the day's collections. A centrally located site, such as a Department of Transportation facility, a fairground or a dealership, is an ideal location.

Advantages of one-day events include the economy of having all resources available and mobilized for a single well-advertised date, not needing a permanent site, the ability to include near-by counties in the collections, and the possibility of covering the whole state by scheduling one-day events in different regions. The main disadvantages of single day events are time limitations and the potential risk and regulatory issues which may arise when participants transport the material. Partici-pants unavailable on the scheduled day will miss the event and other participants may be unwilling to wait in line. In addition, one-day events are likely to be held outdoors and are therefore subject to weather conditions. The potential for pesticide releases causing contamination at a neutral site may be a disincentive for choosing this method. In spite of these disadvantages, single day collections are the most common collection method, and only seven of the states that have had programs, Colorado, Delaware, Kentucky, Maryland, Michigan, Rhode Island and Virginia, have not used this method. Over half of the states with programs – 25 states – collect materials only at single day events. In states which combine Clean Sweep programs with household hazardous waste collection, the same collection site is used but there is a separate line for each waste stream.

Permanent sites: Participants take their material to a "permanent" site, usually a household hazardous waste collection facility, or in the case of Vermont, to a landfill. Out of the nine states that have used permanent collection sites, seven have permanently funded Clean Sweep programs.

Permanent sites allow maximum flexibility to participants who may not be available for single day collection events and spread the volume collected over time, which reduces waiting in lines. A permanent site is more likely to be indoors or have a collection area protected from the weather. A permanent site entails the need for a facility and personnel to staff and maintain it. However, because the volume is distributed over time, a small staff can manage the logistics compared to the large staff needed to handle a one-day event. Even when permanent facilities advertise a collection event at their site, there is little chance of being overwhelmed since service is available year round. Permanent facilities offer unique opportunities to sponsor chemical exchange programs and increase local hazardous waste education. Because these efforts lead to improved pesticide management and reduced waste disposal costs, states and local governments use permanent facilities to provide extra educational programs and technical assistance. As with single day events, potential risk and regulatory issues may arise when participants transport the material themselves. The fact that

participants may be unwilling to drive long distances to a single facility is a likely reason that Michigan is the one state that uses only permanent sites to collect pesticides.

On-site pick up: For on-site pick up, the hazardous waste contractor and/or the lead government agency travel to each participant's site to collect the material. In five states, Colorado, Kentucky, Maryland, Rhode Island and Virginia, this is the only method used. In other states, including Washington and Florida, pre-visits and on-site pick ups are done only if the pesticides pose a very high risk, such as cylinders or deteriorated containers, or if there are very large quantities. Before the material is picked up for disposal, state employees and/or the hazardous waste contractor visit the participant's site to inventory and prepare the material.

On-site pick up presents minimal risk from transporting or handling the pesticides, since it is done by well-trained and equipped contractor employees or state personnel. Other advantages of this method include convenient scheduling for the participant, no need for the participant to transport the pesticides, and no requirement for a permanent site. States can require the contractor to dispose of any contaminated soil found under failed containers. However, on-site pick up can be more expensive than other collection methods. It is labor and time intensive because the contractor must travel to each site, unload empty overpack drums and load full drums.

Information on the methods used to collect pesticides at Clean Sweep programs is provided in Table 5 and Figure 6.

At least 15 states have used more than one collection method, and larger programs tend to use several methods simultaneously. For example, permanently funded programs in Minnesota, North Carolina and Vermont have used all three methods to conduct pesticide collections. Wisconsin has 19 counties offering season-long services and also conducts one-day events and multi-county collections. Wisconsin offers grants of up to $30,000 per year to counties with permanent collection facilities if the county contributes $3,000 in cash or services. Counties can select their own waste hauler, although they are discouraged from creating local fee schedules. All sites serve as collection sites for businesses and very small quantity generators. Many counties have found it desirable to offer household hazardous waste service at the same time they offer agricultural and business service.

The method of collection can change over time. For example, when North Carolina began its program in 1980, state inspectors collected pesticides from farm and home sites and transported the material to storage facilities located throughout the state. The material staged in the storage facilities was consolidated at a central location in Raleigh, where it was collected by a contractor. In January 1997, the state began to collect pesticides at both designated single day events and at permanent household hazardous waste collection sites. The amount of pesticides collected annually has increased since 1997. After 17 years of experience with on-site pick up, North Carolina decided that other methods are more efficient and effective, and the state plans to use both the single day and permanent site methods in the future.

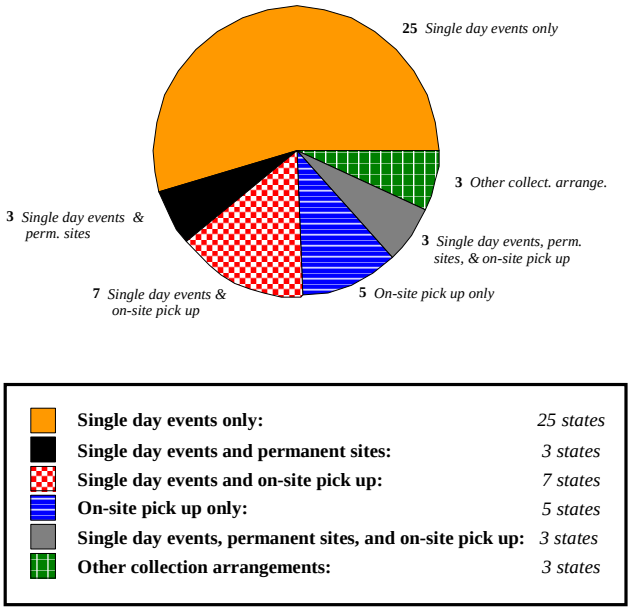
Wisconsin expanded its collection methods to reach new participants in remote areas. The location of permanent sites has posed a challenge to the program because, contrary to expectations, few farmers have been willing to drive wastes into cities. Consequently, permanent facilities have been strongly encouraged to create satellite sites and hold special "farm chemical collection weeks," which have greatly improved collections.

TABLE 5 Clean Sweep Methods of Collection by Program Category
Each cell contains (1) the number of states with the indicated collection method and (2) a listing of those states

Collection Method \ Category	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Single Day Events Only	**(7)** ID, MT, ND, OH, SD, TX, UT	**(9)** CA, IL, IN, ME, MA, MS, NE, OR, WV	**(7)** AL, CT, HI, LA, MO, NY, SC	**(2)** NH, WY	25
Single Day Events and Permanent Sites	**(2)** IA, KS	**(1)** NJ			3
Single Day Events and On-site Pick-up	**(5)** GA, NV, PA, TN, WA	**(1)** FL	**(1)** AR		7
On-site Pick up Only	**(2)** KY, VA	**(1)** MD	**(1)** CO	**(1)** RI	5
Single Day Events, Permanent Sites, and On-site Pick up	**(3)** MN, NC, VT				3
Other Collection Arrangements[1]	**(2)** MI, WI			**(1)** DE	3
Total	21	12	9	4	46

Note: (1) The other arrangements are – MI: Permanent sites only; WI: Single day events, permanent sites and multi-county collections; DE: Permanent sites and on-site pick up.

FIGURE 6 State Clean Sweep Methods of Collection



Minnesota originally held regional one-day collection events, but found that the volume of pesticides collected on a single day, 30,000 pounds or more, was difficult to manage. State officials revised their strategy and began to provide a collection opportunity in every county at least once every other year. In 1997, the Minnesota Department of Agriculture formed a partnership with several regional household hazardous waste programs to establish several year-round pesticide drop-off locations. These sites accept pesticides from individuals or businesses which need timely disposal in an emergency situation. Collected pesticides are kept at storage facilities until a hazardous waste contractor collects them.

2.8 *Do participants have to register before the material is collected?*

Twenty-six states require participants to register with the state or contractor before pesticides are collected. Seven other states encourage pre-registration but do not require it or require it only for certain quantities of material or certain types of participants. Ten states do not require pre-registration, including two that have dropped the requirement in recent years. Information on the requirement for pre-registration is shown in Table 6 and Figure 7.

Registration is essential for on-site pick up because the contractor has to know in advance how many stops will be made and what quantities and types of pesticide will be collected to determine the number of trucks and personnel needed. For other collection methods, such as single day events, pre-

FIGURE 7 State Requirements for Clean Sweep Pre-Registration

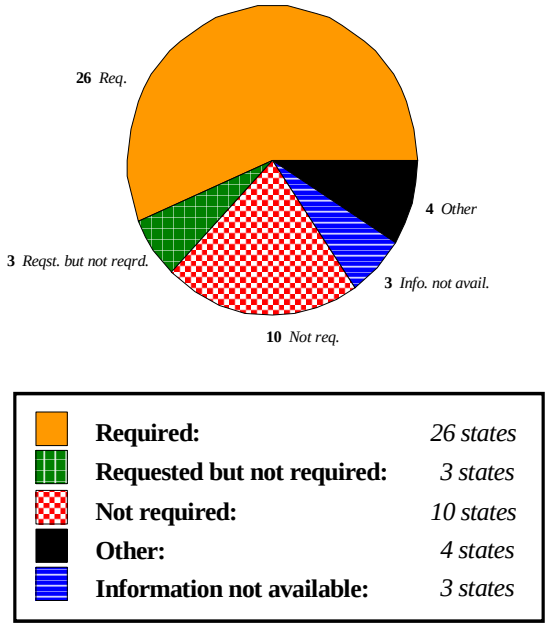


TABLE 6 Requirement for Clean Sweep Collection Pre-Registration by Program Category

Each cell contains (1) the number of states with the indicated pre-registration requirement and (2) a listing of those states

Registration \ Category	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Required	**(10)** GA, IA, KY, MT, NV, OH, SD, UT, VA, WA	**(8)** CA, IL, IN, ME, MD, MA, OR, WV	**(6)** AL, AR, CO, CT, HI, NY	**(2)** RI, WY	26
Requested but not required	**(2)** ID, KS		**(1)** LA		3
Not required[1]	**(5)** MN, ND, TN, TX, VT	**(3)** FL, NE, MS	**(1)** SC	**(1)** NH	10
Other	**(4)** MI, NC, PA, WI				4
Information not available		**(1)** NJ	**(1)** MO	**(1)** DE	3
Total	21	12	9	4	46

Note: (1) Two of these states (MN and ND) used to require pre-registration, but don't require it anymore.

registration facilitates planning and helps ensure a smoothly run event. When Clean Sweep program managers can accurately estimate the amount of material expected, the contractor can estimate the amount of supplies and personnel required more precisely and can assign appointment times to prevent delays and back ups. In some states, registration is needed for regulatory compliance. For example, Washington and Oregon return the approved registration form to participants, who then use them as bills of lading for transporting the waste to the collection site.

Registration has probably kept some people from participating in Clean Sweep programs because of concern about how the information might be used by government regulatory agencies. Some rural residents do not accept the program's "amnesty" or feel that the term itself implies guilt on the part of the participant. Registration only provides an estimate of the amount to be collected because participants may underestimate their stocks or may bring a larger quantity of pesticides than they registered. In addition, people who did not register may show up. For example, Louisiana reported that pre-registration for its 1996 program was for 26 tons of pesticide, but the state collected over 201 tons. State officials attributed the large amount of undeclared materials to a fear of punitive fines. A farmer pre-registered 100 pounds of unwanted pesticides in West Virginia's pilot Clean Sweep program. When he realized it was truly an amnesty program, the farmer provided an additional 5,000 pounds. Turning people away who do not pre-register has major disadvantages. Such participants may be discouraged after making the effort to get to the event and may be tempted to dump the material indiscriminantly rather than to continue storing it.

Several states that originally required or requested pre-registration changed their procedures. Minnesota, for example, dropped the requirement when they determined that more than half of their participants were walk-ins. Similarly, North Dakota dropped their pre-registration requirement and Florida no longer requests it.

2.9 How is the material disposed of?

The vast majority of material collected is disposed in high temperature hazardous waste incinerators. Pesticides that cannot be incinerated are sent to permitted hazardous waste landfills. For example, mercury products collected in Colorado were stabilized and landfilled. Lead arsenate, a commonly collected pesticide, is landfilled in permitted facilities. Seventeen states listed incineration as their sole disposal method, and 15 states reported using both incineration and landfilling. States make decisions about whether to landfill certain pesticides on a case-by-case basis, depending on the quantities involved, the state's land disposal restrictions, and the hazardous waste contractor's expertise.

Five states reported using a third disposal method in addition to incineration and landfilling, but these methods disposed of a very small percentage of the total. For example, Illinois held three one-day events in 1999. Of the 14,392 pounds of pesticides collected at one event, 13,357 pounds were incinerated, 505 pounds were landfilled and 530 pounds underwent wastewater treatment. At the other two events, all of the pesticides collected were incinerated except for four pounds which were landfilled. Iowa has used some collected waste material in fuel blending, and Wisconsin has reclaimed or reprocessed approximately 3 percent of the pesticides collected. It is not clear whether such infrequently used disposal methods are cost-effective. Both Illinois and Tennessee reported that they recycle products when possible, but Tennessee estimated that less than 1 percent of the collected pesticides are recycled. South Carolina provided

some product to a cement kiln for fuel, but this accounted for less than 0.2 percent of the annual collection.

Information on the methods used by the states to dispose of pesticides and other materials collected at Clean Sweep programs is provided in Table 7 and Figure 8.

2.10 Can usable pesticides be exchanged or donated to a party which needs or can use them?

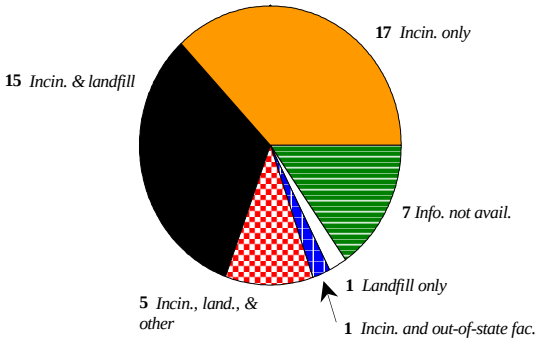
When unopened, legally usable products are collected, common sense suggests that it would be better and more energy efficient to use them than to dispose of them. Tactics employed to accomplish this include product exchanges, redistribution tables and recycling centers.

Programs to find a user for collected pesticides must be well-planned and orchestrated, with good advertising, strong local leadership and on-site logistics management. Regulatory and liability issues may pose barriers to exchange programs when pesticides are transferred from one owner to another. For example, many agricultural products are restricted use products, which can only be distributed to applicators certified to use them. This means that before such products can be exchanged, someone has to check credentials at the collection event. Additionally, the age, efficacy, and previous storage conditions of the pesticides are often unknown, so there is no guarantee that a

TABLE 7 Clean Sweep Methods of Disposal by Program Category
Each cell contains (1) the number of states with the indicated disposal method and (2) a listing of those states

Category / Disposal Method	Permanently Funded	Continuous	Intermittent	One-Time	Number of States
Incineration only	**(9)** GA, KY, MI, MN, MT, NV, ND, SD, UT	**(6)** CA, IN, MD, MS, MA, WV	**(1)** LA	**(1)** WY	17
Incineration and landfill	**(9)** ID, KS, NC, OH, PA, TX, VT, VA, WA	**(2)** NE, OR	**(3)** AL, AR, CO	**(1)** DE	15
Incineration, landfill, and other methods	**(3)** IA, TN, WI	**(1)** IL	**(1)** SC		5
Incineration and out-of-state facilities only		**(1)** ME			1
Landfill only				**(1)** RI	1
Information not available		**(2)** NJ, FL	**(4)** CT, HI, MO, NY	**(1)** NH	7
Total	21	12	9	4	46

FIGURE 8 State Clean Sweep Methods of Disposal



Incineration only:	*17 states*
Incineration and landfill:	*15 states*
Incineration, landfill, and other methods:	*5 states*
Incineration and out-of-state facilities only:	*1 state*
Landfill only:	*1 state*
Information not available:	*7 states*

pesticide's composition remains within the specifications of its registration. As a result, it may be necessary to have recipients sign waivers or letters of understanding.

Despite these considerations, Kansas, Kentucky, Nevada, Pennsylvania, Utah, Vermont, and Wisconsin allow exchange, generally on a limited basis. Texas has an exchange program for household hazardous waste collections and tried having a "swap shop" for pesticides in sealed, unopened containers that were neither banned nor restricted. Ohio has donated useable products. Illinois attempted a swap program in 1994, but discontinued it because the Department of Agriculture found that contacting the appropriate people to facilitate the exchange was very time-consuming. In addition, Illinois determined there was considerable uncertainty about the quality of the products and concluded that most products were in need of disposal. It is possible that other programs also allow pesticide exchange on a case-by-case basis, especially if containers are unopened.

2.11 What is involved with establishing a contract between the lead agency and a hazardous waste management company?

State and local governments typically hire hazardous waste management companies to handle the pesticides in Clean Sweep programs. In nearly all programs, the contractor provides all materials and services for collection, including manifesting, packaging, transporting and disposing of the collected material. In many cases, the contractor will collect pesticides at end-user locations if containers are sufficiently deteriorated to make transportation dangerous. The contractor may assume all responsibility as the generator of the waste and may hold the state harmless from any claims.

Contracts include insurance such as worker's compensation, general liability, and pollution liability. Contractors maintain a health and safety program and are responsible for obtaining all licenses, permits, manifests and other documents necessary for compliance with federal, state and local regulations, including those established by the Occupational Safety and Health Administration and Department of Transportation and EPA's requirements under the Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act (commonly called Superfund), and Superfund Amendments Reauthorization Act. Site set-up and restoration at single day events are the contractor's responsibility. In states that conduct on-site collections at participants' sites, the contractor may also commit to stabilizing and cleaning up contaminated soil around deteriorated containers. Some waste management companies do on-site "finger-

print" analyses, rapid field tests conducted to identify a chemical by pinpointing certain of its baseline physical characteristics, such as flash point, to determine compatibility of unknown chemicals. Contracts can vary greatly among states, but a sample contract is provided in Appendix III. Table 8 displays the unit costs for Minnesota's current contract.

Table 8: Typical Charges in Minnesota's 1999-2002 Contract

Activity	Units	Cost ($)
Planning assistance	per person per hour	$0.00
Mobilization/demobilization [1]	per mile per person	$1.68
Incineration of hazardous waste	per net pound	$1.43
Incineration of nonregulated, nonhazardous waste	per net pound	$1.43
Fuel blending of hazardous, nonregulated or nonhazardous waste	per net pound	$0.50
Incineration of compressed gas cylinders	each	$750.00
Incineration of F-coded dioxin-bearing waste	per net pound	$2.00
Landfilling	per net pound	$0.12
Identification of unknowns	per analysis	$1,200.00
Short term storage (less than 10 days)	per drum per day	$3.00
Long term storage (more than 10 days)	per drum per day	$5.00

Note: (1) Fee for traveling to and from the site, setting up the Clean Sweep event, and dismantling.

In 1997, North Dakota collected agricultural chemicals and household hazardous waste to help clean up damage caused by the Red River flood. Table 9 lists costs for the collection, packaging, profiling, transportation and treatment or disposal of the collected materials.

States have a variety of methods for engaging hazardous waste contractors to collect and dispose of waste pesticides. For example, Michigan's Department of Agriculture (DoA) does not enter into any contracts, but counts on its 15 county grantees to initiate and manage the contracts for household hazardous waste and Clean Sweep collections. The grantees, usually county health departments or occasionally landfill authorities, are reimbursed for their disposal costs. Michigan's strategy is a 3-way collaboration: Michigan DoA pays for disposal, the local grantee initiates and monitors the contract with a hazardous waste management vendor, and the permanent sites were established with EPA grants. While this system saves the DoA from managing the contracts, the main drawback to this strategy is price disparity, with disposal costs ranging from $0.75 per pound to $1.80 per pound from county to county. The largest cost disparity is for mercury disposal, which ranges from $1.50 to $12 per pound, prompting Michigan DoA to consider establishing a state-wide contract

Table 9: Charges in North Dakota's 1997 Contract for a Combined Household Hazardous Waste and Clean Sweep Program

Activity	Units	Cost ($)
Mobilization [1]	not applicable	$28,000
Agricultural chemicals and household chemicals	per net pound	$1.90
Household lab packs [2] for incineration or landfill	per net pound	$2.60
Household reactive lab packs [3] for incineration	per net pound	$6.80
Motor oil	per gallon	$1.00
Antifreeze	per gallon	$2.00
Lead-acid batteries	each	$2.50
Minimum contractual fee	not applicable	$85,000

Notes: (1) Fee for traveling to and from the site, setting up the Clean Sweep event, and dismantling. (2) Overpack drums that hold small containers of non-reactive household waste. (3) Overpack drums holding small containers of household waste that show the RCRA hazardous waste characteristic of reactivity.

for mercury alone. The three most active counties (of 15 permanent sites) also run annual satellite collections in areas which are distant from the permanent centers.

Minnesota's strategy differs from Michigan's in that the state contracts directly with the waste management company and is able to use its services at any time, not only for scheduled collection events, but also for special runs as needed. Minnesota uses the same contractor for Clean Sweeps and household hazardous waste (HHW) collections and saves money because both kinds of waste are collected at the same time and there is only one mobilization fee. Minnesota has learned that it is advisable to include a clause that allows the parties to extend the contract after 1, 2 or 3 years. If legally acceptable, this saves the considerable time and effort involved in rebidding a contract, particularly when the contractor is performing well.

2.12 Which hazardous waste management companies have been or are actively involved with Clean Sweep programs?

A limited number of contractors have been involved with Clean Sweep programs because hazardous waste vendors must have specialized knowledge, experience and equipment and must bid competitively for the state and county government contracts. The following companies are listed for informational purposes only. No endorsement of any company is implied, and other companies are or may soon be entering the field. In addition, the fact that a contractor has been awarded contracts for several years does not guarantee that the contractor will continue to maintain quality control and win future contracts. States have used the following contractors:

- Advanced Environmental Technical Services
- Care Environmental Corporation
- Clean Harbors Environmental Services
- ENSCO Services
- HAZ-M.E.R.T Inc.
- Heritage Environmental Services, LLC
- LWD, Inc.
- MSE Environmental
- Onyx Environmental Services
- Philip Services Corporation
- Safety-Kleen (Columbia, SC).

Addresses, phone numbers and websites for these firms are provided in Appendix IV. These companies can provide a starting point for states wishing to identify potential hazardous waste contractors, the types of services they offer and their locations.

2.13 How can states reduce disposal costs and improve program efficiency?

The methods of collecting, identifying and packing waste pesticides greatly impact the operating costs and efficiency of Clean Sweep programs. For example, a decision to move wastes to an incinerator versus stabilizing them and sending them to a landfill could increase disposal costs by a factor of three to five. Similarly, costs can easily double if a large number of partially filled metal containers are lab packed rather than decanted. Lab packs are overpack drums that contain small containers of waste.

A Clean Sweep program manager's ideas for reducing program costs and improving efficiency[2] are summarized below. Many of the administrative strategies require considerable coordination and planning between the manager and

[2] This discussion is based on presentations by Roger Springman, Wisconsin Department of Agriculture, Trade and Consumer Protection, at the 1997 and 1998 Conferences of the North American Hazardous Materials Management Association.

the waste hauler and a level of sophistication which is difficult to achieve with short-term contracts.

Chemical Waste Handling Strategies

Bulking. Bulking is most commonly applied to paints and other general-purpose solvents, thinners and cleaners, but can also be applied to pesticides. When sufficient quantities of aqueous herbicides are present, the waste hauler can begin herbicide bulking, which reduces costs by nearly 50 percent compared to lab packing. Another common procedure is to move smaller quantities of "bulkables" (products collected in high quantity and which can be easily consolidated) to central locations from satellite sites. Although a considerable amount of insecticides are generated at Wisconsin Clean Sweeps, the fumes associated with insecticide bulking may create safety concerns.

Fuel blending. Diesel fuel, solvents, flammable paint and old gas, which are occasionally brought to waste collections, have monetary value to waste haulers as fuel for incinerators and cement kilns. Pricing credits may be given for these materials based on their chemical characteristics (e.g., halogen and sludge contents).

Cylinder bubbling. Greenhouses, nurseries, and certain horticultural operations often have older, low pressure insecticide and fumigant cylinders for disposal. Since disposal costs can be $800 or more per cylinder, this is one of the most expensive waste streams at Clean Sweeps. Bubbling involves releasing cylinder contents underwater, usually in a five-gallon bucket. The resultant waste stream can typically fit the profile of a liquid-poison, thereby reducing disposal costs by as much as 70 percent. This technique can only be used when valve integrity is absolutely certain and when not prohibited (as "treatment") by some state regulatory agencies.

Decanting 2.5 and 5-gallon containers. Farmers bring large numbers of partially filled 2.5- and 5-gallon herbicide containers to Clean Sweeps. Rather than separately lab packing such containers, similar pesticides can be decanted into a single (or several) 5-gallon container (or 55-gallon drum for greater quantities). This practice can result in 20 to 30 percent savings over lab packing because there is less dead-air space and the containers can be disposed separately.

Removing drum vents. Agricultural and business waste streams include drums of various designs, some of which contain vents which stick up several inches above the drum. Because non-DOT approved and "open" drums cannot be transported, overpacking into salvage drums is prescribed. To avoid extra overpack costs, vents can be removed and plugged, saving over $100 per drum. On-site staff must have drum repair kits to implement this option.

Product recycling. Product exchanges and recycling are effective strategies at household hazardous waste collections, but may pose special problems with restricted use pesticides, which can only be distributed to certified applicators.

Administrative Strategies

Use of public programs. Many states have established specialized services for certain problem materials, such as low-level radioactive materials and explosives. For example, Wisconsin operates a low-level radioactive collection and disposal program funded by fees collected from the nuclear power industry. The program saves schools and other public sites tens of thousands of dollars by aggregating material and avoiding waste hauler mobilization fees.

Waste stream vs. lab pack option. How wastes are initially defined for regulatory purposes affects what rules, paperwork and transportation options apply. According to 49 CFR 173.12b, chemicals of the same DOT hazard class that meet certain size or quantity limits may be placed into a specified shipping container with the resulting manifesting requirements. However, if these same chemicals are considered a "waste stream," drum inventory is no longer necessary and some additional paperwork and technical demands can be reduced, saving 5 to 10 percent in labor.

Use of the Universal Waste Rule. As discussed in section 4.2, the Universal Waste Rule gives managers and waste haulers a regulatory option that can reduce paperwork and handling costs.

Joint program sponsorship. If programs are seen as being sponsored by only one agency, it may be hard to seek cooperative approaches. States have overcome local sponsorship barriers by providing financial incentives, such as reduced cost-share fees and mobilization fees for counties working together in joint or mobile collections. Michigan is among the states that found a suitable partner in industry when looking for a collection site. By enlisting the cooperation and sponsorship of a large Grower's Cooperative, the state was able to establish a permanent collection site.

Pre-registration. One way to facilitate good decision-making is through pre-registration. Early knowledge about the types and quantities of pesticides to be collected allows program staff and waste haulers to estimate the level of resources needed and to identify alternative management options.

Vendor selection. Waste haulers must meet high efficiency standards to run a successful program. Consequently, it is important for program managers to have a responsive vendor or to employ contracting strategies that allow rapid adjustments (e.g., annual contracting or performance-based contracts). The price, indicated by the disposal cost per pound and the mobilization fee, is one indicator of efficiency, although expressing efficiency in dollar figures only hides many important non-monetary values. Vendor commitment, vendor service abilities, liability protection, and vendor end-site control should be as important as price when selecting a contractor.

The effectiveness of contracts in responding to efficiency demands depends largely on the extent to which the vendor is made a partner in the collection process. If the vendor is viewed as an "outsider," there will likely be less incentive for change. Strategies that build incentives or that view vendors as partners are usually more successful. The following questions can be used for efficiency evaluations:

- What incentives are built into the contracting process, including Requests for Proposals and Requests for Bids, to encourage waste haulers to lower costs and improve efficiency while maintaining high customer satisfaction?
- Does the contracting process "test the marketplace" across a wide range of competitors?
- How frequently do sponsors, program management staff and waste hauling staff meet to discuss contract compliance and efficiency issues, and what happens as a result of these meetings?
- What legal and administrative changes are needed to give program managers and sponsors more options in dealing with vendor selection, contract compliance and program efficiency concerns?

Section 3 Clean Sweep Program Results

3.1 How many and what type of Clean Sweep programs have been implemented?

All but four states – Alaska, Arizona, New Mexico and Oklahoma – have conducted at least one Clean Sweep program. This report compiles the information by state even though counties in some states, such as New York and New Jersey, conduct the programs. EPA is unaware of any Clean Sweep programs implemented by tribes or territories. As stated in section 1.6, EPA has classified state programs into five categories. The categories, which reflect the frequency or permanency of the program, are permanently funded, continuous, intermittent, one-time, and never. The states in each category are identified in Figure 9.

Permanently funded: Twenty-one states have continuous programs which are permanently funded. A continuous program is defined as one that has been implemented for at least three consecutive years. Permanent funding is defined as a mechanism that is reliable, consistent and in place year after year, e.g., using a portion of state pesticide registration fees, access to a fund that pays for clean up programs, or consistent state appropriations.

Continuous: Twelve states have continuous programs, meaning a program that has been implemented for at least three consecutive years that does not have permanent funding. Although continuous means "without interruption," a program may still be classified as continuous even if it occasionally skips a year. Of the twelve continuously funded states, ten have active programs, that is, they have been implemented for at least three years in a row and carried out a Clean Sweep program in 2000 or 2001. Two of the twelve continuously funded states have inactive programs, because they did not conduct a program in 2000 or 2001.

Intermittent: Nine states have programs which are not continuous but which have held more than one collection event. There are four active programs (in 2000 or 2001) and five inactive programs.

One-time: Four states have programs which have held one collection event. All of these events were held in 1990 or 1992.

Never: Four states have no existing program and have never held a collection event.

State Clean Sweep Programs by Category

Permanently funded programs: Georgia, Idaho, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nevada, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin

Continuous programs: California, Florida, Illinois, Indiana, Maine, Maryland, Massachusetts, Mississippi, Nebraska, New Jersey, Oregon, West Virginia

Intermittent programs: Alabama, Arkansas, Colorado, Connecticut, Hawaii, Louisiana, Missouri, New York, South Carolina

One-time programs: Delaware, New Hampshire, Rhode Island, Wyoming

Never held a program: Alaska, Arizona, New Mexico, Oklahoma

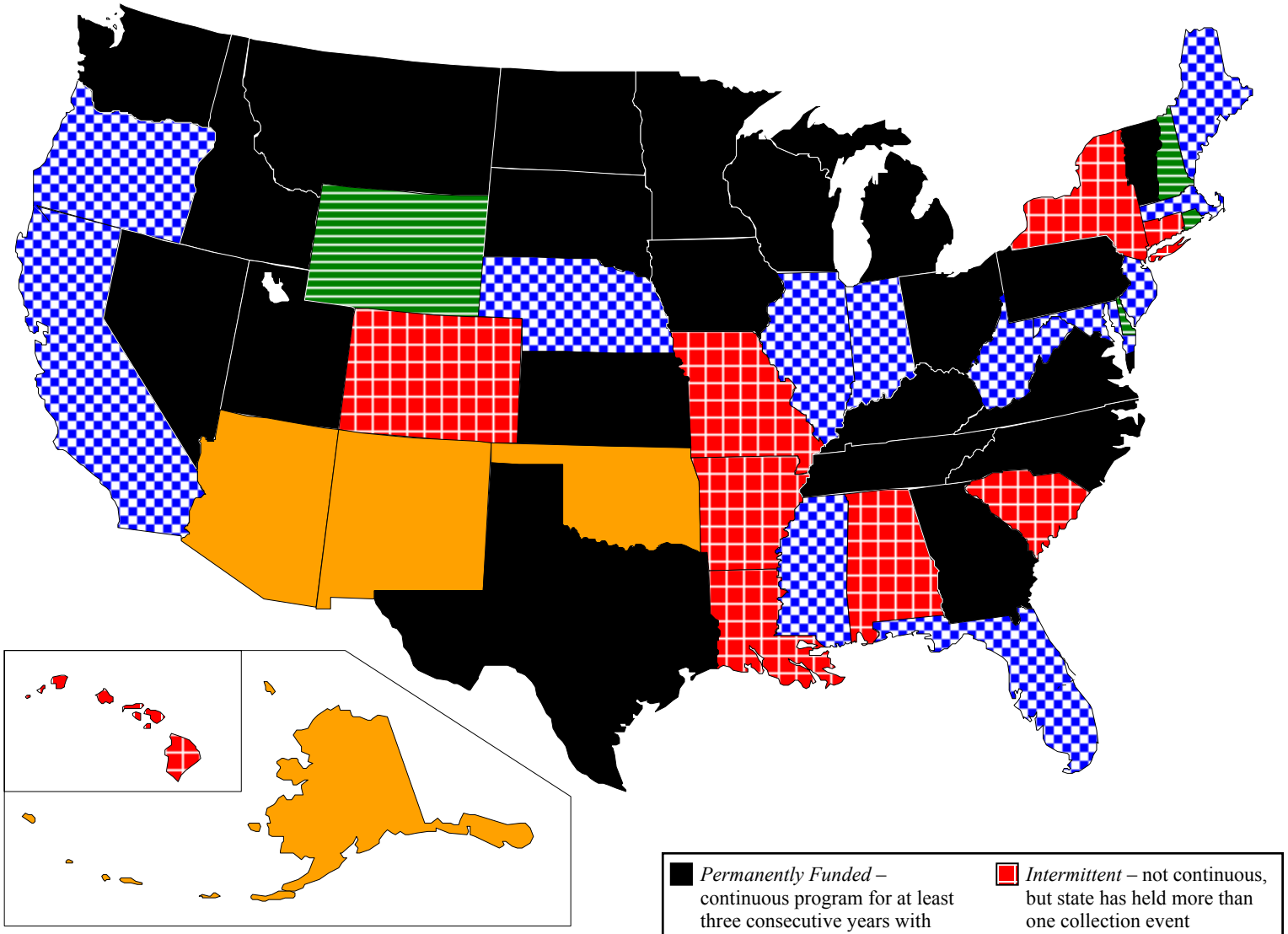


FIGURE 9 State Clean Sweep Programs by Category

North Carolina held the first Clean Sweep program in 1980. Iowa, Maine and North Dakota followed with programs in the early eighties. These states recognized early on that farmers were accumulating unwanted pesticides and that, without an affordable method of proper disposal, the states faced risks from contamination by these unwanted pesticides. Other states initiated Clean Sweeps and, as shown in Figure 10, the number of states with Clean Sweep programs increased rapidly from the late 1980s to the mid 1990s. Since 1995, the number of states with programs has remained relatively constant, ranging from 30 to 34 states. The number of states with permanently funded programs has followed a similar pattern. There was a quick increase in the first half of the 1990s with a steady but slower increase from 17 to 21 states since 1995.

One measure of a program's success is longevity. Figure 11 identifies the 22 states that have operated Clean Sweep programs for at least seven years. In addition, Table 10 lists program information for each state, including the category, active or inactive status, year of its first collection, number of years of collection and, for permanently funded and continuous programs, the year it achieved that status.

3.2 How many pounds of pesticides have Clean Sweep programs collected?

Based on the data states have reported to EPA, it is estimated that Clean Sweep programs have collected over 24 million pounds of unwanted pesticides from 1980 through 2000.

FIGURE 10 Number of States with Clean Sweep Programs per Year

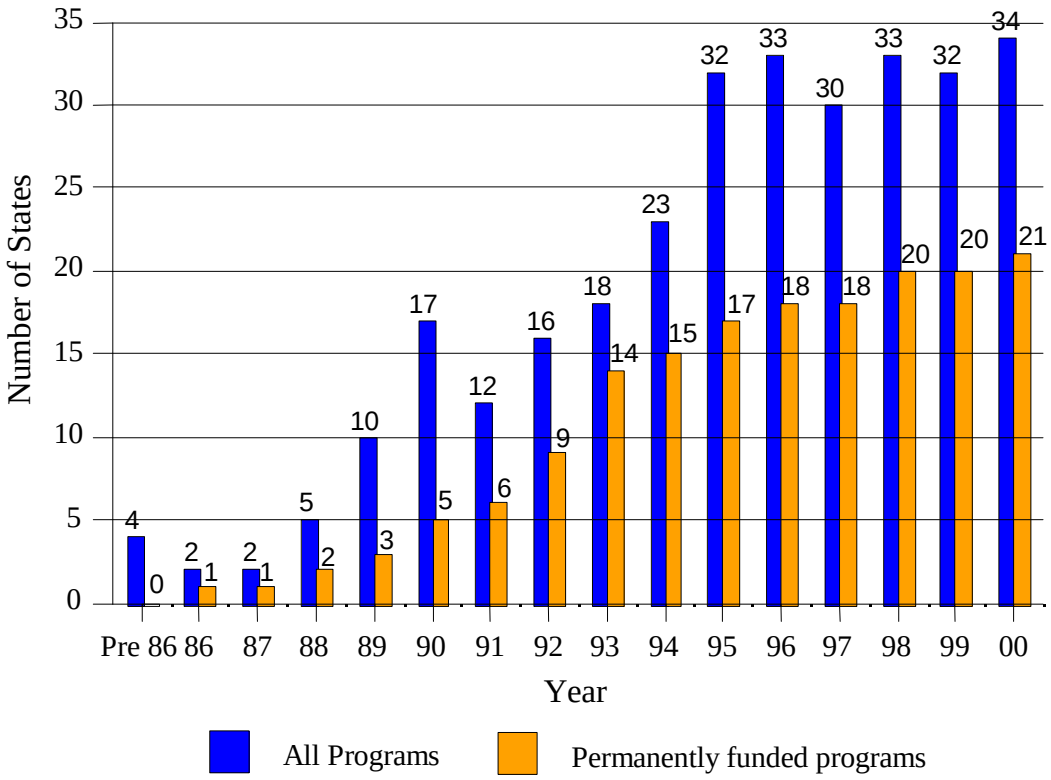


FIGURE 11 States with Clean Sweep Collections for at Least Seven Years
Each truck represents an annual collection

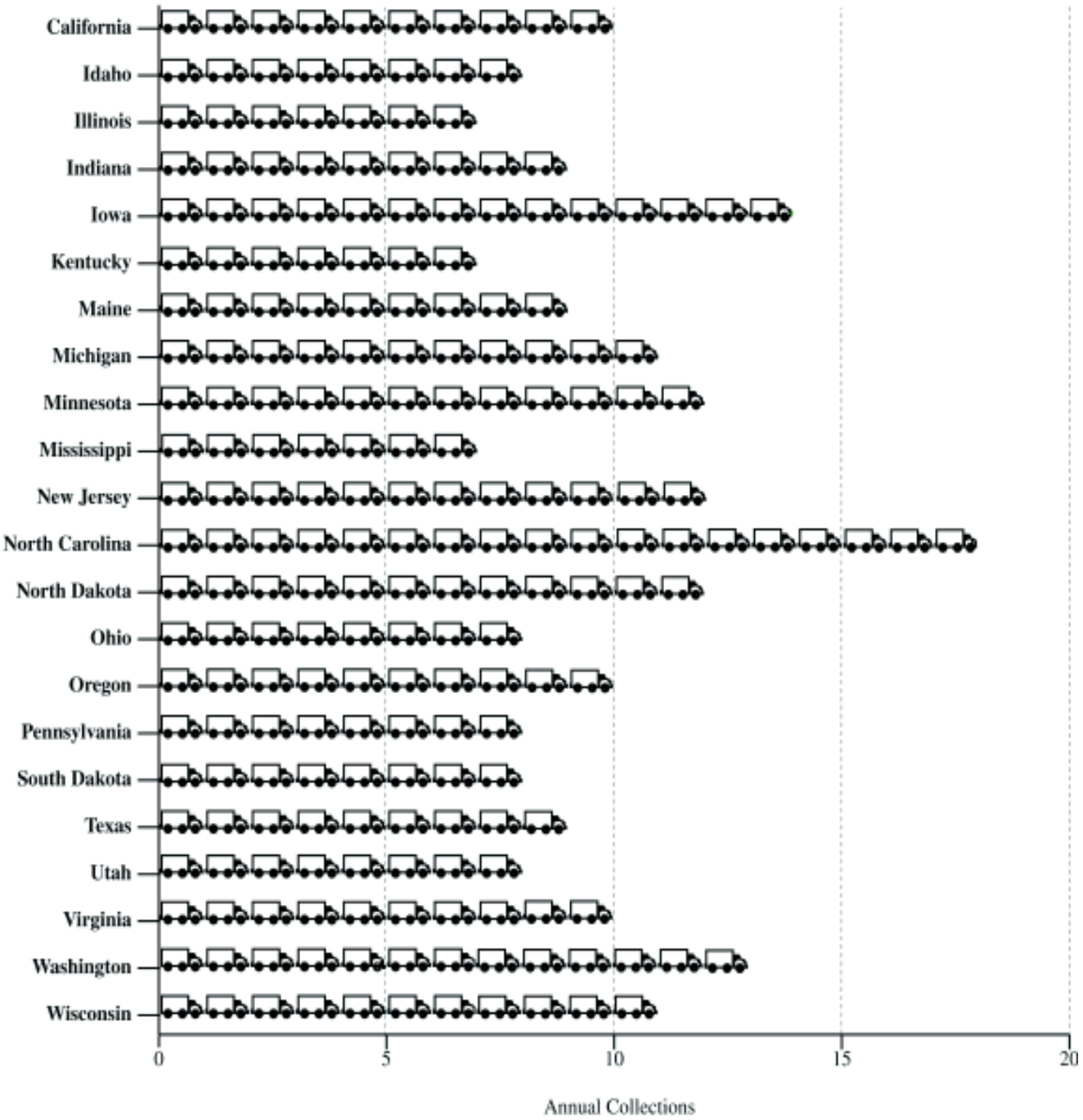


TABLE 10 Status of State Clean Sweep Programs

State	Category[1]	Year Category Achieved[2]	First Year[3]	Number of Years[4]	Status[5]	State	Category	Year Category Achieved	First Year	Number of Years	Status
AL	Int.	n/a[6]	1994	4	Active	MT	Perm.	1994	1994	6	Active
AK	None	n/a	n/a	n/a	n/a	NE	Cont.	1998	1995	4	Active
AZ	None	n/a	n/a	n/a	n/a	NV	Perm.	1995	1995	6	Active
AR	Int.	n/a	1992	2	Active	NH	Once	n/a	1990	1	Inactive
CA	Cont.	1989	1989	10	Inactive	NJ	Cont.	1985	1985	12	Active
CO	Int.	n/a	1995	4	Active	NM	None	n/a	n/a	n/a	n/a
CT	Int.	n/a	1990	3	Inactive	NY	Int.	n/a	1993	5	Active
DE	Once	n/a	1992	1	Inactive	NC	Perm.	1986	1980	18	Active
FL	Cont.	1995	1995	5	Active	ND	Perm.	1992	1980	12	Active
GA	Perm.	1998	1995	6	Active	OH	Perm.	1993	1993	8	Active
HI	Int.	n/a	1987	2	Inactive	OK	None	n/a	n/a	n/a	n/a
ID	Perm.	1993	1993	8	Active	OR	Cont.	1991	1991	10	Active
IL	Cont.	1998	1990	7	Active	PA	Perm.	1993	1993	8	Active
IN	Cont.	1992	1990	9	Active	RI	Once	n/a	1990	1	Inactive
IA	Perm.	1991	1986	14	Active	SC	Int.	n/a	1988	2	Inactive
KS	Perm.	2000	1996	5	Active	SD	Perm.	1993	1993	8	Active
KY	Perm.	1995	1991	7	Active	TN	Perm.	1998	1998	3	Active
LA	Int.	n/a	1990	2	Inactive	TX	Perm.	1992	1992	9	Active
ME	Cont.	1996	1982	9	Active	UT	Perm.	1993	1993	8	Active
MD	Cont.	1995	1995	5	Active	VT	Perm.	1996	1991	6	Active
MA	Cont.	1998	1990	4	Active	VA	Perm.	1992	1990	10	Active
MI	Perm.	1990	1990	11	Active	WA	Perm.	1988	1988	13	Active
MN	Perm.	1989	1989	12	Active	WV	Cont.	1994	1994	5	Inactive
MS	Cont.	1999	1994	7	Active	WI	Perm.	1990	1990	11	Active
MO	Int.	n/a	1990	3	Inactive	WY	Once	n/a	1992	1	Inactive

[1] The program categories are permanently funded (Perm.), continuous (Cont.), intermittent (Int.), one-time (Once) and never (None)

[2] The year the category was achieved applies only to permanently funded and continuous programs. It represents the year the state received permanent funding or, for continuous programs, the first of the three or more consecutive years.

[3] The first year is the year of the state's first collection.

[4] The number of years is the number of years that pesticides were collected.

[5] Status represents whether the state collected pesticides in 2000 or 2001. All permanently funded programs are active and all one-time programs are inactive. Continuous and intermittent programs can be either.

[6] n/a = not applicable.

Several factors make it difficult to precisely record the amount of pesticide collected. There is no uniform method of recording the data, and there is variation on how states characterize partially full containers, especially drums. Some programs only report round numbers, which are probably estimates. Some states report on a calendar year basis, while others report on a fiscal year basis. When liquids are collected, their volume in gallons is often reported, while solids are reported by their weight. This report converts quantities of liquids from gallons to pounds by estimating 9 pounds to the gallon, a close approximation but not accurate for all liquids. Some programs use a conversion factor of 10 pounds per gallon and these amounts were not recalculated. In addition, some states limit collections to farmers, while others include residential pesticides or all household hazardous waste. In states where collection events are run on a county level, state officials may not have complete data. Information from older collection events may be missing or inaccurate. In spite of these caveats, EPA believes the overall total of about 24.6 million pounds and the totals for individual states are good indications of the minimum amounts collected, and are probably underestimates. Table 11 shows the amount of pesticide collected per state, per year from 1980 through 2000.

While 24 million pounds is a significant amount, it is important to compare this quantity to the amount of pesticides used. This analysis indicates that the amount of pesticides collected and disposed by Clean Sweep programs is significantly smaller than the amount of pesticides sold and used in the U.S. Only a small proportion of pesticides sold become obsolete or unwanted. The Clean Sweep challenge is to collect and dispose of these pesticides.

EPA estimates that 917 to 1,025 million pounds of active ingredient in conventional pesticides were used in 1997.[1] Agricultural products comprised approximately three-quarters of the conventional pesticides (which also include home and garden and industry/commercial/government pesticides), so approximately 750 million pounds of active ingredient in agricultural products was used annually during this time period. Because the amount of active ingredient can range from less than 1 percent to over 80 percent of a formulated product, the total weight of formulated agricultural pesticides used per year is much greater. The most common agricultural products are from 10 percent to 50 percent active ingredient, which means that approximately 1,500 million to 7,500 million pounds (1.5 to 7.5 billion pounds) of formulated agricultural products were used per year in 1997. Assuming that this amount of formulated agricultural pesticides was used each year for the past 40 years, approximately 60 to 300 billion pounds of formulated agricultural pesticides have been used in the U.S. over the past four decades. EPA chose 40 years because many of the pesticides collected at Clean Sweep events since 1980 are years or even decades old. Therefore, the 24.6 million pounds of formulated pesticides collected and disposed by Clean Sweep programs through 2000 is a small fraction – 0.008 percent to 0.04 percent – of the estimated quantity of formulated pesticides used during that same period.

[1] U.S. EPA, *Pesticides Industry Sales and Usage: 1996 and 1997 Market Estimates*, November 1999.

Table 11 Total Amount of Pesticides Collected by Clean Sweep Programs Each Year (in pounds)

State	Pre '86	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
AL										71,154	55,246				50,344	12,649	189,393
AK																	0
AZ																	0
AR								5,000								30,689	35,689
CA					87,820	128,000	188,380	336,668	157,514	1,082	137,384	110,502		20,135	19,343		1,186,828
CO											17,000		33,910		17,755	15,833	84,498
CT						16,200					6,900	23,000					46,100
DE								30,423									30,423
FL											70,000	18,600	6,400	27,000		170,929	292,929
GA											5,000	36,800	25,600	128,876	373,851	207,905	778,032
HI			12,471		5,000												17,471
ID									30,861	13,090	43,668	40,474	43,760	35,855	36,436	78,460	322,604
IL						13,000	6,550			27,263	107,727			26,610	55,586	15,580	252,316
IN						8,800		4,300	6,000	9,000	8,064	1,900	5,164	8,078		16,841	68,147
IA [1]	10,835			33,305	77,480	18,810	49,772	180,574	230,923	66,486	51,912	58,218	83,320	84,240	103,709	80,971	1,130,555
KS												96,942	46,197	19,235	40,975	134,106	337,455
KY							50,600				8,700	52,500	43,800	37,460	50,836	34,471	278,367
LA						5,000						403,200					408,200
ME [2]	30,000	12,000			44,000							6,900	9,025	8,000	7,062	3,222	120,209
MD											33,368	14,889	13,433	20,846	4,454		86,990
MA						86,300								38,975	21,840	11,874	158,989
MI						84,000	84,000	64,000	84,000	84,000	60,000	120,000	63,940	52,682	59,281	96,215	852,118
MN					32,400	34,100	35,800	53,800	135,300	183,300	236,500	208,500	283,800	298,800	410,718	123,362	2,036,380
MS										22,970	257,621	167,617	153,463	214,433	23,623	150,159	989,886
MO						800						6,000	3,000				9,800
MT										13,197	14,506	64,224	26,335	21,774		39,150	179,186
NE											595,541			297,701	249,065	193,726	1,336,033
NV											14,647	10,653	17,058	18,418	4,986	8,802	74,564

Table 11 Total Amount of Pesticides Collected by Clean Sweep Programs Each Year (in pounds)

State	Pre '86	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
NH						20,000											20,000
NJ					10,535	19,850	15,841	22,014	39,741	109,915	88,798	115,159	137,648	95,362	52,459	15,425	722,747
NM																	0
NY									13,860		59,300	120,724			24,610	960	219,454
NC [3]	39,809	1,400	132,729	31,890	29,120	51,055	32,708	70,444	26,467	51,403	100,980	59,825	81,045	123,211	133,313	151,078	1,116,477
ND [4]	17,800			10,460	13,740			80,910		131,838	48,222	94,389	174,275	131,709	158,938	166,949	1,029,230
OH									9,000	113,000	126,000	251,250	214,600	142,374	123,390	109,099	1,088,713
OK																	0
OR							59,776	58,742	95,773	22,072	56,096	25,906	69,206	30,056	67,017	12,799	497,443
PA									29,700	60,133	82,084	300,293	174,048	188,110	86,189	81,040	1,001,597
RI						some											some
SC				6,743	400												7,143
SD									31,059	43,757	23,867	31,086	50,282	28,283	23,069	32,260	263,663
TN														100,000	100,000	100,000	300,000
TX								394,560	678,460	276,720	133,040	469,200	277,960	264,840	551,380	103,660	3,149,820
UT									11,453	17,487	14,095	13,334	18,903	26,244	17,145	26,600	145,261
VT							17,900					4,363	3,640	3,125	8,925	28,000	65,953
VA						31,797		57,237	68,146	222,374	62,156	75,931	74,271	47,918	97,618	81,351	818,799
WA				49,343	35,212	62,576	86,724	81,683	55,581	88,734	51,526	81,081	101,895	93,714	152,237	139,453	1,079,759
WV										112,000	60,000	18,688	17,500	31,242			239,430
WI						39,100	9,622	84,170	143,558	107,526	158,087	172,034	240,499	165,011	150,388	254,000	1,523,995
WY								16,000									16,000
Total	98,444	13,400	145,200	131,741	335,707	619,388	637,673	1,540,525	1,847,396	1,848,501	2,788,035	3,274,182	2,493,977	2,830,317	3,276,542	2,727,618	24,608,646
# states	4	2	2	5	10	17	12	16	18	23	32	33	30	33	32	34	46

Notes: (1) Iowa: "pre-1986": 10,835. (2) Maine: 1982: 12,000; 1984: 18,000. (3) North Carolina: 1980: 16,500; 1982: 20,500; 1983: 2,809. (4) North Dakota: 1980: 6,300; 1984: 11,500.

Figures 12 and 13 track annual pesticide collections and cumulative collection totals over time. A relatively small amount of pesticides was collected through 1991 – about 2.0 million pounds, or 8.1 percent of the total. Since 1992, at least 1.5 million pounds of pesticides have been collected each year and the annual total averaged almost 2.9 million pounds between 1995 and 2000. Variation in the annual totals generally mirrors the variation in the number of Clean Sweep programs each year, shown previously in Figure 10.

FIGURE 12 Amount of Pesticides Collected per Year

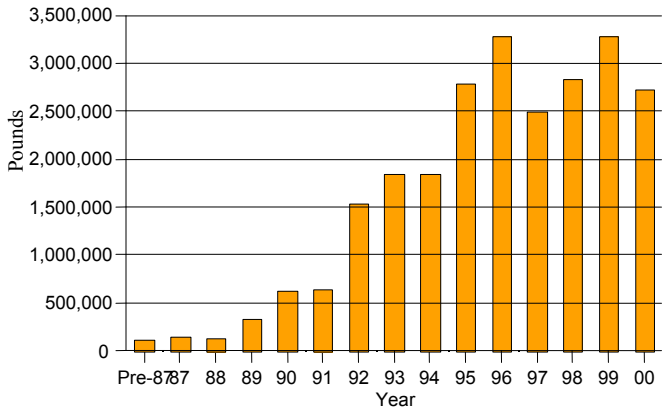


FIGURE 13 Cumulative Amount of Pesticides Collected

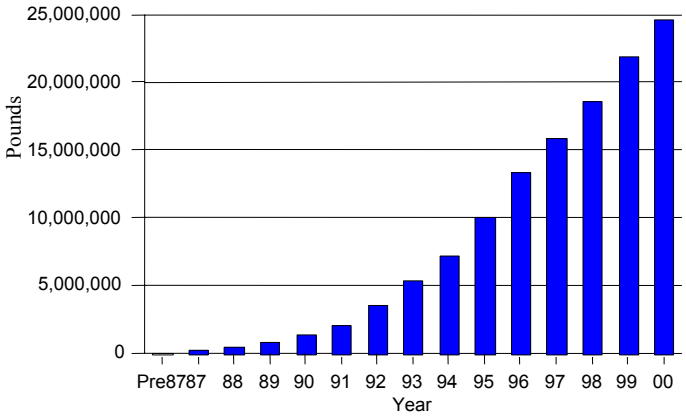
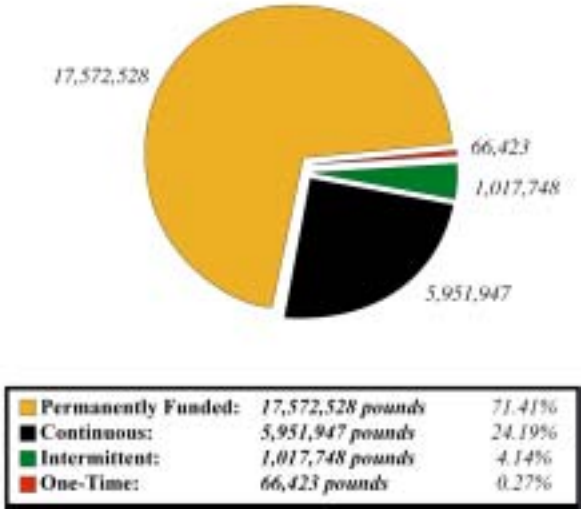


Figure 14 displays the amount of pesticides collected by states in each category. The 21 states with permanently funded programs have collected more than 71 percent of the nationwide total of pesticides, primarily because they have the most extensive programs and assured funding. Together, they have conducted over 61 percent of the annual collections.

FIGURE 14 Cumulative Clean Sweep Collections by Program Category
(Quantity in Pounds)



Through 2000, 11 states have collected more than one million pounds of pesticides, and these states are shown in Figure 15. Two of these states, California and Nebraska, have continuous programs while the others have permanently funded programs. As shown in Figure 16, the states that have collected over one million pounds – 22 percent of the states – have collected almost 64 percent of the national total.

Figure 17 presents information on the amount of pesticides collected by each state.

FIGURE 15 Amount of Pesticides Collected by the States with More Than One Million Pounds
Each drum represents 100,000 pounds collected

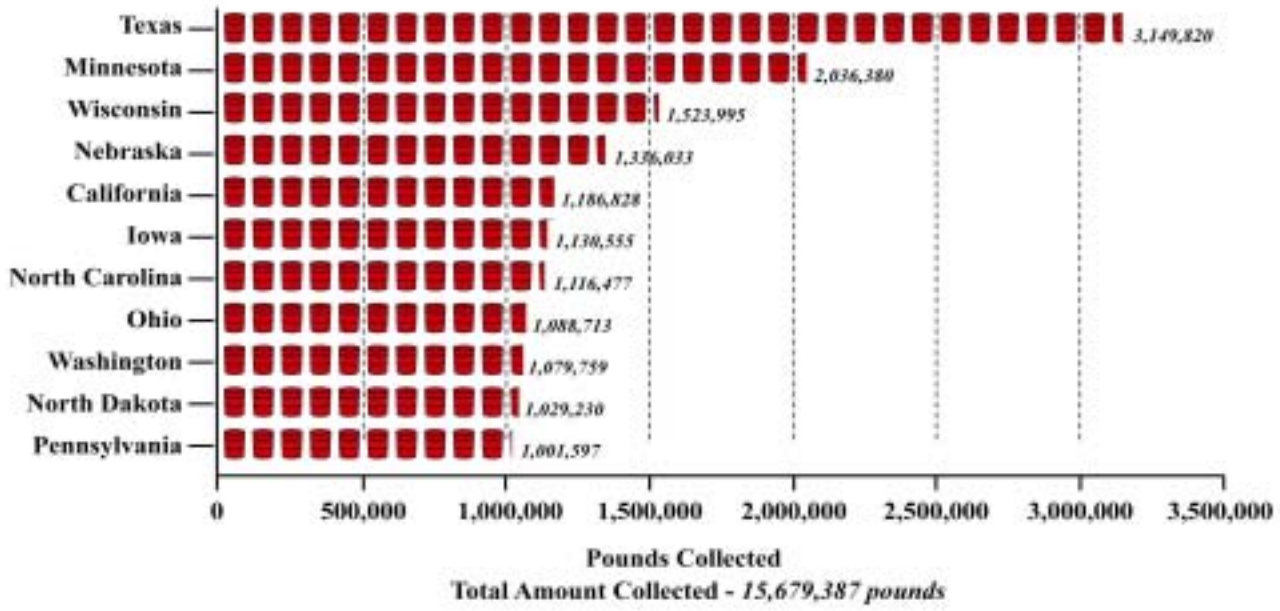
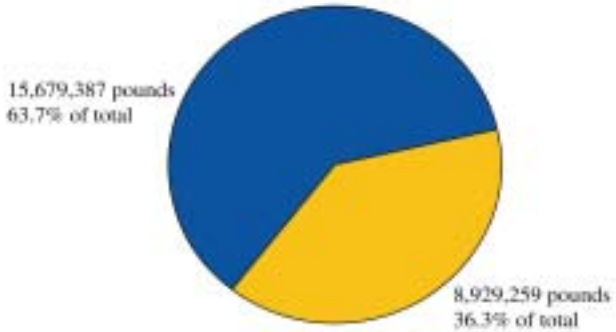


FIGURE 16 Amount of Pesticides Collected by Selected States through Year 2000
Eleven states that have collected more than one million pounds of pesticides each
Remaining states



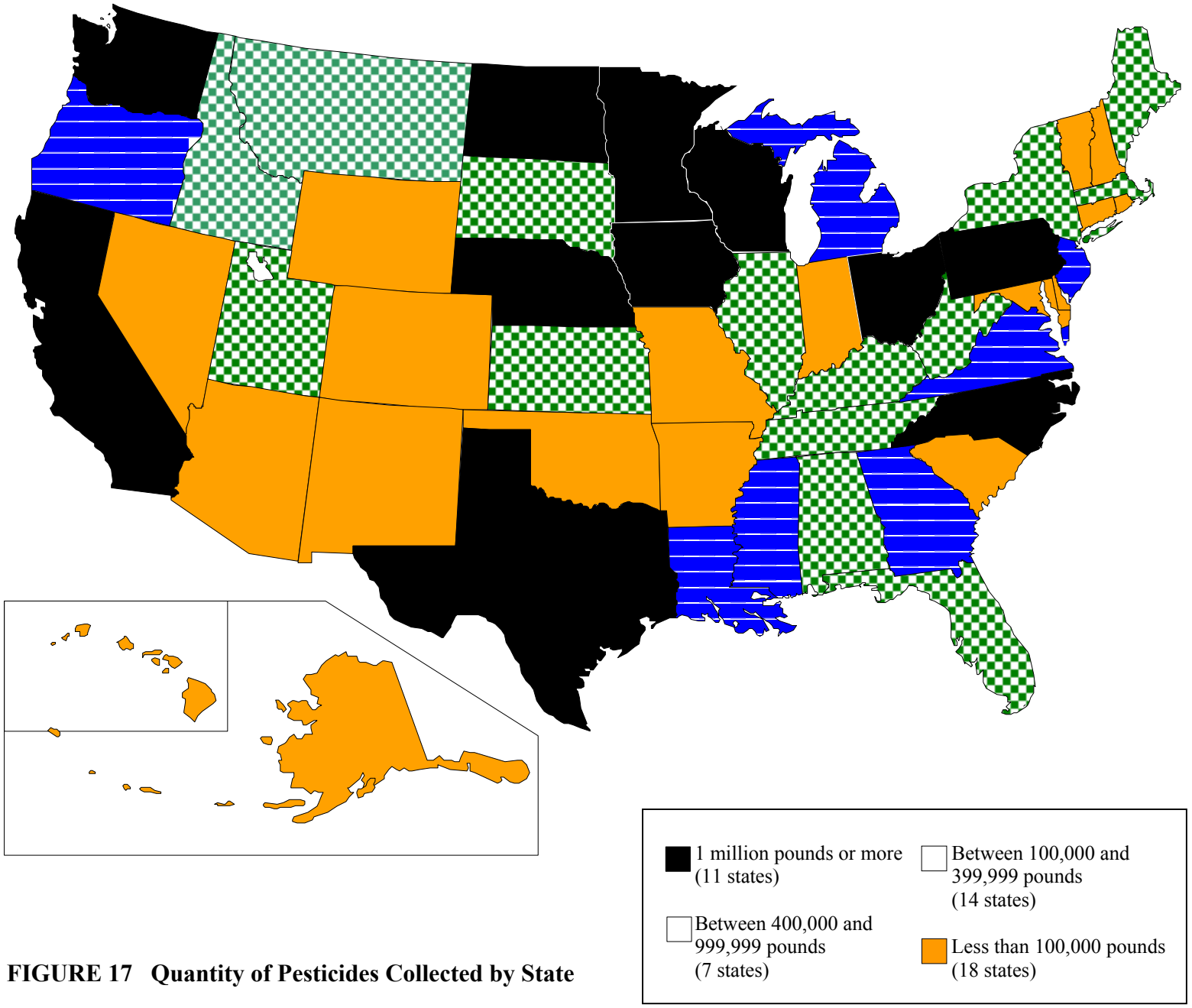


FIGURE 17 Quantity of Pesticides Collected by State

3.3 How many pounds of pesticides are collected from each participant?

States beginning or restarting Clean Sweep programs frequently ask EPA, "How many people participate and how much pesticide do they bring to collections?" States want to know the experiences of other states in order to estimate how much will be collected in their own. The number of participants and the quantities collected have a direct impact on the number of people and resources the state and the contractor must mobilize for the collection. Direct comparisons between states are difficult because the kinds of participants vary from state to state. For example, states which allow participation by businesses other than farmers may collect larger quantities per participant than states which include household participants.

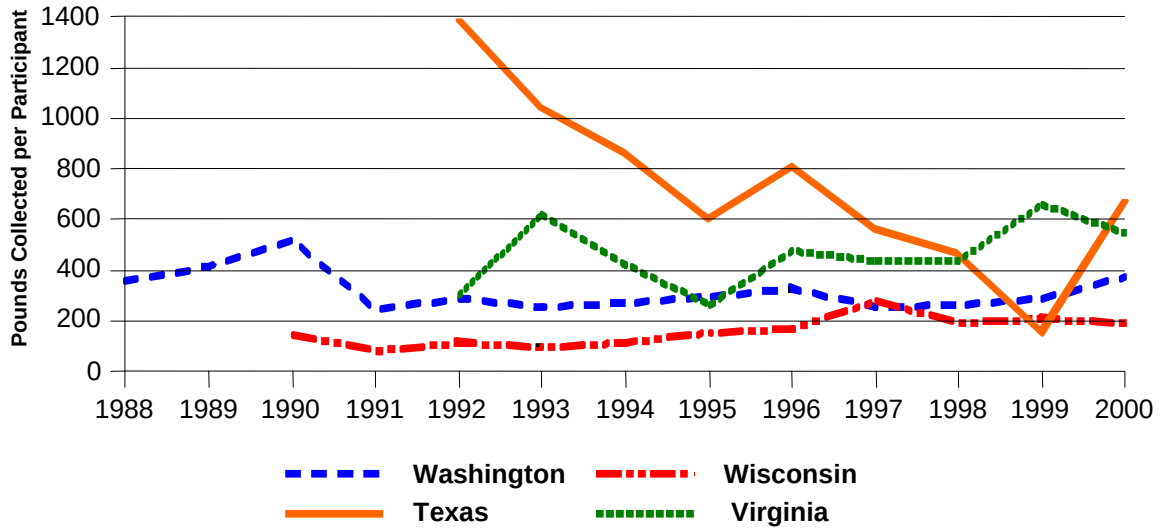
Thirty-one states reported the number of participants in at least some of their collection events. As shown in Table 12, the average amount collected per participant in nearly three-quarters of these states was between 101 pounds and 400 pounds. Eleven states, 35 percent of the states with information, collected an average of between 301 and 400 pounds per participant. Appendix V includes comprehensive tables showing data on the number of participants and the quantity collected per participant by state.

Table 12: Average Quantity of Pesticides Collected Per Participant

Number of States	Quantity of Pesticides Collected Per Participant
2	Less than 100 pounds
6	Between 101 pounds and 200 pounds
6	Between 201 pounds and 300 pounds
11	Between 301 pounds and 400 pounds
3	Between 401 pounds and 500 pounds
3	Greater than 500 pounds

Figure 18 shows the average quantity of pesticides collected per participant in Texas, Virginia, Washington and Wisconsin from 1988 to 2000. These states were chosen because participant information was available for at least 10 years. In addition, these states represent a reasonable

FIGURE 18 Clean Sweep Quantity (pounds) per Participant for Selected States



cross section of the range in average amounts per participant.

3.4 Which pesticides are collected at Clean Sweep programs?

Most pesticides sold in the U.S. have shown up at Clean Sweep collections. Canceled pesticides, some of which have not been sold in the U.S. for decades, such as DDT and mirex, continue to be collected along with currently registered products. For example, 2,4-D, a widely used herbicide, is one of the most commonly collected pesticides. Some currently registered products are brought in because they are old, deteriorated or damaged, but others are still usable and are unwanted for a variety of reasons, such as the owner has died, ceased farming, or decided to use other pesticides or grow different crops.

Some states track and report the individual pesticides collected, which is discussed in more detail in Sections 4.6 and 4.7. Minnesota and Virginia have comprehensive data on the amount of individual pesticides collected over the life of their programs. Minnesota has tracked 55 pesticides every year since 1988.

Table 13 lists the quantity of these pesticides collected between 1988 and 1998 and the percent this represents of all pesticides. The table also indicates which of the pesticides are still registered, which are considered hazardous waste when disposed, and which are PBTs or organophosphate (OP) pesticides.

From 1988 through 1998, Minnesota collected almost 95,000 pounds of the Level 1 persistent, bioaccumulative and toxic (PBT) pesticides listed in section 1.2, specifically aldrin, chlordane, DDT, dieldrin, mirex and toxaphene. Minnesota also collected nearly 65,000 pounds of the potentially dioxin-containing pesticides – pentachlorophenol, 2,4,5-T, Silvex, Ronnel and other dioxin materials – during this time period. These two categories represent more than 10 percent of all pesticides collected between 1988 and 1998, with the Level 1 PBTs at 6.3 percent and the potentially dioxin-bearing pesticides at 4.3 percent.

Tracking the quantities of organophosphates collected may enable regulators to gauge one of the impacts of the Food Quality Protection Act (FQPA). FQPA requires EPA to reassess all tolerances established before August 3, 1996. EPA has placed the organophosphates in the highest priority group for reassessment, since they appear to be among those pesticides which pose the greatest risk due to both their toxicity and multiple routes of exposure from application to ingestion of residues on food. Organophosphates account for about half, by amount sold, of all insecticides used in the U.S. Cumulative and aggregate risk assessments are being done on organophosphate insecticides due to their common mechanism of toxicity, and EPA continues to evaluate them for reregistration eligibility.

Eight of the 55 pesticides that Minnesota tracks are the following organophosphates: malathion, chlorpyrifos, diazinon, phorate, terbufos, fonofos, parathion and disulfoton. A total of 104,601 pounds of these organophosphates were collected between 1988 and 1998, about 7 percent of all pesticides collected.

The Virginia Department of Agriculture and Consumer Services maintains a database of the quantities of individual pesticides registered by participants in their Clean Sweep program. Virginia collects pesticides from participants' sites, so it is essential for participants to register with the state and report detailed information about the quantity and identity of the individual pesticides. The

Table 13 Specific Pesticides Tracked in Minnesota's Clean Sweep Programs 1988 - 1998

A U indicates that the pesticide is currently registered, a hazardous waste when disposed, a persistent, bioaccumulative and toxic (PBT) chemical, or an organophosphate (OP).

Pesticide	Weight (pounds)	% of All Pesticides	Currently Registered	Haz Waste when Disposed	PBT	OP	Pesticide	Weight (pounds)	% of All Pesticides	Currently Registered	Haz Waste when Disposed	PBT	OP
2,4-D	141,834	9.44	U	U			propanil	12,724	0.85	U			
alachlor	83,816	5.58	U				metolachlor[1]	12,470	0.83	U			
DDT	52,653	3.50		U	U		sodium TCA	12,427	0.83				
atrazine	52,501	3.49	U				barban	11,872	0.79		U		
trifluralin	44,195	2.94	U				dicamba	11,016	0.73	U			
malathion	34,859	2.32	U			U	maneb	10,980	0.73	U			
pentachlorophenol	31,211	2.08	U	U	U*		methoxychlor	10,864	0.72	U	U		
carbaryl	28,629	1.91	U	U			MCPA	9,798	0.65	U			
2,4,5-T	27,956	1.86		U	U*		thiram	9,194	0.61	U	U		
pyrethrin	27,409	1.82	U				phorate	9,170	0.61	U	U		U
chlorpyrifos	24,074	1.60	U			U	ethalfluralin	8,430	0.56	U			
arsenic	22,802	1.52	U	U			terbufos	7,114	0.47	U			U
chloramben	22,619	1.51					fonofos	6,763	0.45				U
cyanazine	20,047	1.33					mercury	6,626	0.44		U	U	
EPTC	19,427	1.29	U				carbon tetrachloride	5,555	0.37		U		
chlordane	19,357	1.29		U	U		aldrin	4,195	0.28		U	U	
dalapon	18,683	1.24					parathion[2]	3,755	0.25		U		U
pendimethalin	17,771	1.18	U				dieldrin	3,142	0.21		U	U	
lindane	17,603	1.17	U	U			heptachlor	3,101	0.21		U		
dinoseb	16,999	1.13		U			disulfoton	3,018	0.20	U	U		U
propachlor	16,561	1.10	U				Silvex	3,014	0.20		U	U*	
glyphosate	16,110	1.07	U				ronnel	2,506	0.17		U	U*	
carbofuran	16,069	1.07	U	U			formaldehyde	2,384	0.16	U	U		
diazinon	15,848	1.05	U			U	aldicarb	2,373	0.16	U	U		
toxaphene	15,519	1.03		U	U		endrin	1,729	0.12		U		
captan	15,515	1.03	U				bendiocarb	1,404	0.09	U	U		
carboxin	13,522	0.90	U				other dioxin materials	103	0.01		U	U*	
triallate	13,047	0.87	U	U			ALL PESTICIDES	1,502,300	---				

Notes: (*) Dioxins are Level 1 PBTs, and the pesticides 2,4,5-T, Silvex, pentachlorophenol and ronnel potentially contain dioxins, although these pesticides are not listed as Level 1 PBTs per se.
(1) The original registrant for metolachlor is no longer supporting its registration, and it is uncertain whether an alternative registrant will be granted registration. S-metolachlor, an enriched S-isomer of metolachor, was registered in 1997 for the same uses as that of (racemic) metolachlor, and is currently registered.
(2) Cancellation order effective September 13, 2001. Use of existing stocks of end-use products will not be lawful under FIFRA as of October 31, 2003.

registered amounts in the database are only estimates, so the total does not match the total in Table 11. This information still provides a good indication of the relative amounts of the specific pesticides that are collected and disposed of in Virginia. Table 14 lists information on the amounts of the 57 most common pesticides registered for disposal in Virginia from 1992 through 2000.

Table 14 lists the 57 pesticides with the largest volumes in Virginia's database. Out of these most commonly registered (and mostly likely collected) pesticides, there were:

- 42,460 pounds of the Level 1 PBTs, representing 7.8 percent of all pesticides in Virginia's database;
- 12,311 pounds of potentially dioxin-containing pesticides, 2.3 percent of the total; and
- 41,713 pounds of organophosphate insecticides, 7.7 percent of the total.

3.5 What are the safety requirements and procedures of Clean Sweep programs?

According to information provided to EPA by the states, Clean Sweep programs have maintained an excellent safety record. This is particularly impressive considering the large quantity of pesticides transported and collected and the fact that some, but certainly not all, pesticides were in old or damaged containers. For example, Ohio's report noted that in over 20 projects with 2,865 participants, there were no accidents. Illinois similarly reported no accidents or spills in their 1999 and 2000 reports. EPA believes that this success is due directly to the diligence and competence of state employees and contractors. Many states provide guidance, either on their website or in the form of printed fact sheets, on safe participation in Clean Sweep programs.

Several states provide materials to facilitate the safe handling of pesticides. For example, Mississippi, Utah and Washington distribute overpack drums to participants who request them in advance. Overpack drums can be filled with containers in poor condition to assure safe transport to the collection event. Idaho, North Dakota, Oregon, Tennessee and Washington distribute bags and other overpack materials. A number of states require training for the handlers, volunteers and state employees who will be involved in the collection event, and three states (Massachusetts, New York and Tennessee) require participants to participate in pre-event training.

The guidance for participation in Clean Sweep programs provided on the web sites of Texas, Idaho and Washington is particularly user-friendly and is presented in the form of questions and answers. Questions include:

- How do I register for a collection in my area?
- What products are accepted?
- How should I store my pesticides?
- How do I dispose of my empty pesticide containers?
- What can I do to prevent a pesticide from becoming a waste?
- How should I transport waste materials?
- What if I don't know what some of my pesticides are?
- Are there any regulatory consequences when participating in these collections?
- What should I expect at the collection site?
- What health and safety precautions are taken?

South Dakota and Minnesota provide detailed guidance on how to participate in Clean Sweep collections, and several other states including Montana, North Carolina, Tennessee, Virginia and Wisconsin give background, schedules and other relevant information for collection events. State websites are listed in Appendix VI.

Table 14 Quantity of the Most Common Pesticides Registered in Virginia's Clean Sweep Program from 1992 through 2000

A U indicates that the pesticide is currently registered, a hazardous waste when disposed, a persistent, bioaccumulative and toxic (PBT) chemical, or an organophosphate OP.

Pesticide [1,2]	Weight (pounds)	% of All Pesticides	Currently Registered	Haz Waste when Disposed	PBT	OP	Pesticide [1,2]	Weight (pounds)	% of All Pesticides	Currently Registered	Haz Waste when Disposed	PBT	OP
DDT	16,069	2.96		U	U		lime sulfur	4,233	0.78	U			
2,4-D	14,976	2.76	U	U			chlorothalonil	4,119	0.76	U			
dinoseb	14,282	2.63		U			pendimethalin	3,985	0.73	U			
sulfur	14,162	2.61	U				pentachlorophenol	3,959	0.73	U	U	U*	
toxaphene	13,824	2.54		U	U		chlorypyrifos	3,691	0.68	U			U
carbofuran	13,745	2.53	U	U			ethylene dibromide	3,666	0.67		U		
captan	12,380	2.28	U				benefin	3,564	0.66	U			
atrazine	11,821	2.17	U				metolachlor [4]	3,427	0.63	U			
vernolate	9,044	1.66					2,4,5-T	3,400	0.63		U	U*	
carbaryl	8,935	1.64	U	U			linuron	3,280	0.60	U			
malathion	7,441	1.37	U			U	methomyl	3,004	0.55	U	U		
PCNB	7,357	1.35	U				methyl parathion	2,917	0.54	U	U		U
chlordane	7,274	1.34		U	U		methoxychlor	2,879	0.53	U	U		
lead arsenate	7,109	1.31		U			aldicarb	2,859	0.53	U	U		
trifluralin	6,892	1.27	U				paraquat	2,844	0.52	U			
diazinon	6,741	1.24	U			U	lindane	2,818	0.52	U	U		
pyrethrins	6,482	1.19	U				aldrin	2,801	0.52		U	U	
butylate	6,450	1.19	U				ferbam	2,749	0.51	U			
creosote	6,376	1.17	U	U			heptachlor	2,713	0.50		U		
alachlor	6,090	1.12	U				mancozeb	2,636	0.49	U			
parathion [3]	5,604	1.03	U	U		U	sodium dalapon	2,519	0.46				
ethoprop	5,581	1.03	U			U	DDD (= TDE)	2,492	0.46		U	U	
simazine	5,474	1.01	U				EPTC	2,484	0.46	U			
endrin	5,458	1.00		U			phorate	2,455	0.45	U	U		U
fonofos	5,250	0.97				U	profluralin	2,288	0.42				
silvex	4,972	0.91		U	U*		carboxin	2,245	0.41	U			
copper sulfate	4,769	0.88	U				zineb	2,204	0.41				
propionic acid	4,740	0.87	U				terbufos	2,033	0.37	U			U
formaldehyde	4,644	0.85	U	U			ALL PESTICIDES	543,499	---				

Notes: (*) Dioxins are Level 1 PBTs and the pesticides 2,4,5-T, Silvex, pentachlorophenol and ronnel potentially contain dioxins, although these pesticides are not listed as Level 1 PBTs per se.

(1) The weight includes the amount of the pesticide as the only active ingredient and as one of several active ingredients if it was listed first. For example, the entry for DDT includes 14,845 pounds of DDT and 1,224 pounds of DDT and at least one other active ingredient, e.g., DDT+captan+parathion. It is important to note that there were relatively large amounts of some the combinations, including but not limited to 3,200 pounds of trifluralin+benefin (included with trifluralin); 2,507 pounds of atrazine+metolachlor (included with atrazine); 2,500 pounds of toxaphene+DDT+parathion (included with toxaphene); and 2,274 pounds of toxaphene+DDT (included with toxaphene).

(2) The table lists the 57 pesticides in Virginia's database with the largest registered volumes. Only specific pesticides were listed in this table. The information registered with Virginia also includes 59,383 pounds of "unknown", 3,493 pounds of "insecticide" and 1,800 pounds of "herbicide".

(3) Cancellation order effective September 13, 2001. Use of existing stocks of end-use products will not be lawful under FIFRA as of October 31, 2003.

(4) The original registrant for metolachlor is no longer supporting its registration, and it is uncertain whether an alternative registrant will be granted registration. S-metolachlor, an enriched S-isomer of metolachor, was registered in 1997 for the same uses as that of (racemic) metolachlor, and is currently registered.

States have emergency plans or require the hazardous waste contractors to develop and submit them to appropriate authorities. An emergency plan typically contains names and phone numbers of contacts, schedules of collection events and pre-event training, a list of emergency responders, directions to hospitals, and an evacuation route. Training addresses the location and use of personal protective equipment including respirators, fire extinguishers, and decontamination equipment, as well as first aid and spill response procedures. State and contractor staff are the first responders to on-site emergencies, and other responders may be called if needed. Minnesota's *Waste Pesticide Collection: Site Safety and Emergency Contingency Plan* is included in Appendix VII.

Section 4 Challenges and Opportunities

States and counties have encountered a number of obstacles in their efforts to conduct and improve Clean Sweep programs. The challenges faced by Clean Sweep program managers include obtaining funding, complying with the hazardous waste regulations and related concerns about liability, making potential participants aware of the programs, overcoming a general distrust of government programs, and managing problematic waste streams such as dioxin-containing waste. As states are trying to increase participation in their programs, they are also working to prevent the build-up of unwanted pesticide stocks in the future.

Lack of funding is the principal reason noted by states for not operating a continuous Clean Sweep program. Without a permanent funding mechanism, the scramble for funds requires staff who are imaginative, persistent, and able to engage partners. Often, success in fund-raising hinges on how good of a salesperson the Clean Sweep manager is, and how readily he or she can solicit partners and in-kind contributions. The different ways states have used to fund Clean Sweep programs are discussed in detail in section 2.2.

4.1 How do states design their Clean Sweep programs to comply with the regulatory requirements?

The federal hazardous waste regulations developed under the authority of the Resource Conservation and Recovery Act (RCRA) are extensive, and states may perceive some sections of them as a hindrance to collection campaigns for commonly-generated wastes such as pesticides. Household hazardous waste is exempt from regulation as hazardous waste, but agricultural pesticides are not exempt. The Universal Waste Rule, discussed below, was specifically designed by EPA to ease some of these regulatory burdens and therefore encourage collection.

As an example of the implications of the hazardous waste regulations, consider the requirements for hazardous waste generators, the people who first create or produce that waste. First, generators are responsible for identifying whether their solid waste is hazardous waste. If it is hazardous waste, generators are required to register with EPA to obtain a generator number. When generators transport or ship waste, they must ensure that the waste is accompanied by a manifest to the final disposal facility.

States have addressed the manifest requirement in several different ways. In Washington, Clean Sweep participants must comply with the full RCRA regulations. Participants register before the collection events and provide a form listing their unwanted pesticides. The state government returns the approved form to the participants, who use them as manifests for transporting the waste to the collection site. Some states consider the pesticides to be pesticide products under FIFRA, the federal pesticide law, until the participant brings it to the collection site. During the transportation, the material is a pesticide, not a waste, so it does not need to be manifested. At the collection site, the pesticides are determined to be discarded and therefore become wastes. Many other states have adopted the Universal Waste Rule (UWR), which offers an alternative regulatory structure for materials defined as universal wastes. The UWR facilitates the collection of hazardous waste pesticides by removing some of the legal obligations, such as the handling and paperwork associated with generation and transportation of hazardous waste and the associated costs.

While the UWR eliminates the requirement for participants to manifest pesticides before transporting them to Clean Sweep collection sites, compliance with the Department of Transportation (DOT) Hazardous Materials Regulations is still required for transporting pesticides by road. The approaches taken by states to comply with DOT regulations vary.[1] The Massachusetts Department of Food and Agriculture developed an agreement with the State Police whereby the police would refrain from random road side inspections of carriers participating in the 1998 Clean Sweep event. In North Carolina, a two-year waiver from DOT regulations was secured by the Department of Agriculture and Consumer Services to facilitate pesticide collections. In Maine, participants register their inventories with the Board of Pesticide Control which then issues DOT shipping papers. In Pennsylvania and other states using on-site pick-up, waste pesticide is collected by the contractor at each participant's site so participants do not have to transport it.

4.2 What is the Universal Waste Rule?

The Universal Waste Rule (UWR) is a set of streamlined hazardous waste management regulations governing the collection and management of certain widely-generated wastes.[2] It was intended to ease the regulatory burden on businesses; promote proper recycling or disposal of certain hazardous wastes which appear commonly in the municipal solid waste stream, thereby reducing the hazardous waste content of municipal landfills; and provide for collection opportunities for communities and businesses.

EPA promulgated the UWR on May 11, 1995 as an amendment to the regulations implementing RCRA (40 CFR 273), to facilitate the environmentally-sound collection, recycling or treatment of batteries, certain hazardous waste pesticides, and mercury-containing thermostats. In 1999, EPA published a rule adding hazardous waste lamps.

The major benefits of the UWR for Clean Sweep programs are that it eliminates the need for participants to obtain an EPA generator number and participants do not need a manifest to transport the pesticides to a collection site.

When EPA issues a new RCRA rule, states authorized to implement the RCRA program must adopt the new rule in a separate state rulemaking for it to be effective.[3] Because the UWR is less stringent than the base or initial RCRA regulatory program, state adoption is optional. EPA strongly encourages state adoption, however, to foster better management of universal wastes in each state. Consistent programs among states will facilitate the implementation of regional collection programs and interstate transport of wastes. States may adopt the entire rule or portions of it, including general provisions; provisions for batteries, pesticides, thermostats and lamps; and provisions allowing the addition of new universal wastes. In other words, a state may adopt all categories of waste included in

[1] The information in this paragraph is taken from 1998 Massachusetts Pesticide Bureau Waste Pesticide General Clean Out: Final Report, prepared by the Massachusetts Department of Food and Agriculture.

[2] Universal Waste Rule web site: http://www.epa.gov/epaoswer/hazwaste/id/univwast.htm

[3] State authorization is a rulemaking process through which EPA delegates the primary responsibility of implementing the RCRA program to states in lieu of EPA. Currently, 49 states and territories have been granted authority to implement the base, or initial, program. Many also are authorized to implement additional parts of the RCRA program that EPA has since promulgated, such as Corrective Action and the Land Disposal Restrictions. State RCRA programs must always be at least as stringent as the federal requirements, but states can adopt more stringent requirements.

the EPA rule or choose only certain wastes and exclude others. Missouri's website http://www.dnr.state.mo.us/deq/dap/pubs lists publications in PDF format, including The Universal Waste Rule in Missouri (Technical Bulletin PUB2058), which provides a good summary of the UWR.

As of June 30, 2001, 41 states and the District of Columbia had adopted the UWR and 22 have been authorized by EPA to implement it. The UWR went into effect immediately in states and territories that are not RCRA-authorized, including Iowa, Alaska and Puerto Rico. Table 15 shows which states have adopted the UWR, which have received authorization from EPA, and the effective date. States that have not adopted the UWR must comply with the full RCRA regulations regarding notification, labeling, marking, accumulation time limits, employee training, response to releases, offsite shipments, tracking, manifesting and transportation.

4.3 How can states deal with liability issues prior to, during, and after collection?

Clean Sweep activities pose different questions of liability to participants, the owners or operators of facilities that host single day events, the state government and the hazardous waste contractor. For example, if a pesticide is spilled when the participant is driving to a one-day event, who is responsible for clean up? If a spill occurs at the location of the event, who must clean it up? If the pesticides are improperly disposed, who is responsible? If there is a problem with the disposal facility where the pesticides are shipped, who is responsible? A full analysis of the legal implications of Clean Sweep programs is beyond the scope of this report. This section briefly describes how liability concerns affect the implementation of Clean Sweep programs.

Prior to a collection, program managers make sure that participants are aware of the danger of transporting old, unwanted pesticides in their vehicles to the collection site. Using web sites and printed material, program managers inform participants of the procedures to follow. For example, Minnesota's web site instructs participants to load pesticides in sturdy containers on a truck bed (not a car), separated from each other by cardboard inserts and tightly strapped down to prevent sliding. Participants are cautioned to bring their completed product inventory and drive safely, as they are responsible for any spills along the way to the collection site. Massachusetts' site provides instructions on how to repackage damaged or leaking containers and provides a transportation safety checklist. The web sites of Idaho, South Dakota, Texas and Washington also provide detailed information for participants. Some states distribute overpack drums, bags or other packing material to participants for repackaging faulty containers. As a precaution, three states require participants to attend a pre-event training.

At the collection event, trained contractor and government staff, not the participants, unload and process the pesticides at the site. After the collection, the hazardous waste contractor is responsible for stabilizing and securing the collection site. At permanent sites, trained government staff manage the security of the stored products.

Clean Sweeps are sometimes set up so that the pesticide agency becomes the official generator of the waste for the purposes of compliance with hazardous waste regulations. South Carolina has had a few problems with liability due to the unique structure of the state's pesticide regulatory agency, which is housed in Clemson University rather than the Department of Agriculture. The University Board of Directors did not want to be in the position of incurring the role and liability of a generator. The

Table 15: Status of Adoption and Authorization of the Universal Waste Rule re Pesticides

State	Adopted [1]	Authorized [2]	Authorization Date	State	Adopted	Authorized	Authorization Date
AL	Y	Y	2/10/98	MT	Y	N	
AK	N (EPA administered) [3]	N		NE	Y	N	
AZ	Y	Y	5/20/97	NV	Y	Y	8/23/96
AR	Y	N		NH	N	N	
CA	N [4]	N		NJ	N	N	
CO	Y	N [5]		NM	Y	N	
CT	N	N		NY	Y	N	
DE	Y	Y	9/11/00	NC	Y	Y	12/22/98
FL	Y	Y	6/2/97	ND	Y	N	
GA	Y	Y	1/23/98	OH	Y	N	
HI	Y	N		OK	Y	Y	11/23/98
IA	N (EPA administered)	N		OR	Y	N	
ID	Y	Y	1/19/99	PA	Y	Y	11/27/00
IL	Y	N		RI	N	N	
IN	Y	Y	11/30/99	SC	Y	N	
KS	Y	N		SD	Y	Y (Not Pesticides)	6/8/00
KY	Y	N		TN	Y	Y	11/15/99
LA	Y	Y	12/22/98	TX	Y	Y	10/18/99
ME	Y (Not Pesticides)	N		UT	Y	Y	3/15/99
MD	N	N		VT	Y	Y	11/23/99
MA	Y	Y	10/12/99	VA	Y	Y	9/29/00
MI	Y	Y	6/1/99	WA	Y (Not Pesticides)	Y (Not Pesticides)	1/11/00
MN	N	N		WV	Y	Y	7/10/00
MS	Y	N		WI	Y	N	
MO	Y	N		WY	Y	N	

Notes: (1) Adopted = the state program office has notified the EPA of a state analogue to the UWR.
(2) Authorized = the EPA has authorized state implementation of the UWR.
(3) Not adopted (EPA authorized) = the state hazardous waste programs, including the UWR, are administered by the EPA regional office.
(4) Not adopted = the state may or may not have adopted an analogous state rule, but no notice has been given to the EPA.
(5) Not authorized in a state which has adopted the UWR = the authorization package has been received by EPA and evaluation is in progress.

state pursued legislation that would allow the university to have an active role but with limited liability, but budget shortfalls have precluded the resolution of this issue.

In some states, the hazardous waste contractor assumes the status and liability of the hazardous waste generator.

4.4 How can states increase participation?

One of the biggest challenges faced by Clean Sweep program managers is maximizing participation. For example, Minnesota found that 82 percent of the participants in 1998 were taking part for the first time, despite having run a statewide, well-organized program since 1990. There are many reasons that people may not participate in Clean Sweep programs, including lack of awareness of the program, fear of being "out of compliance" with hazardous waste regulations, and distance to the collection site.

Collection programs have tried a variety of advertising methods, including newspaper ads, posters at pesticide dealerships, letters to potential participants, radio or TV announcements, and information distributed by extension agents. States may use the commercial or private applicator recertification programs as a way to inform farmers of the Clean Sweep program. Results of surveys by North Dakota and Florida on the method by which participants learned of the collection event are shown in Table 16. As shown in this table, the most effective way to reach participants varies, so most programs use multiple advertising methods.

Table 16: Outreach Methods Responsible for Participants' Knowledge of Collection Event

Outreach Method	% of Participants Citing Method in ND 1996	% of Participants Citing Method in ND 1998	% of Participants Citing Method in FL 2000
Extension agent	28%	19%	
Local newspaper ad	24%	35%	
Dept. of Agriculture	22%	1%	
Word of mouth	14%	7%	41%
Newspaper story	12%	11%	
Radio	12%	20%	14%
Television	13%	7%	
Newsletter			42%
Trade associations			11%
Brochure	11%		
Posters	8%	12%	
Farm/ranch ad	10%		
Other	3%		
TOTAL	157%*	118%*	108%*

* The total exceeds 100 percent because participants reported more than one method.

The impression of many Clean Sweep managers is that a major obstacle to participation is over-coming distrust of government agencies and fear of retaliation. Many farmers have the perception that they could be fined or otherwise punished if it came to the attention of a government agency that they were storing chemicals, particularly canceled pesticides, on their property. Another fear is that they may be subject to an unwanted site inspection or be placed on a "list" for some future enforcement action. Some states have found that pre-registration, which helps them estimate the volume of waste to be expected in a one-day collection event, is a deterrent to those who prefer to remain anonymous.

To promote participation by agricultural communities, some state Clean Sweep programs partner with industry. For example, Michigan enlisted the cooperation of Vriesland Grower's Cooperative, a 580-member cooperative with over 60 years of service to growers. The cooperative agreed to allow their facility to become a permanent collection site for the Clean Sweep program, and during its first year, collected 20 percent of all the pesticides in the entire state that year. States have also relied on the good relationship between extension agents and growers to gradually diminish the distrust of Clean Sweep programs.

Many programs have seen an increase over time in the volume of older pesticides collected. This may be due to the eventual participation by farmers who held back until they saw that their neighbors experienced no penalties or fines after taking part in a Clean Sweep program. Farmers tend to store unusable or canceled products until they have a safe way to dispose of them. Word of mouth and other forms of communication eventually filter through the agricultural community, and Clean Sweep program managers have indicated that it may take several collection events in the same area before the less trusting participate.

After its 1998 program, Massachusetts concluded that trust can be built by having regular and convenient collection events and developing and highlighting partnerships with agricultural and pesticide user organizations. Under this approach, when a government agency is the initiator, it is listed as one of several sponsoring organizations. Ohio's Department of Agriculture collaborates closely with county extension services, Farm Service Agencies, Soil and Water Conservation Districts, Health Departments and Solid Waste Management Districts, and the Ohio EPA, with the Farm Bureau and commodity associations helping to publicize the program.

Another potential barrier to participation may be the location of the collection site. Farmers may be unwilling to transport large quantities of toxic chemicals great distances to unfamiliar locations. Wisconsin records show the maximum distance the average farmer is willing to travel to participate in a Clean Sweep is 15 miles. One option for increasing participation is to expand service through satellite sites or mobile collection units.

4.5 What are the disposal options for dioxin-containing wastes?

Most pesticides can be disposed of at high temperature hazardous waste incinerators or landfilled at permitted hazardous waste landfills. The main exception is the small number of pesticides that may contain dioxin, such as 2,4,5-T, Silvex, Ronnel and pentachlorophenol. Under the federal hazardous waste regulations, these pesticides generally fall under the "F027 code" (see box on following page), which is identified as dioxin-listed waste. Past Clean Sweep programs have received small amounts of these pesticides. Extrapolating data from programs which report quantities of specific pesticides collected leads to an estimate that about 300,000 pounds of dioxin-bearing pesticides have been collected and disposed nationwide.

Definition of F027 Waste in Federal RCRA Regulations

40 CFR 261.31(a) The following solid wastes are listed hazardous waste from non-specific sources...
F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

The problem for Clean Sweep programs is that the only commercial incinerator in the U.S. that is permitted to accept dioxin waste, in Coffeyville, Kansas, closed in August 2000. Even prior to August 2000, this incinerator operated intermittently and therefore did not always accept the dioxin-bearing pesticides from Clean Sweep programs. Without an incinerator available to dispose of dioxin-containing materials, Clean Sweep programs did not and do not want to accept these pesticides because storage is cost-prohibitive and not a long-term solution. Therefore, most states (and hazardous waste contractors) accept dioxin-containing material only if a permitted dioxin disposal facility is operating. However, rejecting such pesticides at collection days creates ill will and the potential that such products will be indiscriminately dumped.

Shipping dioxin wastes to incinerators in other countries, such as Canada, has been done. A Canadian facility is actively accepting F027 waste for incineration, but this may not be convenient for southern states. A solution to this problem is of high priority to states, but highly dependent on private incineration company management decisions.

4.6 What are the benefits of tracking specific pesticides?

Although it costs more staff time and effort to track quantities of individual pesticides, some states want to know exactly what wastes they are collecting. Tracking specific pesticides enables states to identify trends in the quantities of old, canceled, or currently used pesticides being collected and to plan future strategies for waste collection. Data on the quantity of canceled and unregistered pesticides collected also helps convince state legislators of the magnitude of the problem so that funds will be budgeted for Clean Sweep programs.

In addition, by conducting Clean Sweep programs, state and local governments are contributing to global efforts to eliminate PBTs. Tracking information on the PBT pesticides collected and disposed by Clean Sweep programs enables the U.S. to quantify the nationwide contribution, as part of its treaty obligations, to the elimination of these toxic and environmentally hazardous substances.

4.7 How do states track specific pesticides?

States use a number of different ways to collect information on the amount of specific pesticides that have been collected. Vermont requires its Solid Waste Districts to report the specific pesticides collected in order to receive state funding for disposal. Michigan recommends instituting the practice of recording the specific pesticides collected right at the beginning of the program. Once a program is underway, habits are hard to change, particularly if collections are infrequent and attract many participants at once. Permanent collection centers, such as Michigan's, are open five days a week and do not have the problem of time constraints when recording information during extended busy times. It took

several years for Michigan to convince every center to record the weight and identity (either by EPA or USDA registration number or by common name) of all products collected. In some cases, reimbursement was withheld until the information was provided. North Carolina recently began to track quantities of 15 to 20 different pesticides. Containers of these pesticides are placed aside as they are dropped off and the quantities are tallied during down times at the collection events. In Virginia, participants provide detailed information about the quantity and identity of the individual pesticides when they register. The Virginia Department of Agriculture and Consumer Services maintains this information in a data base. While the actual amount collected differs from the amount that is registered, the data base provides a good estimate of the pesticides collected.

In an effort to encourage states to track specific pesticides in 2000, EPA offered small grants to states which already had Clean Sweep programs but did not record amounts of individual pesticides. Minnesota, Kentucky, New York and Massachusetts were awarded small grants.

Minnesota had already been tracking specific pesticides for ten years but had not analyzed the cost of its data collection and management. Therefore, the state proposed to explore ways to more efficiently manage the data. Minnesota compared the state's current, hand written method of data collection by volunteers to three principal types of data management: optical recognition of container bar codes, scanning drivers' licenses at collection sites, and telephone number identification.

The bar code option required a pre-programmed scanner and proved to be both time- and cost-prohibitive, since it involved communicating with all the chemical companies about information they were hesitant to share. Even if existing codes could be used, many containers are old and from the pre-bar code era. Minnesota believes that by developing a bar code for each of the most frequently-collected pesticides, it would be possible to use scanners without the container actually having a compatible bar code. For this to occur, the product would have to be identified and then located on a product name sheet with the correct assigned bar code. A three-ring binder containing the bar code sheets would need to be carried while taking inventory at on-site collections. Sheets of bar codes representing only numbers would also be necessary to scan in the weights of each pesticide collected.

Minnesota's program maintains a database of participants' names and addresses, and they investigated ways to make the data entry more efficient. They tried several methods, including one used by county household hazardous waste programs which scan drivers' licenses, and another using software from telephone companies. Neither option was considered practical, because they would require constant upgrading.

Minnesota also evaluated various equipment (scanners, software, hardware) with the latest technology which could be used under field conditions at collection sites under conditions of extreme weather conditions, dust, grime, heat, cold, and rain. The investigators concluded that the sensitivity and limited mobility of scanners would be a problem, but that the bar code scanning option has potential for the future. They developed a trial program with bar codes identifying about 50 pesticides, but the budget did not allow for a trial.

Minnesota concluded that, currently, entering the information longhand is the most appropriate, practical, reliable and least time consuming (especially when several hundred bar codes are involved) method of collecting the information, provided the penmanship is legible.

In Kentucky's program, a Department of Agriculture employee visits the participant's site to assess the pesticides or to pick them up if they quantity is small and doesn't require special containment. Most pesticides are placed into overpack drums. To track certain pesticides, the Department of Agriculture employee followed the same procedure, but separated the tracked pesticides from the others in either overpack bags, drums or pails depending on the amount. This allowed the state to measure and record the weight of the tracked pesticides. Kentucky collected useful information, but the process added additional effort and time to the process and required additional overpack material.

4.8 What are states doing to prevent future accumulation?

States are trying to prevent the future accumulation of waste pesticides by providing training and outreach for good management practices and promoting integrated pest management (IPM). States may provide comprehensive guidance on good management practices, either on their websites or in published documents, for storing and disposing unwanted pesticides, managing empty containers, and avoiding the accumulation of unwanted pesticides. Appendix VI lists state websites with information about pesticides and disposal, and some that provide Clean Sweep-specific information. Examples of websites which address good management practices for preventing accumulation of unwanted pesticides are Florida, South Dakota and Washington. North Dakota's website[4] gives guidance on prevention and emergency response on pesticide storage concerns during a flood. State and county extension services continue to offer advice and training in IPM to facilitate farmers' informed decisions about pesticides.

[4] http://www.ag.ndsu.nodak.edu/flood/pestidhb.htm

Section 5 Observations

Using a variety of approaches, Clean Sweep programs in 46 states have collected and disposed of more than 24 million pounds of unwanted pesticides, which may otherwise have seeped out of deteriorated containers and contaminated soil and groundwater. Using predominantly state resources, 11 states have collected over a million pounds of pesticides, and the 21 states with permanent funding have collected more than 70 percent of the waste pesticides collected nationwide. Participation has expanded from exclusively farmers and ranchers to include residential and institutional pest control operators, government agencies, golf course owners and others. Although many of the collected pesticides were canceled years ago, currently-registered pesticides are the most commonly collected materials.

After examining the states' programs, EPA has made observations about several major issues facing these programs nationwide. This section discusses the advantages of permanently funded programs, the costs of Clean Sweep programs, the amounts of unwanted pesticides still needing disposal, the relationship between quantities used and quantities disposed, and the continued need for Clean Sweep programs.

5.1 Permanent funding has many advantages.

The 21 states with permanently funded programs have collected over 70 percent of all the waste pesticides nationwide while conducting over 60 percent of the annual collections. The obvious principal advantage of permanent funding is that program managers have predictable funds every year or every few years, and can, therefore, devote their energy to program implementation. With permanent funding, managers can think long-term, can plan for phased state-wide collections, and can establish long-term contracts with waste haulers.

An established, funded program builds trust in the community and gives farmers and other participants a sense of confidence that Clean Sweep programs are beneficial to participants and the environment. Participants learn through the experiences of neighbors, and program staff can plan successful outreach efforts and target different geographical areas each year so as to cover an entire state.

Permanently funded programs give program managers greater waste management contracting flexibility, including options to negotiate long-term contracts. As discussed in section 2.13, the administrative strategies that allow for program efficiency require considerable coordination and planning between the manager and the contractor. The more stable the program and vendor relationship, the greater the chance that the advantages of administrative options can be fully realized. When managers have the time to research and understand administrative options, they can move from low-bid contracts to "request for services proposals." Short-term contracts leave little room for vendors to work toward more efficient, long-term solutions, and put the burden on program managers to identify all needs in the bid documents.

Also, program managers of well-funded programs have the flexibility to alter or expand service formats. For example, satellite sites, permanent sites, combined household and agricultural collections, multi-county and multi-day collections, and on-site pick ups to reduce customer travel time and increase convenience are options available only to those states with established, assured funding.

5.2 *The unit costs (on a per pound basis) of Clean Sweep programs have decreased over the past decade.*

The cost of a Clean Sweep program (and the way cost is calculated) varies from state to state and over time. In some cases, programs may cite only the cost of the contractor, while the considerable internal expenditures, including agency in-kind and personnel costs, may be omitted from the reporting. The major contractual costs are usually the mobilization fee (cost attributed to the contractor's expenses in arriving at the site and setting up for the collection), collection and disposal costs, and the analysis of unknown substances brought to the collection. However, the cost of Clean Sweep programs is minor compared to the cost of cleaning up the pollution resulting from improper disposal of unwanted pesticides.

Some states have provided yearly cost information on their Clean Sweep programs and that information is provided in Table 17. The data from these states are incomplete, making it impossible to analyze the total cost of Clean Sweep programs in the U.S.

Another way to evaluate the cost of Clean Sweep programs is to consider the cost per pound of disposed material. Based on the data from fifteen states provided in Table 18, the cost per pound has decreased significantly over the past decade. When Utah's Department of Agriculture and Food began its Unused Pesticide Collection Program in 1993, the state paid $4.50 per pound to dispose of the collected material. In 2000, due to the Department's ability to get various disposal companies on a state contract, the cost was reduced to $1.55 per pound, a decrease of over 65 percent. Using vendors that were on a state contract saved more than $230,000 in four years, and decreased both cost and paperwork for farmers and ranchers. Similarly, Ohio's disposal costs went from $6 per pound in 1993 to $1.25 per pound in 2000. The cost per pound over time for Georgia, Maryland, Mississippi, Utah and Virginia is shown in Figure 19.[1]

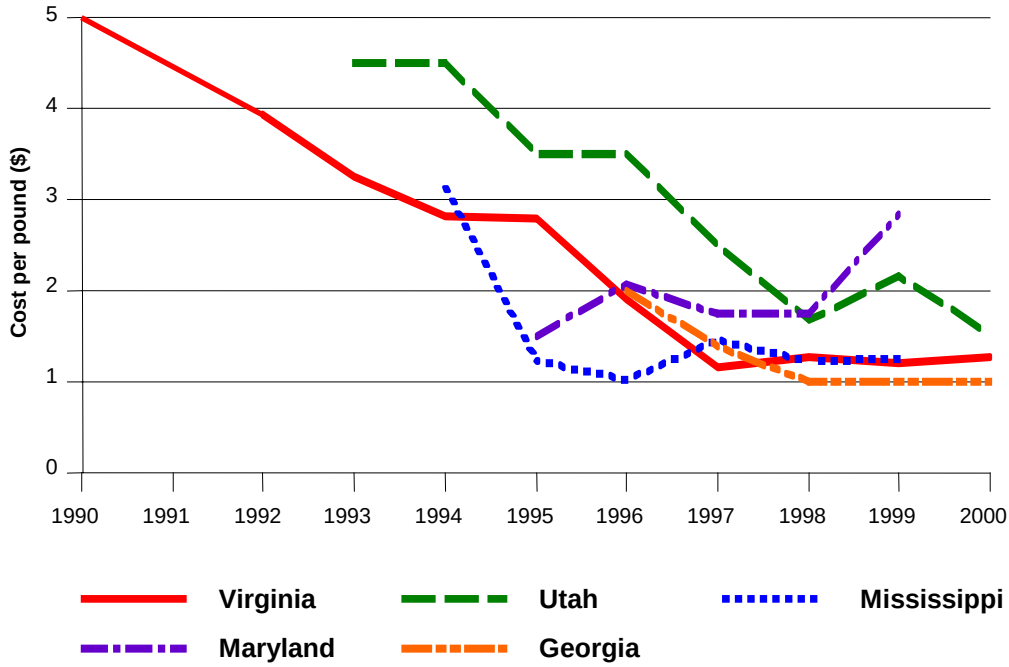
In states with successful long-term programs, the current per pound cost ranges from $1.98 per pound in Washington to less than $1.00 per pound in North Carolina, with other states in between, for example $1.80 in Wisconsin, $1.60 in Minnesota, $1.30 in Nebraska, and $1.21 in Texas. The unit cost for Clean Sweep programs in 1999 and 2000 in 26 states averaged $1.56 per pound and ranged from $0.85 per pound to $2.98 per pound.

In its *Progress Report for Operation Cleansweep* of March 2001, the Florida Department of Agriculture and Consumer Services summarized the benefits of Clean Sweep programs and analyzed the difference in cost between their 2000/2001 state-run program and the cost that would have been incurred if each of the 374 participants had contracted and paid for disposal separately.

The collection and proper disposal of unwanted pesticides provides a benefit to both end users of pesticides and citizens of the state.

[1] Note: EPA believes that this cost decrease is due partly to increased efficiency by the programs and partly to the general changes in incineration costs over the decade. Although data from the early 1990s was not available, the Environmental Technology Council web site (http://www.etc.org) lists the average cost for disposing of lab packs at commercial incinerators (on a per pound basis) as follows: $2.17 in July 1999, $2.42 in January 2000, $1.62 in September 2000, and $1.63 in May 2001.

FIGURE 19 Cost (per pound) of Clean Sweep Collections for Selected States



Program participants benefit by the removal of a potential financial liability. Citizens benefit by the removal and disposal of potential pollutants from their environment.

In addition, there are significant cost savings based on comparing the cost of Clean Sweep programs to the costs of each participant contracting for disposal separately. Typical costs for removing hazardous wastes from private property include both the costs of hiring a professional, properly-licensed firm to characterize the products for disposal and the costs to transport and dispose of the material. Costs for professional services are on the order of one hundred to several hundred dollars per hour, depending on the number of professional staff assigned. Transport and disposal costs paid by the Florida Department of Environmental Protection for emergency clean-up services run $2.15 per mile for transport and $300 per 30-gallon overpack drum. The average amount of unwanted pesticides per participant in the Florida program was 630 pounds, which would translate to at least three 30-gallon overpack drums. Assuming a trip of 50 miles to the transfer/storage facility, the cost per participant would be about $1,000, or at least $374,000 for the 374 participants for transportation and disposal only, i.e., not including the costs for professional services. Assuming a minimum cost of $1,500 for professional services per participant, the cost for participating businesses to dispose of their unwanted pesticides increases by $561,000 to a total of $935,000, if they had each contracted for disposal individually. In comparison, the cost to the state for the 374 participants to participate in the December 2000 to February 2001 Clean Sweep program was $270,033. In other words, environmentally sound, privately-arranged disposal would have cost an estimated 3.5 times more than the state paid, showing the benefits from the increased efficiency, economy of scale and single mobilization and professional services fee that are part of Clean Sweep programs.

Table 17: Total Program Cost per Year for Selected States (in dollars)

State	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
AL							99,000	132,590				64,400	16,800	312,790
FL								no data [1]	39,035	no data	no data		195,507	NA [2]
GA								no data	73,600	35,070	128,880	373,850	207,910	>819,310
HI	50,062	17,300												67,362
ME	no data [3]	no data							no data	no data	15,280	9,180	15,000	NA
MD								50,052	30,820	23,508	36,481	12,604		153,465
MS							71,960	311,964	170,832	222,667	259,876	29,485	no data	>1,066,784
NE								744,000			no data	no data	252,020	>996,000
NH			75,000											75,000
NY						71,800 [4]		no data	213,804			50,708 [4]	no data	>336,312
SD						no data	no data	no data	no data	no data	no data	38,525	42,062	NA
UT						51,539	78,692	49,333	46,669	47,258	44,090	36,832	40,474	394,887
VT				no data					<60,000	<60,000	<60,000	<60,000	60,000	NA
VA			158,977		225,264	222,100	624,983	174,132	144,024	86,073	60,559	116,150	103,620	1,915,882
WV							no data	150,000	29,340	no data	no data			NA

Notes: (1) No data = the state collected pesticides that year, but there are no data on costs. (2) NA = not applicable. If there were more years (or the same number of years) with no data than with data, a total was not calculated because it would be misleading. (3) For Maine, there are no data for 1982, 1984, and 1986. (4) For New York in 1993, the overall costs were $71,800; the disposal costs were $31,800. In 1999, the overall costs were $50,708; the disposal costs were $39,990.

Table 18: Average Cost per Pound for Selected States (dollars per pound)

State	1987	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
AL							1.39	2.40				1.28	1.33	1.65
FL								no data[1]	2.10	no data	no data	no data	1.14	NA [2]
GA								no data	2.00	1.37	1.00	1.00	1.00	1.06 [3]
HI	4.01	3.46												3.86
ME	no data [4]	no data							no data	no data	1.91	1.30	4.66	NA
MD								1.50	2.07	1.75	1.75	2.83		1.76
MS							3.13	1.21	1.02	1.45	1.21	1.24	no data	1.27 [3]
NE								1.25			no data	no data	1.30	NA
NH			3.75											3.75
NY						2.29 [5]		no data	1.77			1.62 [5]	no data	1.79
SD						no data	no data	no data	no data	no data	no data	1.67	1.30	NA
UT						4.50	4.50	3.50	3.50	2.50	1.68	2.15	1.52	2.72
VT				no data					no data	no data	no data	no data	2.14	NA
VA			5.00		3.94	3.26	2.81	2.80	1.90	1.16	1.26	1.19	1.27	2.34
WV							no data	2.50	1.57	no data	no data			NA
Average [6]	4.01	3.46	4.52		3.94	3.27	2.62	1.50	1.60	1.45	1.22	1.16	1.23	

Notes: (1) No data = the state collected pesticides that year, but cost data are not available. Therefore, the cost per pound could not be calculated. (2) NA = not applicable. If there were more years (or the same number of years) with no data than with data, an overall average cost per pound was not calculated because it would be misleading. (3) This represents the average quantity for the years with data. (4) Maine does not have cost information available for 1982, 1984, and 1986. (5) For New York in 1993 and 1999, this represents the cost of disposal per pound, not the overall cost per pound. (6) This is a weighted average that was calculated from the total cost and total number of pounds for the states with data for that year.

5.3 *Reliable estimates of uncollected pesticides are elusive.*

No one knows how many pounds of unwanted pesticides remain uncollected in the U.S., and accurately estimating the total amount is difficult due to several factors. First, many farmers are reluctant to fill out government surveys, particularly if they happen to have canceled pesticides stored in their barns. Some people may fear that a survey, even if anonymous, may be tracked back to them and that they might be subject to a fine or penalty. Second, some stocks lie forgotten in barns for years until the owner dies and the barn is bought or inherited by someone who does not need the pesticides and wants to get rid of them. Third, unwanted pesticides continually accumulate. Ideally, all pesticides bought in a single year would be used during that year's growing season. In reality, some amount may be left over every year and many never be used, if farmers change crops or need different pesticides. Fourth, in recent years, some uses of older products have been canceled due to new risk assessments conducted under the Food Quality Protection Act. In such cases, a farmer may choose not to use existing stocks of a specific pesticide.

Several states have conducted surveys to attempt to estimate the amount of unwanted, uncollected pesticide. Georgia sent out printed surveys in 1997 to help determine (1) if they should continue the Clean Sweep program and (2) if so, which areas of the state they should target. A cover letter explained the purpose of the survey and ensured the recipient of absolute confidentiality, recording only the name of the county where the pesticides were stored. Postage-paid return envelopes were provided. A total of 4,741 one-page surveys were sent to randomly selected farms throughout the state. A total of 1,446 responses (30.5 percent response rate) were received. The survey consisted of the following questions:

- What county do you live in?
- Do you have unusable waste farm chemicals in need of disposal?
- Why have these chemicals become unusable?
- Approximately how much do you have?
- How long have you had these chemicals?
- How far would you be willing to travel to dispose of these chemicals?
- Would you participate if you had to pay a portion of the disposal cost, and if so, check the highest amount/pound you would be willing to pay?
- What is the best way to inform you if a program is started in your area?

Georgia officials then extrapolated the survey results to estimate that 43,000 farms in the state had approximately 544,000 pounds of unwanted pesticides. The Clean Sweep advisory committee believed that this estimate was approximately half the actual amount. For comparison, between 1998 and 2000, Georgia collected more than 710,600 pounds of pesticides.

Florida's Department of Agriculture and Consumer Services enlisted the collaboration of other state and federal agencies, grower groups, environmental groups and other interested parties in a three-county pilot project in 1996. County agricultural extension agents conducted surveys and identified over 5,000 pounds of unwanted agricultural pesticide in the three counties. In the Clean Sweep collection that followed, some growers had apparently underestimated the amount they had for disposal, while other growers who had not pre-registered for the collection were accommodated. Over 7,500 pounds of pesticides, or 50 percent more than estimated, were collected in the three pilot counties. All participants were satisfied with the process, and the rapport and trust between growers and extension agents were found to be key elements in the success of the program.

A random sample survey of South Dakota's 3,800 farmers and ranchers in 1997 indicated that 73 percent of them were familiar with the Unusable Pesticide Collection Program. The survey also showed that one in 20 had unusable pesticides on hand, which translated into approximately 190 farmers and ranchers. Further survey results indicated that farmers and ranchers held approximately 20,750 pounds and 9,540 gallons (a total of 106,610 pounds, assuming a conversion of 9 pounds per gallon) of unwanted pesticides. Survey respondents with pesticides reported a willingness to travel an average of 30 miles to a pesticide collection site. August and October were the most popular months to hold a collection event, but one in five of those responding had no preference. As a point of reference, from 1998 through 2000, South Dakota collected more than 83,600 pounds of pesticides in their Clean Sweep collections.

5.4 *Only a fraction of the pesticides used in states is disposed in Clean Sweep programs.*

Section 3.2 includes a discussion comparing the amount of pesticide collected and disposed by Clean Sweep programs to the amount of pesticide used nationwide from1961 to 2000. Appendix VIII provides the estimated amount of pesticides used in each state and amount disposed in its Clean Sweep program. Assuming that pesticide management practices are consistent across the country, it is reasonable to expect that the higher a state's pesticide usage, the higher will be its quantities of unwanted stocks.

The table in Appendix VIII shows that states which use the most pesticides have permanently funded or continuous Clean Sweep programs, indicating that these states recognize and are addressing the potential problem of unwanted pesticide stocks. The table also shows, as expected, that states with longer-running programs generally have collected higher quantities of pesticides and a larger proportion of the amount of pesticides used since 1961. A notable exception is Nebraska, which has collected a large quantity of pesticides in only four years.

Texas has collected more than 3.1 million pounds of unwanted pesticides in its 9-year Clean Sweep program. As Appendix VIII shows, this is an estimated 0.06 percent of the quantity of pesticides used in Texas over the past four decades. This means that for every 1,000 pounds of pesticide used in Texas during this time, less than a pound (0.6 pound) has been collected and disposed by the state's Clean Sweep program. Information for all the states is listed in Appendix VIII.

5.5 *Clean Sweep programs will continue to be needed for the foreseeable future.*

Even states with long-term, comprehensive Clean Sweep programs are still collecting large amounts of pesticides. For example, seven of the 11 states that have collected over one million pounds in total, collected more than 100,000 pounds of pesticides in 2000.

The amount collected per year depends on many factors, including the available funding, number of collection events, organization and timing of events, and categories of people who are allowed to participate. Examining the charts for the quantity of pesticides collected in each state in Appendix I indicates the difficulty in trying to define a long-term general trend in amounts collected per year. In some states, such as Minnesota and North Carolina, the amount collected has increased almost every year, although the amount collected in Minnesota in 2000 decreased from the peak in 1999. Other states, such as California, Georgia, Ohio, and Pennsylvania, have had a peak year and declining collections since. Idaho collected about the same

amount annually for five consecutive years, then spiked to an increase of about 60 percent in 2000. Indiana had a peak year, then declining amounts, and after skipping two years collected almost double its highest annual collection. Basically, there is no clear pattern in quantities of pesticides collected over time.

Some states evaluate their own programs for trends. For example, Virginia is in a four-year "maintenance phase" following a nine-year program in which all state localities were scheduled for collection events. The report of the 2000 program noted that in 18 of 25 participating localities, the quantity of pesticide collected was less than the amount collected during the first phase. The reduction, an overall decrease of almost 29 percent, was observed in the 1999 program, continued in the 2000 program, and appears not to be affected by the length of time between collections.

In addition to the typical amounts collected from farmers and others, unpredictable special situations are always possible. For example, a Virginia widow recently auctioned her estate's farm equipment, which included pesticides. The state requested that she remove the pesticides (almost 6,000 pounds) from the auction and arranged for a contractor pick up during the 2000 Clean Sweep program.

Because of the significant volumes of pesticides that continue to be collected by long-term, comprehensive programs and special situations like the one described above, EPA believes that Clean Sweep programs will continue to be needed for the foreseeable future.

Acknowledgements

This report would not have been possible without the timely and thorough comments provided by state and local Clean Sweep managers. Some text from this report was borrowed directly from the reports and conference proceedings penned by Clean Sweep managers. In particular, we are grateful for the contributions of Roger Springman of the Wisconsin Department of Agriculture, Trade and Consumer Protection, on the ways to reduce disposal costs and improve program efficiency and on the advantages of a permanent program. We appreciate the contributions regarding contracts and emergency plans by Jack Knorek of the Michigan Department of Agriculture, Stan Kaminski of the Minnesota Department of Agriculture, Judy Carlson of the North Dakota Department of Agriculture, and Annie Macmillan of the Vermont Department of Agriculture, Food and Markets. Special thanks are due to Wayne Holtzman, EPA contractor, who was the Office of Pesticide Program's principal contact and correspondent for Clean Sweep managers for several years. We also thank the State of Tennessee for graciously allowing the use of its photographs of Clean Sweep operations for the report cover.

In addition, we thank the following people who provided guidance and suggestions on topics and issues to include during the early stages of developing the report:

- *Annie Macmillan, Vermont Department of Agriculture, Food and Markets*
- *Roger Springman, Wisconsin Department of Agriculture, Trade and Consumer Protection*
- *A.G. Taylor, Illinois Environmental Protection Agency*
- *Mary Grisier, EPA Region 9*
- *Margaret Jones, EPA Region 5*
- *David Macarus, EPA Region 5*
- *Janice Jensen, EPA Office of Pesticide Programs.*

APPENDICES

Appendix I

NOTES on STATE "AT A GLANCE" PROFILES

The information in Appendix I is based on data voluntarily submitted by state Clean Sweep managers and state reports and web sites as of October 2001. Inaccuracies can be corrected in on-line updates on EPA's website.

Program Status: Program categories are defined as follows:

Permanently funded: Twenty-one states have continuous programs which are permanently funded. A continuous program is defined as one that has been implemented for at least three consecutive years. Permanent funding is defined as a mechanism that is reliable, consistent and in place year after year, e.g., using a portion of state pesticide registration fees, access to a fund that pays for clean up programs, or consistent state appropriations.

Continuous: Twelve states have continuous programs, meaning a program that has been implemented for at least three consecutive years that does not have permanent funding. Although continuous means "without interruption," a program may still be classified as continuous even if it occasionally skips a year. Of the twelve continuously funded states, ten have active programs, that is, they have been implemented for at least three years in a row and carried out a Clean Sweep program in 2000 or 2001. Two of the twelve continuously funded states have inactive programs, because they did not conduct a program in 2000 or 2001.

Intermittent: Nine states have programs which are not continuous but which have held more than one collection event. There are four *active* programs (in 2000 or 2001) and five *inactive* programs.

One-time: Four states have programs which have held one collection event. All of these events were held in 1990 or 1992.

Never: Four states have no existing program and have never held a collection event.

If a state's program is funded by participant fees only, it has not been included in the "permanent funding" category. Fees can be less predictable, and thus present additional issues for the state lead agency to handle. Whether or not people are willing to pay for disposal depends on many variables, including the farm economy, weather conditions and pest infestations, although fee systems can be built to address these issues.

Quantity of Pesticides Collected: The bar graph and the total amount collected to date reflects collection data through year 2000. Although some states submitted data for year 2001, EPA decided, for the sake of consistency, to postpone 2001 updates until the EPA Clean Sweep web site has been established and all 2001 data have been received.

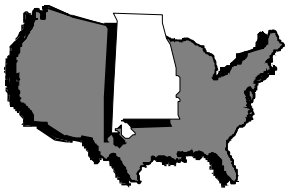
Exchange program: Since unopened, legally usable pesticide products would be better used than disposed, some states conduct limited product exchanges, redistribution and recycling.

1995 Universal Waste Rule: A recorded entry "adopted" indicates that the state program office has notified the EPA of a state analogue to the Universal Waste Rule. A recorded entry "not adopted" indicates that the state may or may not have adopted an analogous state rule, but no notice has been given to the EPA. A recorded entry "adopted, not yet authorized" indicates that the authorization package has been received by EPA and evaluation is in progress.

Specific pesticides reported: A recorded entry of "Yes" indicates that EPA has data on the specific pesticides collected. A recorded entry of "No" means that EPA does not have data on the specific pesticides collected, although the state may be recording that information.

Container Collection - Existing program: Most states have conducted collection and recycling programs for empty, clean pesticide containers, usually in collaboration with the ACRC. If a state has indicated to EPA whether or not container recycling programs have been implemented, an entry of "Yes" or "No" is recorded, otherwise "Information not available" is entered. If a contact point for container collection is in a different agency than the Clean Sweep manager, the person is listed.

ALABAMA AT A GLANCE

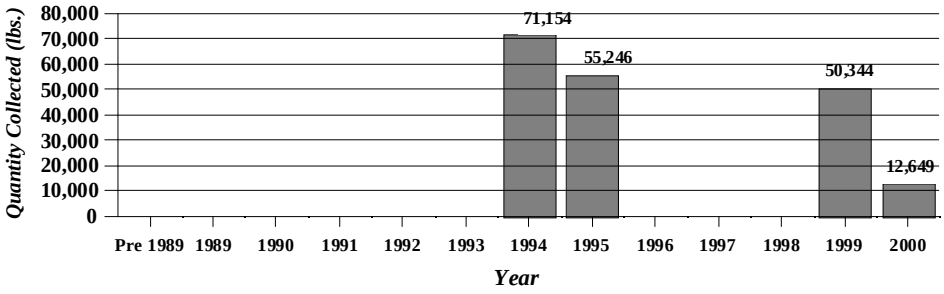


Since 1994 Alabama has conducted four clean sweep collections with the Department of Agriculture and Industries as the lead agency. The State of Alabama, EPA, the Tennessee Valley Authority, and private sources have funded these efforts. The state has collected nearly 190,000 pounds of pesticides.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1994
Program Status: Intermittent, active

Quantity of Pesticides Collected



Amount collected to date: 189, 393 lbs.

Program Funding

Source: State funds, EPA grants, and grants from the Tennessee Valley Authority and private companies
Participant fee collected: No
Cost information: Ranges from $1.28 per pound in 1999 to $2.40 per pound in 1995

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1998
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers and the public

Container Collection

Existing program: Yes

Contact Information

Tony Cofer
Department of Agriculture & Industries
Ground Water Section Pesticide Mgmt
P.O. Box 3336
Montgomery, AL 36109-0336
Tel: (334) 240-7237
Fax: (334) 240-7168
groundwater@agi.state.al.us
Website: http://www.agi.state.al.us (Department of Agriculture and Industries, not specific to Clean Sweeps)

Summary of Alabama Waste Pesticide Disposal Program

Alabama conducted two large Clean Sweep programs in 1994 and 1995 for a total collection of 126,400 pounds of pesticides. The 1994 collection was a combined agricultural and household event; however, the agricultural items were kept separate. Chlordane and heptachlor were the primary pesticides collected. The 1995 collection event was a Pesticide Amnesty Day for agricultural items only, with calcium arsenate and toxaphane being the prevalent pesticide items collected.

Alabama does not have regular collection events. Clean Sweep programs are driven by the availability of funds which have been almost nonexistent. The Alabama Department of Agriculture and Industries (ADAI) is considering requesting an increase in registration fees to support Clean Sweep programs.

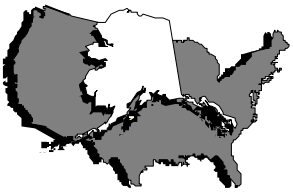
In 1999, Alabama was provided funds from EPA ($50,000), the private sector ($10,000), and the Tennessee Valley Authority (TVA) ($75,000) to conduct a Clean Sweep program for farmers in 12 counties. The program was supported by the Cooperative Extension Service, ADAI, the Department of Natural Resources, and TVA. This program collected a total of 50,344 pounds of pesticides from 81 farms.

In August 2000, Alabama conducted a Clean Sweep program for 8 northeast Alabama counties. The single day event collected 12,649 pounds of chemicals and was strictly targeted to agricultural producers. The funding was provided by ADAI, EPA and TVA.

Alabama Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1994	71,154	414 cars/trucks	172 (ag and household)	$ 99,000	$1.39
1995	55,246	56 cars/trucks	987	$132,590	$2.40
1999	50,344	81 farms	622	$ 64,400	$1.28
2000	12,649	26 farms	487	$ 16,800	$1.33
TOTAL	189,393	577	328	$312,790	$1.65

ALASKA AT A GLANCE

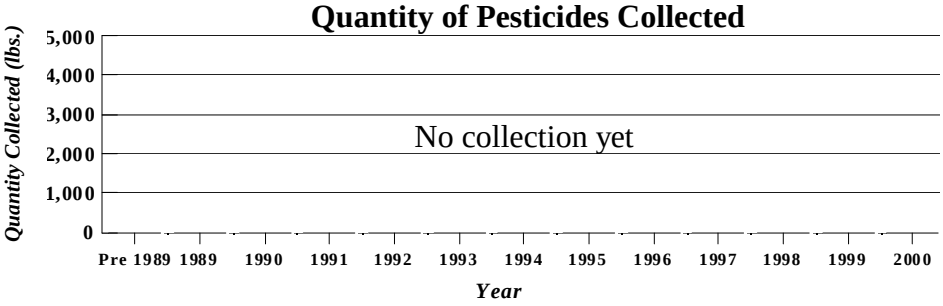


Alaska conducts spring "clean-ups" and municipalities conduct regular programs, which accept hazardous waste from homeowners. However, the state has not conducted any pesticide clean sweeps.

Collection History

Products collected: Not applicable
Year of first collection: Not applicable
Program Status: None

Quantity of Pesticides Collected



Amount collected to date: 0 lbs.

Program Funding

Source: Not applicable
Participant fee collected: Not applicable
Cost information: Not applicable

Collection Logistics

Method of collection: Not applicable
Disposal method: Not applicable
Exchange program: No
1995 Universal Waste rule: EPA administered
Pre-registration: Not applicable
Specific pesticides reported: Not applicable
Eligible participants: Not applicable

Container Collection

Existing program: No

Contact Information

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Pesticide Program
500 South Alaska Street
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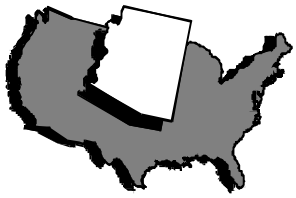
rosemarie_lombardi@envircon.state.ak.us
Website: http://www.state.ak.us/dec/deh/pesticides/home.htm (Department of Environmental Conservation, not specific to Clean Sweeps)

Summary of Alaska Waste Pesticide Disposal Program

The Pesticide Program, which is in the Department of Environmental Conservation, is not directly involved in pesticide collection and disposal.

Alaska conducts spring "clean-up" projects which collect hazardous waste from private home owners and farmers. Pesticides are accepted, along with household hazardous products. Household hazardous waste (HHW) collections are held in many of the larger communities, usually once a month. Farmers and commercial businesses (including commercial applicators, retailers and golf course managers) who are conditionally exempt generators can dispose of up to 220 pounds in HHW collection programs for a fee. The participant takes the material to a permanent site and does not have to register in advance. There is no information that indicates significant quantities of agricultural pesticides are disposed of at HHW programs. All collected wastes are sent out of the state for incineration or landfill disposal.

ARIZONA AT A GLANCE

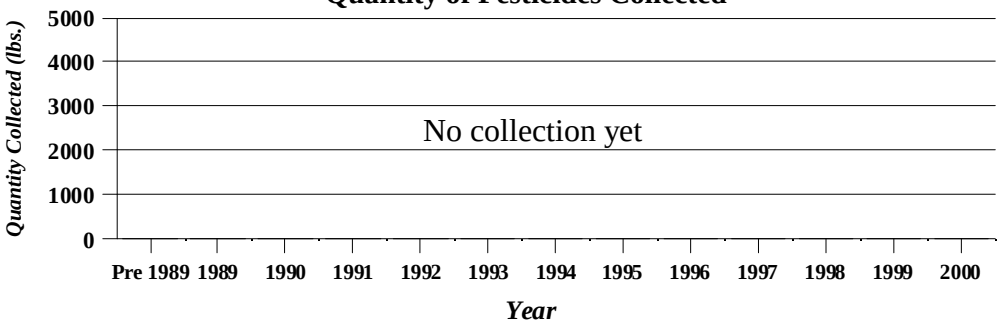


Arizona does not have a clean sweep program for agricultural pesticides and the Department of Agriculture has no plans to initiate one.

Collection History

Products collected: Not applicable
Year of first collection: Not applicable
Program Status: None

Quantity of Pesticides Collected



Amount collected to date: 0 lbs.

Program Funding

Source: Not applicable
Participant fee collected: Not applicable
Cost information: Not applicable

Collection Logistics

Method of collection: Not applicable

Disposal method: Not applicable
Exchange program: Not applicable
1995 Universal Waste rule: Adopted, authorized in 1997
Pre-registration: Not applicable
Specific pesticides reported: Not applicable
Eligible participants: Not applicable

Container Collection

Existing program: Information not available

Contact Information

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Department of Agriculture
Environmental Services
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Phoenix, AZ 85007
Fax: (602) 542-0466

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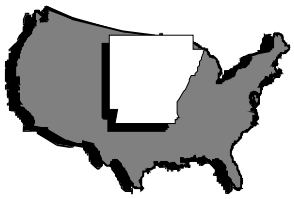
Website: http://agriculture.state.az.us (Department of Agriculture, not specific to Clean Sweeps)

Summary of Arizona Waste Pesticide Disposal Program

Arizona does not have a program for the collection of agricultural pesticides and currently has no plans for one.

ARKANSAS AT A GLANCE

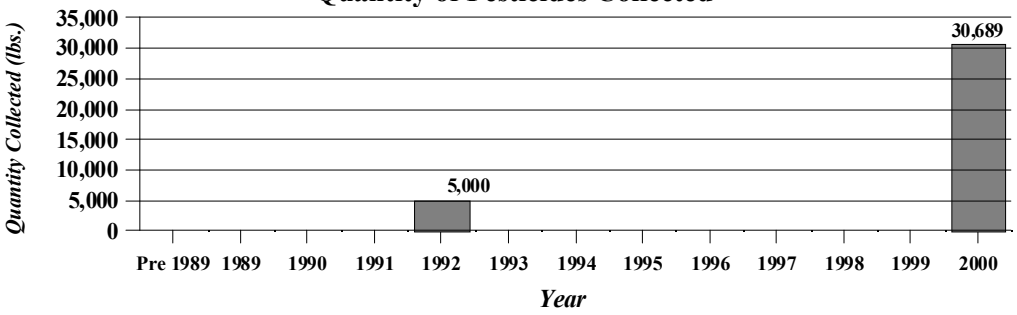


The Arkansas State Plant Board conducted a pilot collection in 2000, the first in the state since 1992, and collected over 30,000 pounds of agricultural pesticides. Legislation passed in 2001authorized the state to fund the program with pesticide registration fees starting in 2002.

Collection History

Products collected: Pesticides
Year of first collection: 1992
Program Status: Intermittent, active

Quantity of Pesticides Collected



Amount collected to date: 35,689 lbs.

Program Funding

Source: Unknown for 1992; state funds for 2000
Participant fee collected: No
Cost information: $1.98 to $2.62 per pound

Collection Logistics

Method of collection: Single day events and on-site pick up
Disposal method: Incineration and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required in 2000; information not available for 1992
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

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State Plant Board
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Tel: (501) 225-1598
Fax: (501) 225-3590

Tom Ezell
Department of Environmental Quality
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Tel: (501) 682-0876
Fax: (501) 682-0565
ezell@adeq.state.ar.us

http://www.plantboard.org/pesticides_about.html (State Plant Board, not specific to Clean Sweeps)

Summary of Arkansas Waste Pesticide Disposal Program

The Department of Pollution and Ecology conducted an amnesty program in 1992 and collected 5,000 pounds of agricultural pesticides. Currently the State Plant Board, which functions like the Departments of Agriculture in many other states, is the lead agency for pesticide regulation in general and for pesticide disposal programs.

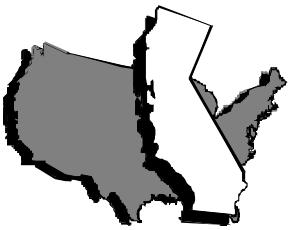
In November 2000, the Plant Board, in cooperation with the University of Arkansas Cooperative Extension Agency, Farm Bureau, Arkansas Department of Environmental Quality, and the Benton County of Environmental Services, collected and disposed of 30,689 pounds of pesticides in a pilot program. The pilot was funded by the State's General Fund. Only farmers participated in the pilot, but the State Plant Board anticipates that future programs will be open to the public. In March 2001, the Arkansas General Assembly established the Abandoned Pesticide Disposal Program and authorized the Plant Board to collect $50 per registered product per year to fund the program beginning in 2002. Another collection in Benton County will be held in 2001. The program is expected to be run statewide in 2003.

Arkansas Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)
1992	5,000
2000	30,689
TOTAL	35,689

Information on the number of participants and program cost is not available.

CALIFORNIA AT A GLANCE

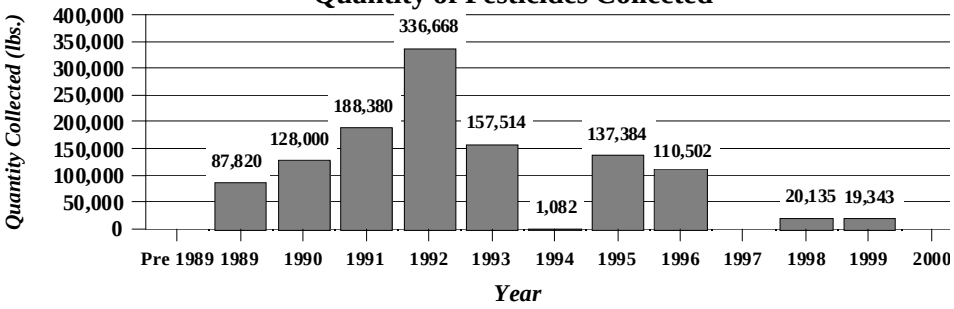


Since 1989 California has conducted clean sweep collections. The Department of Toxic Substances Control within the state Environmental Protection Agency is the lead agency. Collections are conducted on a county-by-county basis and are funded by participant fees. Nearly 1.2 million pounds of pesticides have been collected.

Collection History

Products collected: Pesticides
Year of first collection: 1989
Program Status: Continuous, inactive

Quantity of Pesticides Collected



Amount collected to date: 1,186,828 lbs.

Program Funding

Source: Participant fees
Participant fee collected: Yes
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Not adopted
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

Lee Halverson
Environmental Protection Agency
Department of Toxic Substances Control
700 Heinz Avenue Suite 210
Berkeley, CA 94710-2737
Tel: (510) 540-3894
Fax: (510) 540-3891
lhalverson@dtsc.ca.gov

Websites: http://www.dtsc.ca.gov/index.html (Department of Toxic Substances Control, not specific to Clean Sweeps) and http://www.cdpr.ca.gov/index.html (Department of Pesticide Regulation, not specific to Clean Sweeps)

Summary of California Waste Pesticide Disposal Program

The collection and disposal of unwanted pesticides in California began in 1989 and the disposal programs became more structured a few years later. Since 1993, the pesticide disposal programs have been carried out on a county by county basis, with priority given to need. The county events are sponsored by the county agricultural department and farm bureau. Under this sponsorship, the county serves as the generator and the Agricultural Commissioner signs the manifest. Management and disposal costs are borne by the participants.

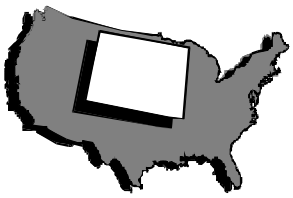
The county collection and disposal program requires an inventory of all wastes and provides the participant with appointment time, location of the collection site and proper packaging procedures for safe transportation. Participants possessing more than 220 pounds of RCRA regulated waste or 2.2 pounds of acutely hazardous waste are provided a manifest for transporting the waste to the collection site. California has not adopted the Universal Waste Rule; however, variances are issued to each county. In most cases, the county Clean Sweep programs are conducted by contractors.

California Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants
1989	87,820	No data
1990	128,000	No data
1991	188,380	No data
1992	336,668	No data
1993	157,514	No data
1994	1,082	No data
1995	137,384	No data
1996	110,502	No data
1997	0	0
1998	20,135	No data
1999	19,343	No data
2000	0	0
TOTAL	1,186,828	More than 700

Information on program cost is not available.

COLORADO AT A GLANCE

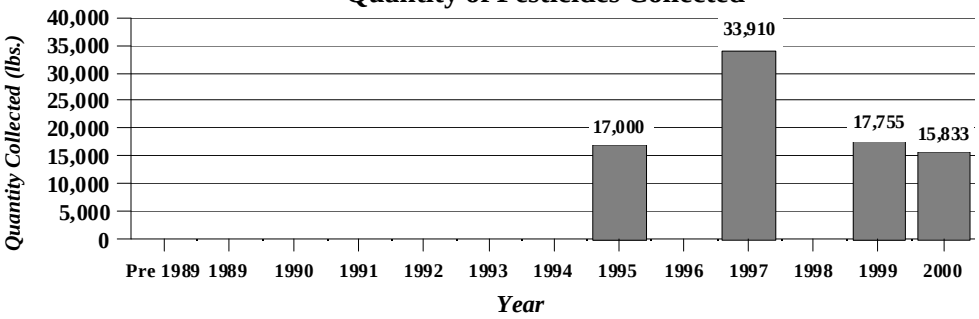


An EPA grant and a state in-kind match funded Colorado's pilot clean sweep effort in 1994. Since then, participant fees have funded the state's intermittent collections, which have totaled over 84,000 pounds of pesticides.

Collection History

Products collected: Pesticides including household pesticides
Year of first collection: 1995
Program Status: Intermittent, active

Quantity of Pesticides Collected



Amount collected to date: 84,498 lbs.

Program Funding

Source: State funds and EPA grants for 1995 only, participant fees for subsequent years
Participant fee collected: Yes, $2.25 to $2.65 per pound
Cost information: Current cost averages $2.25 to $2.65 per pound

Collection Logistics

Method of collection: On-site pick up
Disposal method: Incineration and, in 1995 event only, landfill
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, the public, and any agribusiness or green industry business that applies or stores pesticides including nurseries and greenhouses

Container Collection

Existing program: No

Contact Information

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Fax: (303) 239-4177
rob.wawrzynski@ag.state.co.us
Website: http://www.ag.state.co.us/DPI/programs/programs.html
(Department of Agriculture, not specific to Clean Sweeps)

Summary of Colorado Waste Pesticide Disposal Program

In 1994, Colorado State University Cooperative Extension (CSUCE) sponsored a pilot project for the collection and disposal of unwanted pesticides. Funding for the project was provided by an EPA grant for $75,000 (Section 319 of the Clean Water Act) and a $50,000 in-kind match. Brochures and registration forms were distributed to11,000 potential participants with a return of 67 registering for the event. Initially, there was some question of liability under CERCLA. CSUCE was acting as a broker for the hazardous waste and could be legally liable for any accidents associated with the collection and disposal event. It was agreed to permit CSUCE to assume the role.

In 1995, a competitive bid was conducted to hire a contractor. The competitive bid contained a requirement for the contractor to pick up the pesticides from the participants' sites and to accept hazardous waste generator status to limit the liability of CSUCE. ENSCO won the contract and visited each site to pick up the designated pesticides that had been identified and tagged. Colorado used the contractor-pick-up-method rather than having participants transport the pesticides to a central site. This minimized the effort needed by the participant and the probability of accidents on the way to the site.

ENSCO transferred most of the pesticides to a holding facility in El Dorado, Arkansas. Dioxin-containing materials were transported directly to the incinerator in Coffeyville, Kansas. From El Dorado, selected products were transferred to Oklahoma for landfilling. Some mercury products were transferred to Canada for stabilization and landfilling. A total of 17,000 pounds of pesticides were collected from 67 sites.

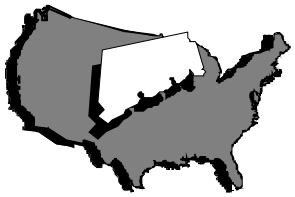
In 1997, the Department of Agriculture encouraged participation in an agricultural pesticide disposal program where the contractor serviced the entire state and was responsible for all aspects of the program including advertising, registration and appointments, collection, and disposal. This program required the contractor to pick up waste at the participant's site and did not allow the participant to transport the waste. This format is based on the State's interpretation of EPA regulations. The collection programs conducted in 1996 through 1999 all operated like this. All collection programs, 1996 through 1999, were paid for by the participants. It is anticipated that future collection programs will be operated by private contractors and the total cost will be paid for by the participants. Currently, the average cost is $2.25 to $2.65 per pound, and depends on the total amounts of pesticides collected during the program.

Colorado Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant.)
1995	17,000	67	254
1996	0	0	NA
1997	33,910	114	297
1998	0	0	NA
1999	17,755	44	404
2000	15,833	43	368
TOTAL	84,498	268	315

Information on program cost is not available.
NA = not applicable

CONNECTICUT AT A GLANCE

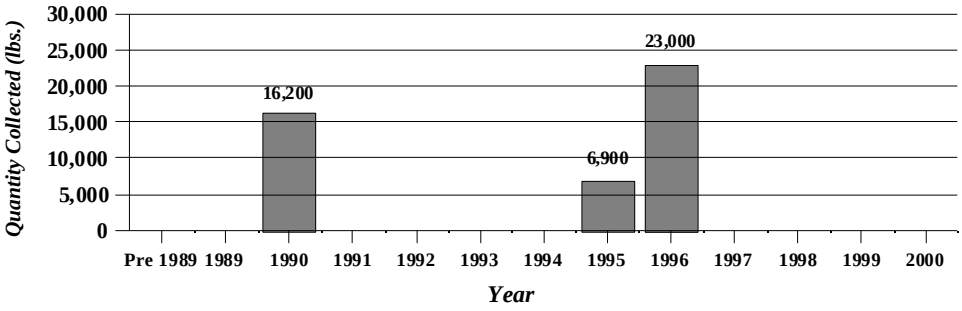


Connecticut conducted pesticide collections for farmers in 1990, 1995, and 1996. These efforts, under the leadership of the pesticide program of the Department of Environmental Protection, collected over 46,000 pounds. No further pesticide collections are planned.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Intermittent, inactive

Quantity of Pesticides Collected



Amount collected to date: 46,100 lbs.

Program Funding

Source: Participant fees and funds from unidentified sources
Participant fee collected: Yes, but not the full cost
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Information not available
Exchange program: No
1995 Universal Waste rule: Not adopted
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: No

Contact Information

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Department of Environmental Protection
79 Elm Street
Hartford, CT 06106
Tel: (860) 424-3324
Fax: (860) 424-4061
bradford.robinson@po.state.ct.us
Website: http://dep.state.ct.us/wst.index.htm (Pesticide Program in the Department of Environmental Protection, not specific to Clean Sweeps)

Summary of Connecticut Waste Pesticide Disposal Program

Connecticut conducted amnesty pesticide collections for farmers in 1990, 1995 and 1996. Future activity will most likely be part of regular household hazardous waste collections after the Universal Waste Rule and other related regulations are adopted.

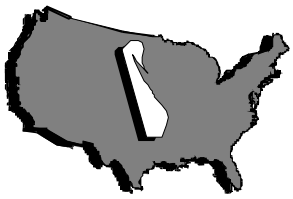
Connecticut has a regular household hazardous waste program with three fixed collection sites serving 7, 12 and 18 communities and approximately 800,000 residents. These programs are regionally shared and collections are for one day. Connecticut is providing grant money to establish permanent regional household waste facilities.

Connecticut Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	16,200	no data	NA
1995	6,900	26 farmers	265
1996	23,000	49 farmers	469
TOTAL	46,100	More than 75	399 over two years

Information on program cost is not available.
NA = not applicable

DELAWARE AT A GLANCE

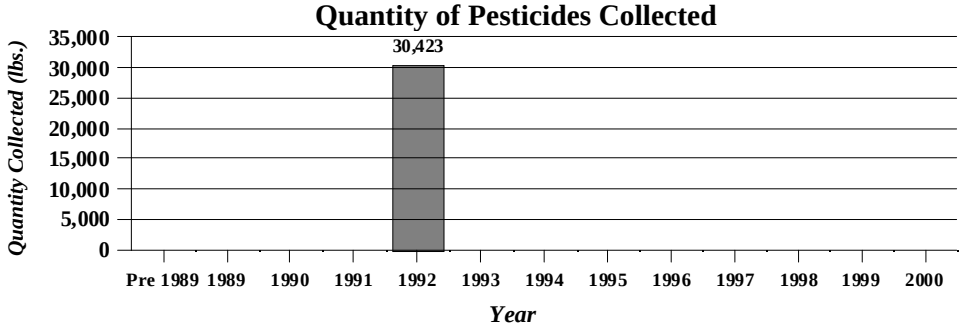


In 1992 the Delaware Solid Waste Authority conducted a one-time "Clean House/Clean Earth" pilot program funded by waste disposal fees. The program collected over 30,000 pounds of pesticides. Under certain conditions businesses may participate in the state's on-going HHW collection programs.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1992
Program Status: Once

Quantity of Pesticides Collected



Amount collected to date: 30,423 lbs.

Program Funding

Source: Surcharge of $2.00 per ton on solid waste disposal fees
Participant fee collected: No
Cost information: Approximately $4.25 per pound in 1992

Collection Logistics

Method of collection: Permanent site and on-site pick up
Disposal method: Incineration and landfill
Exchange program: Information not available
1995 Universal Waste rule: Adopted, authorized in 2000
Pre-registration: Information not available
Specific pesticides reported: No
Eligible participants: Farmers and the public

Container Collection

Existing program: Yes. The Department of Agriculture coordinates this program; (302) 739-4811

Contact Information

Rich Von Stetten or Marsha Anthony
Delaware Solid Waste Authority
1128 S. Bradford Street
P.O. Box 455
Dover, DE 19903-0455
Tel: (302) 739-5361
Fax: (302) 739-4287
rvs@dswa.com
maa@dswa.com

Websites: http://www.state.de.us/deptagri/ (Department of Agriculture Pesticides Section, not specific to Clean Sweeps) and http://www.dswa.com (Delaware Solid Waste Authority, not specific to Clean Sweeps)

Summary of Delaware Waste Pesticide Disposal Program

Delaware's pesticide disposal program was administered by the Delaware Solid Waste Authority (DSWA). In late 1991 and early 1992, DSWA held a CleanHouse/Clean Earth pilot program to collect wastes from both households and agricultural waste generators. In Sussex County, a drop-off center was staffed at certain hours from Tuesday through Saturday. In Kent County, a van collected the waste by going door-to-door after an appointment was made. A total of 77,742 pounds of hazardous materials and 41,394 pounds of motor oil were collected from both counties. Nearly 40 percent (30,423 pounds) of the hazardous materials were pesticides. It was assumed that these were all agricultural pesticides, based on the assumption that pesticides generally make up a relatively small percentage of typical household hazardous waste.

There is anecdotal information indicating that pesticide wastes were specifically collected in 1993 and 1994, but this could not be confirmed. In addition, businesses that are conditionally exempt small quantity generators (CESQGs) are allowed to dispose of up to 220 pounds of waste at the on-going HHW collection programs. CESQGs must call the contractor to make an appointment.

Delaware Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)
1992	30,423
TOTAL	30,423

Information on the number of participants and program cost is not available.

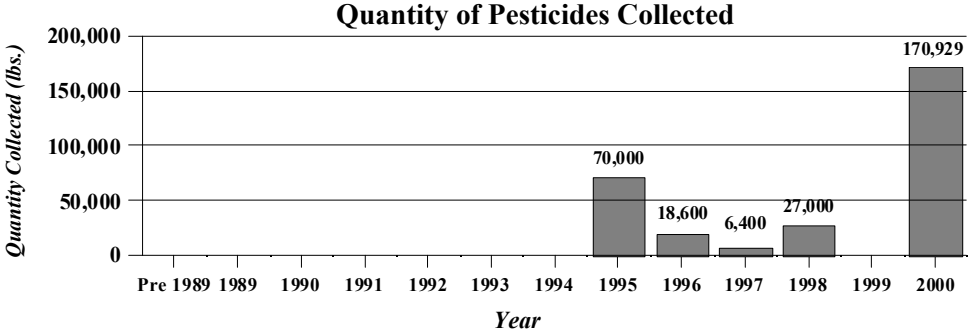
FLORIDA AT A GLANCE

The Departments of Environmental Protection and Agriculture and Consumer Services teamed with other state agencies, the University of Florida and pesticide user groups to implement a Clean Sweep program during 2000 and 2001. This coalition also conducted a pilot project in 1996 and 1997. In 1995, pesticides were collected in a program run by an industry representative and Palm Beach County conducted a program in 1998. Nearly 293,000 pounds of unwanted pesticides have been collected through 2000.

Collection History

Products collected: Pesticides
Year of first collection: 1995
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 292,929 lbs.

Program Funding

Source: State funds and, in 1998, county funds. Unknown for 1995.
Participant fee collected: No fees prior to 2000. Beginning in 2000, there are fees only for retailers, distributors, manufacturers, and governments, who must pay the contract price
Cost information: Average cost of $2.10 per pound in 1996 and $1.14 per pound in 2000

Collection Logistics

Method of collection: Single day events for all years. Beginning in 2000, on-site pick up is used if there are large quantities or deteriorated containers
Disposal method: Information not available
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1997
Pre-registration: Requested but not required prior to 2000. Not required beginning 2000
Specific pesticides reported: Yes (prior to 2000)
Eligible participants: Farmers, commercial applicators, golf course managers, pest control operators and nurseries. Others, such as retailers, distributors, manufacturers, and governments can participate but must pay the contract price

Container Collection

Existing program: Yes

Contact Information

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3125 Conner Blvd, Bldg. 8 L-29
Tallahassee, FL 32399
Tel: (850) 488-8731
Fax: (850) 488-8498
dubberd@doacs.state.fl.us

Websites: http://www8.myflorida.com/myflorida/environment.htm and http://www.dep.state.fl.us/waste/ (Florida Department of Environmental Protection)
http://www.dep.state.fl.us/waste/categories/cleansweep-pesticides/default.htm

Summary of Florida Waste Pesticide Disposal Program

Following a 1995 statewide collection of 70,000 pounds of lead arsenate spearheaded by an industry representative, state agencies and user groups collaborated to conduct several small scale collections in a four-county pilot project (1996-1997). The 1996 pilot program collected an estimated 18,600 pounds of agricultural pesticides from 180 agricultural growers in three counties. Initial surveys indicated that 5,265 pounds would be collected. In the 1997 segment of the pilot program, approximately 6,400 pounds of pesticides were collected from two counties, including one that participated the previous year. As a result of the successful pilot program, plans for a statewide program were made. An additional collection was held in West Palm Beach County in 1998. This program, which was organized and funded by the county, collected about 27,000 pounds of pesticides from 39 participants. These efforts (1996 - 1998) resulted in the collection of 52,000 pounds of unwanted pesticides from more than 220 participants.

In State Fiscal Year 2000-2001, the Department of Environmental Protection (DEP) received $300,000 in funding, an appropriation from the Solid Waste Management Trust Fund as part of the General Appropriations Act, to start an ongoing pesticide collection program. The DEP and the Department of Agriculture and Consumer Services (DOACS) teamed with other state agencies, the University of Florida's Institute of Food and Agricultural Sciences (IFAS) and pesticide user groups to develop and implement "Operation Cleansweep." The funding was granted to the DEP, and then passed to the DOACS, who contracted with the vendor to collect and dispose of the material. DEP and DOACS share operational and program responsibilities and provide in-kind services to operate the program. A steering committee with "Operation Clean-Sweep Partners" was established to publicize, train, and coordinate the program.

Florida adopted the Universal Waste Rule, which was authorized in 1997, and conducted a seven-county program in 2000-01. A contractor (Safety-Kleen) won the bid with a projected cost of $1.14 per pound for all collected materials. The contractor provided all materials and services for the collection, packaging, transport and disposal of the materials collected. The contract also provided for collection of materials at a pesticide end-user location if the containers were deteriorated to the extent that transport was hazardous, or the quantity at the site was large enough (500 pounds or more) to make it more efficient and/or safer to collect on-site. Materials collected were handled under federal and state hazardous waste regulations applicable to the Universal Waste Rule and, for the purposes of the program, the Department of Environmental Protection became the generator. In 2000, 170,929 pounds of pesticides were collected from 273 participants in 7 counties for a total cost of $195,507. Travel expenses, publicity costs and staff time of the agencies and pesticide user groups were provided as in-kind contributions, so all allotted funds were used directly to pay for collection and disposal.

Farmers, golf course superintendents, pest control operators, nurseries and other end-users are eligible for free collection. A limit of 500 pounds of material is being used as a cutoff for planning purposes. Participants with over 500 pounds of material have to coordinate with program staff so that transportation regulations and requirements are addressed. Pesticide retailers, distributors, manufacturers and governments may also participate, but are required to make arrangements in advance and pay the cost of disposal. They benefit by being eligible for the same contract price that was negotiated for the program. Homeowners are not allowed to participate because other programs, such as HHW collections, are widely available for household pesticide waste.

Pre-registration was not required, but DACS staff conducted short interviews with participants to obtain information to help plan future collections.

It is anticipated that funding will be provided on a recurring basis and that the program will rotate around the state, eventually covering all 67 counties.

Florida Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1995	70,000	no data	NA	no data	NA
1996	18,600	180	103	$39,035	$2.10
1997	6,400	no data	NA	no data	NA
1998	27,000	39	692	no data	NA
1999	0	0	NA	0	NA
2000	170,929	273	626	$195,507	$1.14
TOTAL	292,929	more than 492	440 for the three years with data	NA	NA

NA = not applicable

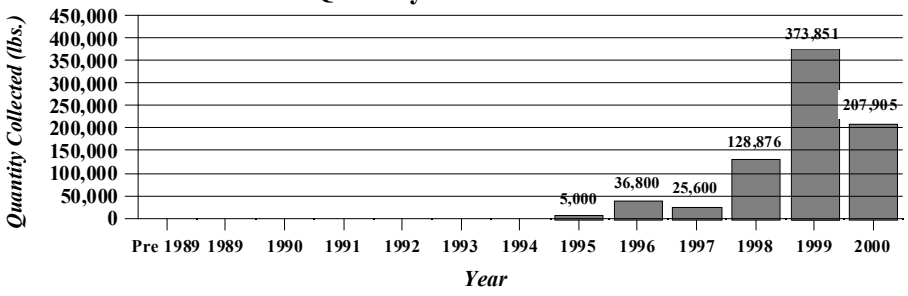
GEORGIA AT A GLANCE

Georgia has conducted a continuous clean sweep program since 1995 under the leadership of the Department of Agriculture. EPA grants were used in the early years of the program, which is now state funded. These collections, known as "Georgia Clean Day," have collected nearly 780,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1995
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 778,032 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: No
Cost information: Ranges from $1.00 per pound in 1998-2000 to $2.00 per pound in 1996

Collection Logistics

Method of collection: Single day events and on-site pick up
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1998
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, golf course managers and the public

Container Collection

Existing program: Yes

Contact Information

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Entomology and Pesticides Division
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Fax: (404) 657-8378
scole@agr.state.ga.us
Website: http://www.agr.state.ga.us/plant_ind/html/pesticide_recycling.html
(Clean Sweep specific)

Summary of Georgia Waste Pesticide Disposal Program

In 1993, EPA provided the Georgia Department of Agriculture with a grant of $48,000 to develop a Georgia Clean Day Program for the collection of agricultural pesticides. In 1995, the Department conducted a pilot program to collect agricultural pesticides from three counties. A contractor was hired by competitive bid for collection and disposal services. The contractor also assumed responsibility as the generator of the pesticide wastes. The pilot project cost $16,000 and 5,000 pounds of agricultural pesticides were collected and sent to a disposal site. Participants were required to register before the collection.

In 1996, EPA provided an additional grant for $40,000 to conduct a second Georgia Clean Day. These funds allowed for two collection events and a special farm on-site pick up (which alone accounted for 16,000 pounds) that resulted in the collection and disposal (incineration) of 36,800 pounds of pesticides.

In 1997, the Georgia Agricultural Statistics Service in cooperation with the University of Georgia Cooperative Extension Service surveyed 4,741 randomly selected farms by letter "to gather data from a random sample of Georgia growers to determine the volume and geographic location of waste farm chemicals throughout the state." This survey provided some positive information in helping the Department of Agriculture to determine what pesticides were out there and the cost of collecting and disposing of these unwanted farm pesticides. In 1997, the Georgia Department of Natural Resources provided a solid waste grant of $50,000 for conducting Georgia Clean Day.

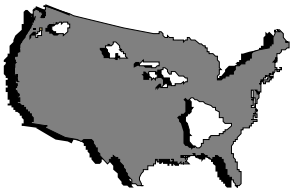
Since then, Georgia Clean Day has been funded directly by the state as a line item in the state budget. The Georgia General Assembly committed to allocating up to a total of $2.5 million, which was the amount estimated to adequately remove most of the canceled and suspended pesticides from Georgia farms. Rather than fund the entire amount at one time, the General Assembly chose to provide a portion of the total each year. Georgia has adopted the Universal Waste rule and has a goal to provide Georgia Clean Day to all 131 counties in Georgia. Georgia Clean Day was conducted in 1997, 1998, 1999 and 2000.

Georgia Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Counties	Program Cost	Average Cost (per pound)
1995	5,000	3 counties	no data	NA
1996	36,800	5 counties	$73,600	$2.00
1997	25,600	59 farms and 5 counties	$35,070	$1.37
1998	128,876	6 counties	$128,880	$1.00
1999	373,851	8 counties	$373,850	$1.00
2000	207,905	15 counties	$207,910	$1.00
TOTAL	778,032	42 counties and 59 farms	more than $819,310	$1.06 for 1996-2000

Information on the number of participants is not available.
NA = not applicable

HAWAII AT A GLANCE

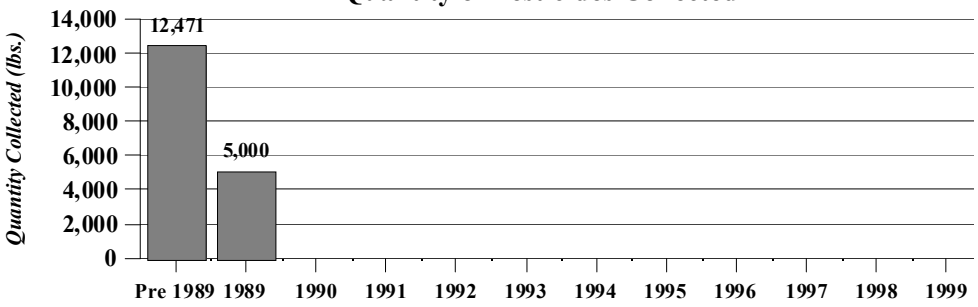


Hawaii conducted a pilot agricultural pesticide collection in 1987 and a combined agricultural pesticide/HHW collection in 1989. These efforts used state and EPA funds and collected nearly 17,500 pounds of pesticides. In 1991 the Department of Health recommended limiting state-funded collection of agricultural pesticides.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1987
Program Status: Intermittent, inactive

Quantity of Pesticides Collected



Amount collected to date: 17,471 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: No
Cost information: Disposal costs to date total $67,362

Collection Logistics

Method of collection: Single day events
Disposal method: Information not available
Exchange program: Yes
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers and the public

Container Collection

Existing program: No

Contact Information

Robert Boesch
Department of Agriculture
1481 South King St. Suite 431
Honolulu, Hawaii 96814
Tel: (808) 973-9404
Fax: (808) 973-9418
Website: http://www.hawaiiag.org/hdoa/pi_pest.htm
(Department of Agriculture, not specific to Clean Sweeps)

Summary of Hawaii Waste Pesticide Disposal Program

Hawaii conducted an agricultural pesticide collection and disposal program in 1987. This was a "pilot project" sponsored by the Office of Environmental Quality Control, which received a grant from EPA. A total of 12,471 pounds of pesticides were collected at six different locations from 86 farmers. The drum disposal cost was $49,500 for 50 drums and the total program cost was $50,062. In 1989, the agricultural collections were combined with the household hazardous waste collection effort. The Department of Agriculture and the Department of Health cooperated in running the program. Twenty drums of waste pesticides were collected from 44 farmers. This is estimated to be equivalent to 5,000 pounds of pesticides, assuming 250 pounds per drum, which was the average in 1987. The cost for drum disposal was $17,300. During the 1989 program, different processing and permitting procedures were used for agricultural and household waste due to liability considerations and to ensure that HHW were not mixed with regulated waste pesticides.

A 1991 report from the Department of Health recommended limiting the state-funded collection of agricultural pesticides. The report stated that developing federal FIFRA regulations and anticipated changes to Hawaii's hazardous waste requirements would "weaken the justification for continuing to collect farmer's waste pesticides".

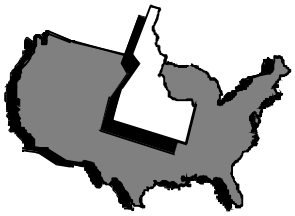
Hawaii Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1987	12,471	86 farmers	145	$50,062	$4.01
1989	5,000*	44 farmers	114	$17,300	$3.46
TOTAL	17,471	130	134	$67,362	$3.86

* Estimate estimated based on 20 drums collected, assuming 250 pounds per drum.

IDAHO AT A GLANCE

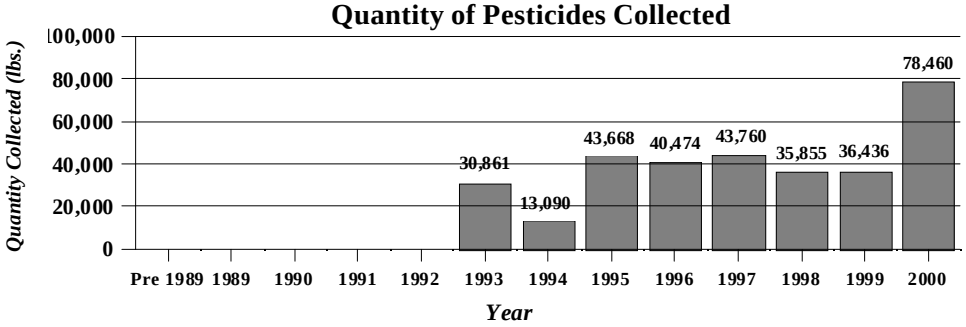
Idaho's permanently funded clean sweep program has collected over 322,000 pounds of pesticides since its beginning in 1993. The program, with the Department of Agriculture as the lead agency, is funded by the state.



Collection History

Products collected: Pesticides including household pesticides
Year of first collection: 1993
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 322,604 lbs.

Program Funding

Source: State funds
Participant fee collected: No
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Requested but not required in all cases
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, the public and county, federal, and state agencies

Container Collection

Existing program: Yes

Contact Information

Rodney Awe
Department of Agriculture
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Boise, ID 83701
Tel: (208) 332-8615
Fax: (208) 334-3547
rawe@agri.state.id.us
Website: http://www.agri.state.id.us/agresource/pdp.htm (Clean Sweep specific)

Summary of Idaho Waste Pesticide Disposal Program

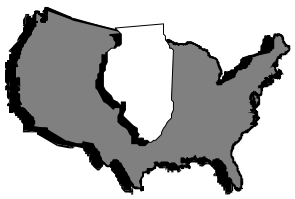
The Idaho State Department of Agriculture (ISDA) has conducted annual pesticide disposal collections since 1993 to assist growers, homeowners, dealers and applicators with disposal of unusable pesticides. Idaho's program, called the Pesticide Disposal Program, collected almost 323,000 pounds of pesticides through 2000. All pesticide users, including growers, pesticide dealers, professional applicators, homeowners, county, federal and state agencies or other local officials are allowed to use this service. Participants transport their unwanted pesticides to a designated site. Each year, collection sites are available in every region of the state. The adoption and use of the Universal Waste Rule greatly simplified the PDP, facilitating expansion of the program. Through the 2000 collections, participants were required to preregister their pesticides with the ISDA, although drop-ins generally were not sent away. Beginning in 2001, preregistration is not required.

Idaho Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Events
1993	30,861	3
1994	13,090	2
1995	43,668	2
1996	40,474	2
1997	43,760	11
1998	35,855	14
1999	36,436	16
2000	78,460	18
TOTAL	322,604	68

Information on the number of participants and program cost is not available.

ILLINOIS AT A GLANCE

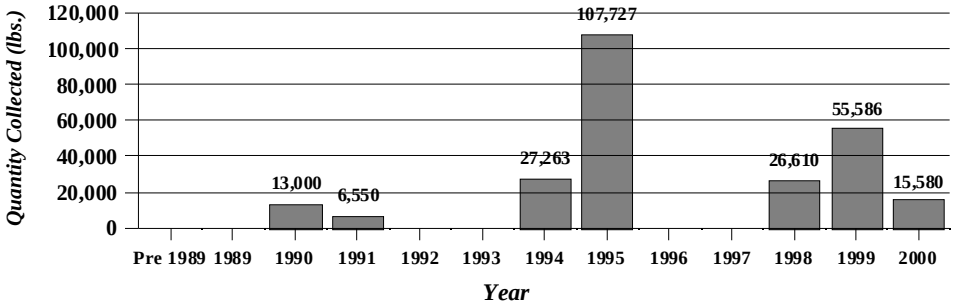


Since its first clean sweep collection in 1990, Illinois has collected over 252,000 pounds of pesticides. EPA and the Department of Agriculture, which is the lead agency, have funded collections.

Collection History

Products collected: Agricultural and structural pesticides
Year of first collection: 1990
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 252,316 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: No
Cost information: Contractual costs for 2000 were $0.85 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration (mainly), landfill (very minimal), and recycling when possible
Exchange program: No. Attempted one in 1994 but discontinued it.
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers; pest control operators added in 1998

Container Collection

Existing program: Yes

Contact Information

Brad Beaver, Warren Goetsch Tel: (217) 785-2427
Illinois Department of Agriculture Fax: (217) 524-4882
Environmental Programs bbeaver@agr.state.il.us
State Fairgrounds wgoetsch@agr.state.il.us
P.O. Box 19281
Springfield, IL 62794-9281

Michael Nechvatal Tel: (217) 785-8604
Illinois Environmental Protection Agency
Website: http://www.agr.state.il.us/Environment/Pesticide/pestuses.html
(Department of Agriculture Environmental Programs, not specific to Clean Sweeps)

Summary of Illinois Waste Pesticide Disposal Program

Pilot programs in 1990 and 1991 collected about 19,500 pounds of pesticides from 147 participants in two counties. Agricultural Clean Sweep programs were conducted several years later, yielding over 27,000 pounds in 1994 and nearly four times that amount in 1995. In 1998 Illinois determined that there was a need to collect from the state's approximately 90 structural pest control operators (PCOs). Three collection sites were identified for a 1998 program and both members and non-members of the Illinois Pest Control Association were notified of the program. Interagency collaboration was achieved, and the Department of Transportation granted amnesty to enable PCOs to legally deliver tagged and untagged products. Only 11 of the PCOs who were notified did not participate, and Illinois stated that those companies ran the risk of being designated EPA Hazardous Waste Storage Facilities. Department of Agriculture staff contacted those PCOs that did not participate to see if they had disposal options or needed assistance.

In 1999 the Illinois Department of Agriculture (IDOA) conducted three, single-day collections at three separate locations. These efforts, funded by the U.S. EPA and the IDOA, collected over 55,500 pounds of pesticides from 185 participants from ten counties.

MSE Environmental, Inc. conducted the collections as the hazardous waste contractor. They conducted each collection very efficiently and experienced no accidents or spills at any of the three collection locations. All products collected during the August 17 pesticide Clean Sweep program were incinerated at the ENSCO, Inc. facility located in El Dorado, Arkansas. Most of the pesticides from the August 18 event (13,357 out of 14,392 pounds) were also incinerated at this facility. Of the remaining material, 505 pounds were landfilled and 530 pounds underwent wastewater treatment. The last collection held on August 19 resulted in the incineration of 26,747 pounds of product while only 4 pounds of product were landfilled.

In 2000, the IDOA along with the Illinois Department of Public Health conducted an agricultural/structural pesticide clean sweep program for DeKalb, Ogle and Lee counties. This single-day collection was funded by the U.S. EPA and IDOA. Local sponsors included each county's Farm Bureau office, University of Illinois Extension office and Soil and Water Conservation District. The collection successfully collected a total of 15,580 pounds of product from 64 participants. Onyx Environmental Services was the contractor for this collection. No accidents or spills occurred during the collection. The majority of all chemicals collected were scheduled to be incinerated.

All chemicals collected during the 1999 and 2000 programs were registered with the IDOA prior to the actual collection date. By pre-registering the products, the IDOA was able to determine which products were eligible for collection. Each participant received a response letter indicating the time and date of the collection along with a listing of their chemicals which were to be brought to the collection for disposal. The majority of products turned away from the collections were not pesticides. These items included paints, paint thinners, household cleaners, motor oil, crop oil, surfactants, and foaming agents. Products containing 2,4,5-T were also not collected due to the unavailability of a disposal site.

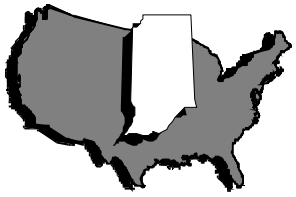
Illinois attempted a swap program in 1994, but discontinued it because the IDOA found that contacting the appropriate people to facilitate the exchange was very time consuming. In addition, Illinois discovered a large amount of uncertainty about the quality of the products and concluded that most products were in need of disposal. In the recent programs, the IDOA tried to convince the owners to find a user for products that still able to be used.

Illinois Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	13,000	89	146
1991	6,550	58	113
1994	27,263	106	257
1995	107,727	398	271
1998	26,610	63	422
1999	55,586	185	300
2000	15,580	64	243
TOTAL	252,316	963	262

Information on program cost is not available.

INDIANA AT A GLANCE

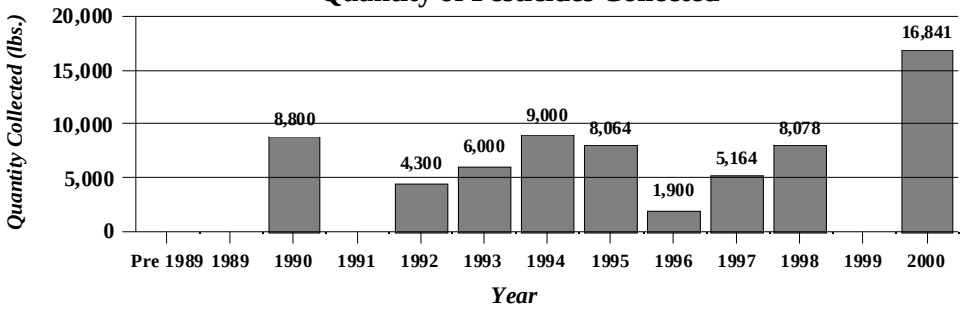


Indiana conducted its first clean sweep collection in 1990 and has collected over 68,000 pounds of pesticides in total. EPA grants and state funds have supported the state's efforts. The program is led by the Office of State Chemist, which is the pesticide regulatory agency in Indiana.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 68,147 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: No, unless a participant's load exceeds weight limitations. In 1995, the first 250 pounds were free. Each additional pound cost $2.00
Cost information: The 1995 collection cost $12,149, an average of $1.51 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, and golf course managers

Container Collection

Existing program: Yes

Contact Information

Kevin Neal
Office of Indiana State Chemist
Purdue University
1154 Biochemistry Building
West Lafayette, Indiana 47907-1154
Tel: (765) 494-5546
Fax: (765) 494-4331
nealk@isco.purdue.edu
Website: http://www.isco.purdue.edu/index_pest.htm
(Office of the State Chemist, not specific to Clean Sweeps)

Summary of Indiana Waste Pesticide Disposal Program

Indiana conducted its first Clean Sweep program in 1990. During annual collections between 1992 and 1994, over 19,000 pounds were collected from approximately 218 participants. The 1992 Clean Sweep project was part of the Lake Michigan Clean Sweep program. Both the 1992 and 1994 Clean Sweep programs were funded with EPA monies.

The Clean Sweep project that was conducted in Lake County, in December 1995, is typical of the Clean Sweep program in Indiana. A contractor was selected by competitive bid. In this case Laidlaw Environmental Service, Inc. from Tennessee was selected to handle, transport, and dispose of the pesticides. Laidlaw provided all the equipment such as drums, tables and protective gear and an emergency response plan.

A survey was conducted prior to the event to gather inventory data about each pesticide, including the brand name, active ingredient, EPA registration number, quantity and whether it was a solid or liquid. Advertisement through newspapers and extension services was used to limit participation to the agricultural community and to plan for safe transportation and collection. At the event, contractor personnel unloaded the pesticides and sorted them according to DOT hazardous materials classifications and disposal guidelines and recorded the types of material. Laidlaw assumed responsibility as the generator and transported the material to a facility for incineration. Each participant was given a packet of information pertaining to safety and pollution prevention on the farm. This Clean Sweep project resulted in the collection of 8,064 pounds of unwanted pesticides from 33 participants. Total project costs were estimated at $12,149, with a federal share of $12,096, state share of $53, and an average cost of $1.57 per pound.

Clean Sweep programs conducted in 1996 and 1997 accounted for approximately 7,000 pounds of pesticides. The 1997 event was funded by EPA for $50,000. In October 1998, Indiana conducted a Clean Sweep Program outside the Lake Michigan Watershed area and collected over 8,000 pounds of pesticides. This is the first time that Indiana conducted a collection and disposal program with FIFRA discretionary funds.

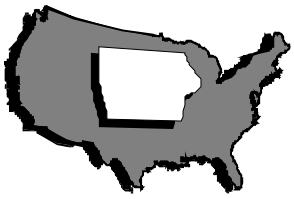
In July 2000 a Clean Sweep collection was conducted in Bloomington with the cooperation of the Monroe County Solid Waste Management District. The collection, open to farmers, ag dealers, pest control businesses and golf courses, brought in almost 17,000 pounds of pesticides.

Indiana Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticide (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	8,800	no data	NA
1991	0	0	NA
1992	4,300	35	123
1993	6,000	73	82
1994	9,000	110	82
1995	8,064	33	244
1996	1,900	no data	NA
1997	5,164	40	129
1998	8,078	no data	NA
1999	0	0	NA
2000	16,841	39	432
TOTAL	68,147	More than 330	150 for the six years with data

Information on program cost is not available
NA = not applicable

IOWA AT A GLANCE

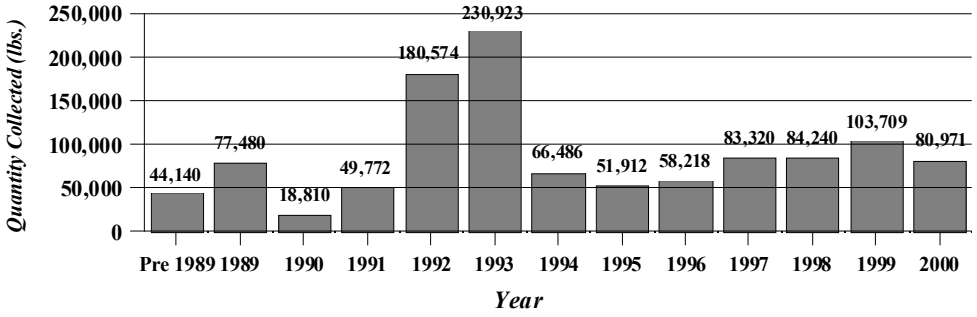


Since 1991 Iowa has conducted annual clean sweep collections under the leadership of the Department of Natural Resources. The program, funded from the state's Groundwater Protection Fund and household hazardous material permits, has collected more than 1.1 million pounds of pesticides.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1986
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,130,555 lbs.

Program Funding

Source: The Groundwater Protection Fund (generated by tonnage fees at landfills) and Household Hazardous Materials (HHM) Permits, which are required for retailers of HHM

Participant fee collected: No fee for households. For farmers, the fee depends on the type of program (single day event or permanent site) and the quantity of pesticides

Cost information: Costs average $1.34 per pound at single day events and $0.70 per pound at collection centers

Collection Logistics

Method of collection: Single day events and permanent sites
Disposal method: Incineration, landfill and fuel blending
Exchange program: There is an exchange program for HHM other than pesticides
1995 Universal Waste rule: EPA administered
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, the public and conditionally exempt small quantity generators

Container Collection

Existing program: Yes, coordinated by the Department of Agriculture; the contact is Jim Ellerhoff at (515) 281-8506

Contact Information

Theresa Stiner or John Wessel
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, IA 50319-0034
Fax: (515) 281-8895

Stiner's telephone and e-mail
Tel: (515) 281-8646
theresa.stiner@dnr.state.ia.us
Wessel's telephone and e-mail
Tel: (515) 281-5859
john.wessel@dnr.state.ia.us

Website: http://www2.state.ia.us/agriculture/pesticidebureau.htm
(Department of Agriculture and Land Stewardship, not specific to Clean Sweeps)

Summary of Iowa Waste Pesticide Disposal Program

The Iowa Department of Natural Resources (IDNR) oversees two different waste pesticide disposal programs, Toxic Cleanup Days and Regional Collection Centers. Toxic Cleanup Days (TCDs) are one-day events that are generally joint efforts between a county organization and the IDNR. A pilot TCD program was held in 1986. TCDs provide for collection and disposal of household hazardous wastes, including waste pesticides, from both households and farmers. The TCD program also focuses on public education addressing the proper purchasing, storage and on-going management of household hazardous materials.

Sites for TCDs, usually fairgrounds or city/county properties, are selected for the one-day event. Prior to the event, one-day workshops are conducted for local task forces and their members. These are conducted by IDNR and contractor staffs to provide a complete program of information on publicity, volunteer coordination, and site operation procedures. Currently, TCDs are managed by appointment only. This program is free to residents and farmers bringing up to 220 pounds of material for disposal.

Regional Collection Centers (RCCs), which first opened in 1995, are permanent facilities for the on-going collection of household hazardous waste, including pesticides, and for on-going public education addressing proper purchasing, storage, use and management of household hazardous materials. Currently, Iowa has 15 operating main Regional Collection Center facilities. Iowa also has 15 smaller satellite RCC facilities. The satellite RCC facilities serve as collection-only locations for residential household hazardous waste and work with larger main RCC facilities for overall household hazardous waste disposal management. Conditionally exempt small quantity generator (CESQG) business waste is not collected at the satellite RCCs at this time. The RCC program as a whole supports residents and CESQG businesses with hazardous waste disposal options in 56 of Iowa's 99 counties. Residents may participate in the RCC program at no charge. CESQG businesses may participate in the program by paying a reduced rate for hazardous waste disposal.

From July 1999 through June 2000, 24,762 households and 369 CESQG businesses participated in the RCC program. During this time, the RCCs collected a total of 1,929,256 pounds of waste (which includes used motor oil, latex paint and lead-acid batteries). Of this waste collected, 572,218 was DOT classified hazardous waste with pesticide waste making up approximately 10% (58,608 pounds).

Iowa Table 1 - Quantity of Pesticides Collected

Year	Total Quantity of Pesticides Collected (pounds)	Quantity of Pesticides from Toxic Cleanup Days (pounds)	Quantity of Pesticides from Regional Collection Centers (pounds) *
Pre 86	10,835	10,835	0
1986	0	0	0
1987	0	0	0
1988	33,305	33,305	0
1989	77,480	77,480	0
1990	18,810	18,810	0
1991	49,772	49,772	0
1992	180,574	180,574	0
1993	230,923	230,923	0
1994	66,486	66,486	0
1995	51,912	51,912	0
1996	58,218	58,218	0
1997	83,320	57,369	25,951
1998	84,240	39,000	45,240
1999	103,709	45,101	58,608
2000	80,971	13,471	67,500
TOTAL	1,130,555	933,256	197,299

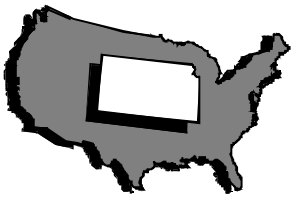
Information on the number of participants and program cost is not available.

* Regional Collection Centers (RCCs) do not track pesticides specifically. Based on the assumption that most pesticides fall under the DOT classification of Class 6.1 Poisons, this column lists the total amount of Class 6.1 Poisons collected at the RCCs for 1997 through 1999. The total quantities of household hazardous materials collected at RCCs were:

1997 350,308 pounds
1998 493,401 pounds
1999 572,218 pounds.

For 2000, the amount collected at RCCs was estimated assuming that 12% of the total (562,780 pounds) was pesticides.

KANSAS AT A GLANCE

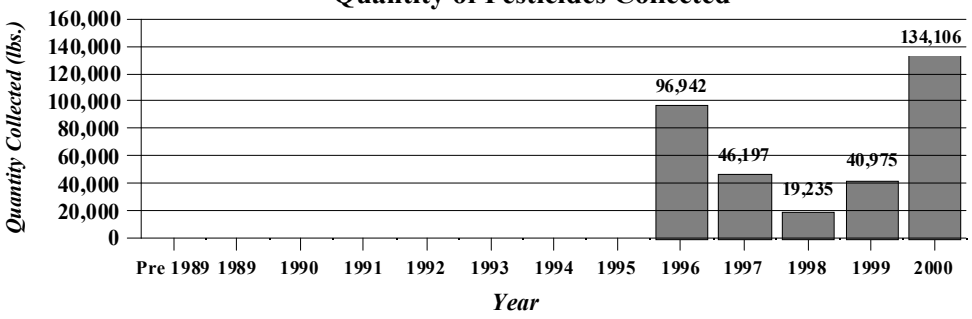


Kansas conducted its first clean sweep in 1996. Originally, the Kansas Department of Health and Environment (KDHE) provided grants to counties, which collected and disposed of the pesticides. In 2000 the structure changed and now the programs are sponsored entirely by KDHE with technical assistance from the Department of Agriculture. The program, which has collected over 337,000 pounds of pesticides, is currently funded from solid waste tipping fees.

Collection History

Products collected: Pesticides
Year of first collection: 1996
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 337,455 lbs.

Program Funding

Source: Solid waste tipping fee and, in 1997, an EPA grant
Participant fee collected: No fee for farmers and ranchers; others charged $1.15 per pound
Cost information: Disposal cost is generally $1.15 per pound. Dioxins are $6.50 per pound and cylinders are $100.00 each

Collection Logistics

Method of collection: Single day events. Some county HHW facilities accept pesticides from agricultural businesses
Disposal method: Incineration (99%) and landfill (1%)
Exchange program: Yes, but very limited
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Requested but not required
Specific pesticides reported: No
Eligible participants: Farmers and ranchers; commercial applicators, retailers, distributors and manufacturers beginning in 2000

Container Collection

Existing program: Yes, through the Department of Agriculture

Contact Information

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Kansas Dept. of Health & Environment
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366
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ccolglaz@kdhe.state.ks.us

Gary Boutz
Kansas Department of Agriculture
109 SW 9th, 3rd floor
Topeka, KS 66612-1281
Tel: (785) 296-0672
Fax: (785) 296-0673
gboutz@kda.state.ks.us

Websites: http://www.ink.org/public/kda/phealth/phpest/index.htm (Department of Agriculture, not specific to Clean Sweeps) and http://www.kdhe.state.ks.us/waste (Department of Health and Environment, not specific to Clean Sweeps)

Summary of Kansas Waste Pesticide Disposal Program

Historically the Kansas Department of Health and Environment (KDHE) dealt with the problem of pesticide disposal through a grant program to counties established by the 1995 Legislature. Although the grant program saw success in some areas, it was not utilized statewide for a variety of reasons. Significant time and planning are required to conduct and organize pesticide collections. Because of the unpredictability of volumes received at these collections, budgeting for a collection at the county level is often difficult. The grant program also required a 25% match which some counties found hard to meet. In order to overcome some of these problems, the Kansas Agricultural Clean Sweep program was launched in the spring of 2000.

The Clean Sweep program is a waste pesticide collection program sponsored entirely by KDHE with technical assistance supplied by the Kansas Department of Agriculture (KDA). The funding - $150,000 per year - comes from solid waste tipping fees. No matching funds are required from counties or participants. The goal of the program is to remove unwanted pesticides from Kansas farms and ranches. Any pesticide, herbicide, fungicide, or rodenticide is accepted by the program. All farmers or ranchers operating in Kansas are eligible for the program. Pesticide dealers, manufacturers and distributers are eligible to participate on a COD fee basis. Three single day collections are held over a week period targeting geographic areas in Kansas. In order to provide adequate personnel and equipment at each collection site, all participants are asked to pre-register.

Clean Harbors Environmental Services was selected as contractor for the project through the State competitive bidding process. Clean Harbors supplies all on-site labor, equipment, and supplies necessary to run the event. KDHE with assistance from KDA handles all advertising, site selection, project coordination, and public education. Collection sites are located in areas with convenient access and ample hard surface room such as county yards, noxious weed offices, or county fairgrounds.

In order to publicize the events, KDHE developed a poster and brochure designed to be used with collection events statewide. The poster and brochure provides details on the program, a 1-800 number which could be used to request information and for pre-registration, and space for individual customization such as site location, collection dates, and times. Brochures are tri-folded and pre-printed for direct mailing.

Posters, brochures, and informational material were distributed across the target areas through county commissions, noxious weed offices, conservation services, extension agencies, Farm Bureau offices, and federal Farm Service Agencies. In addition to poster and brochure distribution, information on the program, including collection dates and times, were sent to every radio and TV station and newspaper in the area. Several radio and newspaper interviews were conducted by KDHE staff. Brochures were also sent to every certified private pesticide applicator in the region using mailing lists supplied by KDA.

Kansas held 17 collection events in 2000, collecting a total of 134,106 pounds from 287 participants. Numerous types of pesticides were collected. Some of the more common ones included furadan, heptachlor, toxaphene, atrazine, chlordane, 2,4-D, pentachlorophenol, DDT, and 2,4,5-T. Ten cylinders of compressed gas (grain fumigants) were also received. All material received was manifested as hazardous waste and shipped carrying appropriate waste codes. The program is expected to expand in FY01. The expenses in FY2000 were $52,000 for disposal, $3,500 for posters and flyers, and $1,500 for mailings.

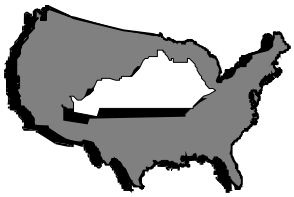
A different format was used one time in 1997, when the KDA formed a partnership with Finney County Conservation Commission (FCCC) and other local agencies and organizations to address disposal of pesticides in southwest Kansas. An EPA Region VII grant was provided, and eleven counties responded to an invitation to participate. The project was dubbed PACE (Pesticide Amnesty Collection Events) and collected over 100,000 pounds of agricultural waste pesticide. An additional amnesty program in north central counties yielded over 10,000 additional pounds. The largest quantity of any pesticide collected was atrazine, followed by 2,4-D, phorate, malathion and copper sulfate. Surveys were distributed to participants as they were greeted, but not everyone filled out the survey, and of those who did, not all questions were answered. In an effort to reassure participants that the pesticide collection was truly an "amnesty" event, some districts decided it would not be necessary for participants to reveal their names or other personal information.

Kansas Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1996	96,942	1,348	72
1997	46,197	699	66
1998	19,235	353	54
1999	40,975	427	96
2000*	134,106	287	467
TOTAL	337,455	3,114	108

Information on program cost is not available.
* This is the calendar year, while other years listed are state fiscal years.

KENTUCKY AT A GLANCE

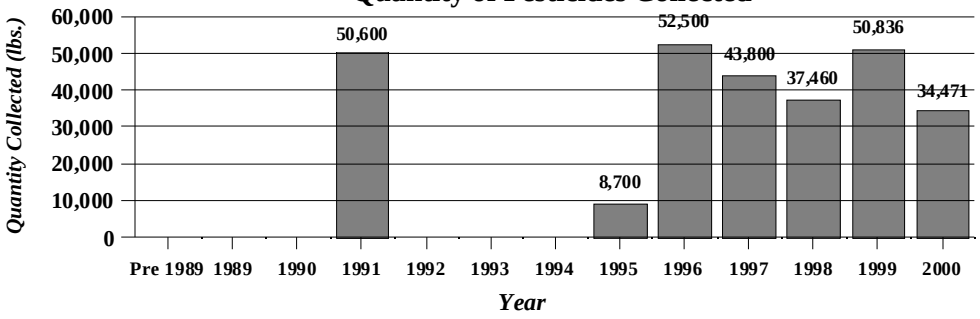


Kentucky conducted its first collection in 1991. In 1995 it began a permanent farm pesticide collection program with the Department of Agriculture as the lead agency. Kentucky has collected over 278,000 pounds of pesticides in a program where Department of Agriculture field coordinators pick up pesticides from the participants' sites.

Collection History

Products collected: Pesticides
Year of first collection: 1991
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 278,367 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: The contractor charged $1.03 per pound during 1996-99 and is charging $1.19 per pound during 2000-04

Collection Logistics

Method of collection: On-site pick up
Disposal method: Incineration
Exchange program: Yes, if pesticides are in original container
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, and golf course managers

Container Collection

Existing program: Yes

Contact Information

Ernest Collins
Kentucky Department of Agriculture
Division of Pesticide Regulation
100 Fair Oaks Lane 5th Floor
Frankfort, KY 40601
Tel: (502) 564-7274
Fax: (502) 564-3773
Toll-free call: (800) 205-6543
ernest.collins@kyagr.com
Website: http://www.kyagr.com/enviro_out/pestweed/programs/services/collection.htm (Clean Sweep specific)

Summary of Kentucky Waste Pesticide Disposal Program

Kentucky conducted an Amnesty Day program in 1991 and then launched its continuous pesticide collection effort in the late fall of 1995. Kentucky has a toll-free number which farmers call to arrange for pick-up by one of the State's four field regional coordinators. After overpacking, weighing and recording certain pesticides of interest (mainly persistent, bioaccumulative and toxic pesticides), the coordinators transport them to one of the State's two main storage facilities, where they are subsequently picked up by a hazardous waste contractor on a biennial basis (May and November). The program is funded by pesticide registration fees which provide $200,000 per year for pesticide disposal, pesticide container collection, and recycling programs.

Since passage of the Universal Waste Rule in 1996, Kentucky ceased keeping a detailed inventory of the amounts of specific pesticides collected. The pesticide product names, site location, number of overpacks and size of overpacks are still maintained for general record keeping. However, in 1999, Kentucky received funds from EPA's Office of Pesticide Programs to do additional record keeping to track quantities of certain pesticides.

Since 1991 the Department of Agriculture, in coordination with some agricultural groups, has run a pesticide container "Rinse and Return" program to collect, chip, and recycle empty plastic pesticide containers (mostly 1- and 2.5-gallon containers). Most counties (110 out of 120) participate. In 2000, Kentucky expanded its "Rinse and Return" to include containers larger than 5-gallons. Specifically, this includes 15-, 30-, and 55-gallon drums and 110- and 220-gallon mini-bulk containers. It is expected that the larger containers will increase the intake of plastic to over 100,000 pounds per year.

Kentucky Table 1 - Quantity of Pesticides Collected

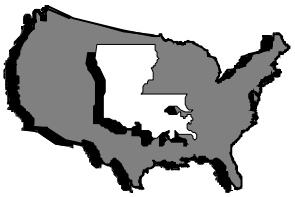
Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1991*	50,600	90	562
1995	8,700	30**	290
1996	52,500	76**	691
1997	43,800	84	521
1998	37,460	177	212
1999	50,836	202	252
2000	34,471	158	218
TOTAL	278,367	817	341

* 1991 was an Amnesty Day program coordinated by the Division of Conservation, Natural Resources Cabinet as a multi-agency effort

** Estimates based upon months of pick up

Information on program cost is not available.

LOUISIANA AT A GLANCE

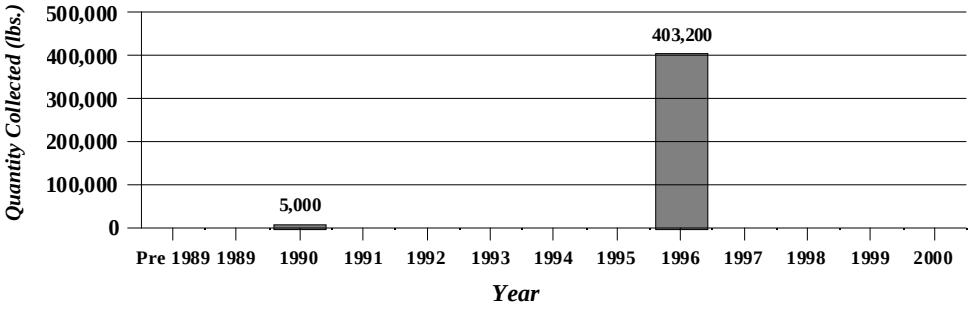


Louisiana collected over 408,000 pounds of pesticides in 1990 and 1996. Nearly all of this material was collected in 1996 when several Louisiana state agencies combined in a major statewide, cooperative effort led by the Department of Agriculture and Forestry (DOAF). Incinerators, hazmat contractors and transporters contributed significantly to the 1996 collection.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Intermittent, inactive

Quantity of Pesticides Collected



Amount collected to date: 408,200 lbs.

Program Funding

Source: State funds and in-kind services
Participant fee collected: Information not available
Cost information: In 1996, the disposal cost to the DOAF was $147,031. The estimated cost of in-kind services was approximately six times this total.

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: Information not available
1995 Universal Waste rule: Adopted, authorized in 1998
Pre-registration: Requested but not required
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

Larry LeJeune
Department of Agriculture & Forestry
Pesticides & Environmental Programs
P.O. Box 3596
Baton Rouge, LA 70821-3596
Website: http://www.ldaf.state.la.us/
(Department of Agriculture and Forestry, not specific to Clean Sweeps)

Tel: (225) 925-6914
Fax: (225) 925-3760
larry_l@ldaf.state.la.us

Summary of Louisiana Waste Pesticide Disposal Program

Louisiana held a small agricultural waste pesticide collection in 1990. In 1996, the Department of Agriculture & Forestry, in collaboration with the Louisiana State University Agriculture Center, the Louisiana Department of Environmental Quality, the Co-op Extension Service, and Louisiana State Police (Transportation Environmental Safety) conducted collections at six sites throughout the state. Participants preregistered 26 tons, but over 201 tons were collected. Undeclared materials were attributed to fear of regulatory enforcement or punitive fines. Most of the material collected from 621 participants consisted of arsenical pesticides. Most services were volunteered, including the services of three incinerators and the hazardous materials personnel and transporters.

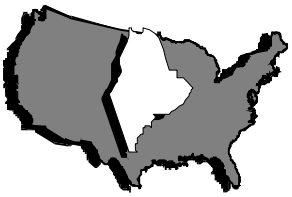
Louisiana began collecting and recycling plastic pesticide containers in 1992, expanding the program to collect 62,000 pounds in 1993 and 397,000 pounds in 1997. The Agricultural Container Research Council funds the recycling, and participation in the program is free and voluntary.

Louisiana Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	5,000	no data	NA
1996	403,200	621	649
TOTAL	408,200	NA	NA

Information on program cost is not available.
NA = not applicable

MAINE AT A GLANCE

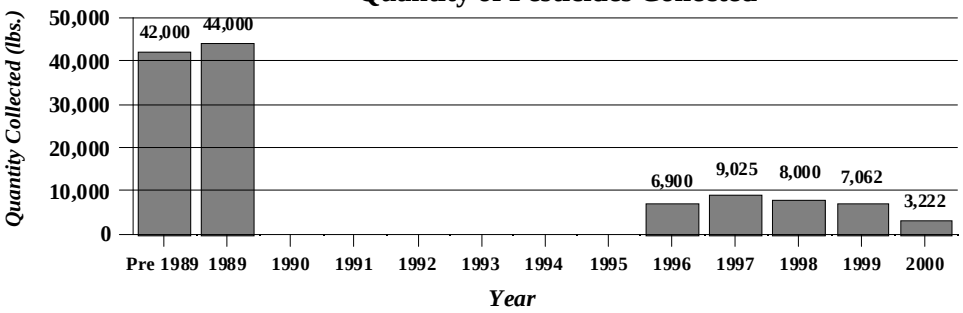


Maine conducted its first clean sweep collection in 1982 and has collected pesticides continuously since 1996. The Maine Board of Pesticides Control, the lead agency, collaborates with the Department of Environmental Protection. The state currently uses EPA grant funds to support its program, which has collected over 120,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1982
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 120,209 lbs.

Program Funding

Source: EPA grants since 1996, pesticide registration fees in 1982 and 1985. State funds in 1986 and 1989

Participant fee collected: No fee for the general public and agricultural users including farmers and operators of greenhouses and nurseries. Others are charged

Cost information: Cost was $1.91 per pound in 1998 and $1.30 per pound in 1999

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration (majority) and other disposal at out-of-state EPA-licensed disposal facilities
Exchange program: No
1995 Universal Waste rule: Adopted excluding pesticides, not yet authorized
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: General public and agricultural users including farmers and operators of greenhouses and nurseries. Commercial applicators and retailers can participate but must make special arrangements and pay the contracted rate

Container Collection

Existing program: Yes

Contact Information

Bob Batteese
Board of Pesticides Control
Department of Agriculture
28 State House Station
Augusta, Maine 04333-0028
Tel: (207) 287-2731
Fax: (207) 287-7548
robert.batteese@state.me.us
Website: http://www.state.me.us/agriculture/pesticides/homepage.htm
(Clean Sweep specific)

Summary of Maine Waste Pesticide Disposal Program

The Board of Pesticides Control (BPC) is the state lead agency for pesticides and has been involved in various types of collection programs since 1982. In the early years, the BPC had a five ton truck and its employees went to farms and homes to collect pesticides whenever a citizen called. The chemicals were then stored until funds were available to hire a contractor to dispose of them at licensed out-of-state facilities. The largest effort occurred in 1989 when there was a one-time legislative appropriation of $100,000 that resulted in the disposal of 22 tons of primarily agricultural pesticides.

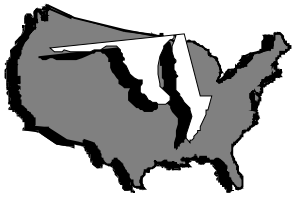
Since 1996, the BPC has utilized federal pesticide grant funds to conduct a joint collection program with the Maine Department of Environmental Protection. Each year, a hazardous materials contractor is hired to be present for one day at each of four regional sites. Homeowners, non-corporate farmers and greenhouse operators can participate free of charge and must submit an inventory form in advance to the BPC. When the week of collections is scheduled, shipping papers are mailed to each participant listing the pesticides they may bring in on the specified date. The program is limited to obsolete pesticides, defined as banned pesticides, and products that have become caked, frozen or are liquids more than 10 years old. Pesticides that can be used legally are generally not accepted although chlorpyrifos products with residential uses will be accepted in the 2000 program.

Maine Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1982	12,000	no data	NA	no data	NA
1984	18,000	no data	NA	no data	NA
1986	12,000	93	129	no data	NA
1989	44,000	173	254	no data	NA
1996	6,900	100	69	no data	NA
1997	9,025	139	65	no data	NA
1998	8,000	65	123	$15,280	$1.91
1999	7,062	39	181	$9,180	$1.30
2000	3,222	48	67	$15,000	$4.66
TOTAL	120,209	more than 657	137 beginning in 1986	NA	NA

NA = not applicable

MARYLAND AT A GLANCE

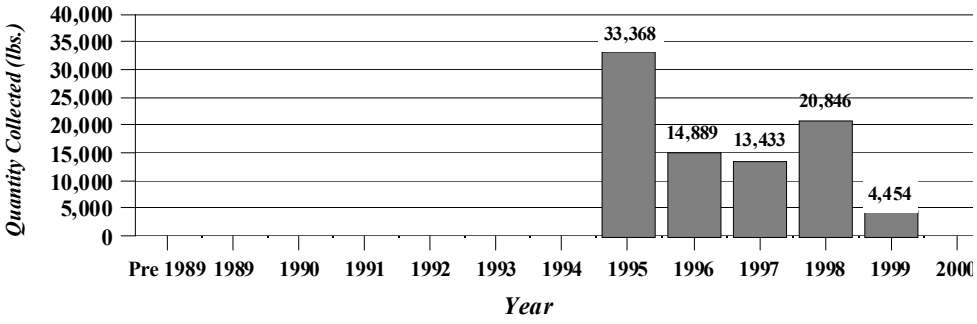


The Maryland Department of Agriculture's initial pesticide collection was funded 1995 with an EPA grant. Pesticides were collected annually through 1999 using EPA and state funds. To date Maryland has collected nearly 87,000 pounds of pesticides using on-site pick ups on a county-by-county basis.

Collection History

Products collected: Pesticides
Year of first collection: 1995
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 86,990 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: No
Cost information: Costs to date total $153,465, an average of $1.76 per pound

Collection Logistics

Method of collection: On-site pick up
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Not adopted
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

Rob Hofstetter
Maryland Department of Agriculture
Pesticide Regulation Section
Wayne A. Cawley Jr., Building
50 Harry S. Truman Parkway
Annapolis, MD 21401-8960
Tel: (410) 841-5710
Fax: (410) 841-2765
hofsterj@mda.state.md.us

Website: http://www.mda.state.md.us/plant/disposal.htm (Clean Sweep specific)

Summary of Maryland Waste Pesticide Disposal Program

The first pesticide collection and disposal program was conducted in 1995 through an EPA grant for $75,000. The collection program was offered to three counties as a one-time opportunity for growers. Participation in the program required a registration form for an inventory of the type and quantities of pesticides for disposal. Participants were selected on a first-come basis. Inspectors conducted on-site inspections to verify types and quantities with information on the registration form. A contractor was hired through competitive bid to pick up 33,368 pounds of pesticides from 57 farmers. Again, in 1996, this program was offered to three counties, and 70 farmers participated for a collection of 14,889 pounds.

In 1997 and 1998, the Maryland University Extension Service along with Maryland Farm Bureau and the Maryland Nurserymen's Association cooperated with the Department of Agriculture to promote and conduct pesticide collection and disposal programs. A total of 34,279 pounds of pesticides were collected from 72 growers. In 1999 the disposal program was offered to growers in Western and Central Maryland. A total of 4,454 pounds of pesticides were collected from 28 growers.

These collection programs consist of individual farm pick ups and are conducted on a county basis. The Department of Agriculture registers all waste pesticides and obtains, through the Maryland Department of the Environment, a temporary Generator Number for each farm location. A Universal Waste Rule was written in 2001 and will be submitted to the Maryland General Assembly for approval in late 2001 or early 2002.

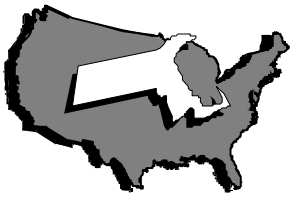
Maryland did not provide funding in 2000 for the collection and disposal of pesticides. To stay in front of future collection and disposal of unwanted pesticides in Maryland, the Department of Agriculture accepts registration forms for future programs. Those registering will be kept on an "interest list" and given priority for any future collection and disposal programs. Pesticides were collected and disposed of in 2001.

Maryland Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1995	33,368	57	585	$50,052	$1.50
1996	14,889	70	213	$30,820	$2.07
1997	13,433	32	420	$23,508	$1.75
1998	20,846	40	521	$36,481	$1.75
1999	4,454	28	159	$12,604	$2.83
2000	0	0	NA	0	NA
TOTAL	86,990	227	383	$153,465	$1.76

NA = not applicable

MASSACHUSETTS AT A GLANCE

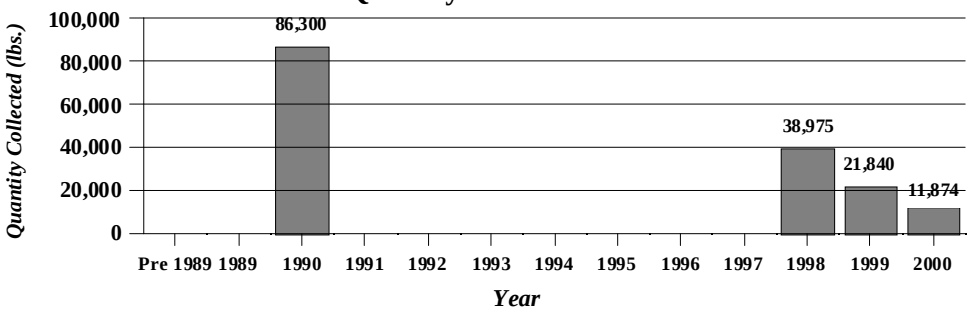


Massachusetts conducted its first clean sweep collection in 1990 with subsequent collections in 1998, 1999, and 2000. The Department of Food and Agriculture is the lead agency for the program, which has collected almost 159,000 pounds of pesticides. State funds and participants' fees currently pay for the collections.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 158,989 lbs.

Program Funding

Source: State funds, EPA grants, and participant fees
Participant fee collected: Yes, $1.35 per pound for solids and $9.00 per gallon for liquids. Dioxin materials are $8.00 per pound
Cost information: 1998 costs were $1.10 per pound for solids and $9.00 per gallon for liquids; 2000 costs were $1.35 per pound for solids and $9.00 per gallon for liquids. The state pays the contractor's set-up fee

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, golf course managers and licensed and certified applicators

Container Collection

Existing program: Yes, on a limited basis

Contact Information

Gerard Kennedy
Pesticide Bureau
Department of Food & Agriculture
251 Causeway Street, Suite 500
Boston, MA 02114
Tel: (617) 626-1773
Fax: (617) 626-1850
Gerard.Kennedy@state.ma.us
Website: http://www.state.ma.us/dfa/pesticides/waste/index.htm
(Clean Sweep specific)

Summary of the Massachusetts Waste Pesticide Disposal Program

In 1998, the Massachusetts Pesticide Bureau implemented a waste pesticide collection program for the first time in over eight years. A survey of 6,600 certified applicators done in 1997 showed a collection was needed. The program included a general clean out targeting pesticide applicators, farmers and municipal and state agencies at 7 locations statewide, and an on-call pick up service for municipal or state agencies. Five training workshops were held to be sure that participants were aware of the correct packaging, transportation and emergency response procedures. There were press releases and articles in newspapers and farm publications, as well as on the Department of Food and Agriculture's (DFA) web site. The Pesticide Bureau developed an agreement with the Commercial Vehicles Enforcement Unit of the State Police to refrain from random roadside inspections of carriers participating in the event. This provided relief from the Federal Hazardous Materials Transportation Regulations.

Participants paid a fee, but the cost was considerably lower than in 1990, and DFA funds were used to subsidize the contractor's set-up fees. Dioxin-containing materials were accepted. Based on the results of the 1998 program, Massachusetts identified the following ways to increase participation in future programs:

- Secure participant trust;
- Develop more convenient, regular events;
- Secure funding to pay for participants' disposal costs; and
- Work to ease the impact of hazardous materials transportation regulations.

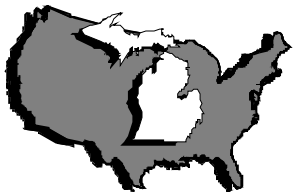
In 1999, nearly 22,000 pounds of pesticide were collected during the second annual collection program. In 2000, almost 12,000 pounds of pesticides were collected from four sites. In addition, the identities and quantities of all pesticides were recorded and provided to EPA.

Massachusetts Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost
1990	86,300	no data	NA	no data	NA
1998	38,975	107	364	no data	$1.10/lb of solids $9/gal of liquids
1999	21,840	94	232	no data	NA
2000	11,874	no data	NA	no data	$1.35/lb of solids $9/gal of liquids
TOTAL	158,989	NA	303 for the two years with data	NA	NA

NA = not applicable

MICHIGAN AT A GLANCE

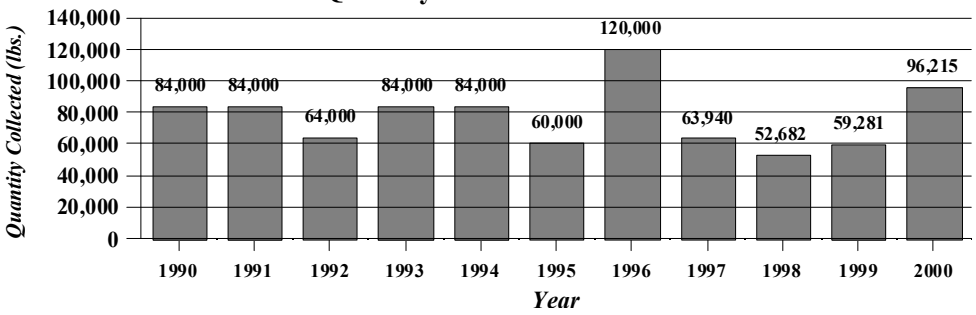


Michigan's permanent clean sweep program has collected more than 852,000 pounds of pesticides since 1990. The program, with the Department of Agriculture as the lead agency, is funded by pesticide registration fees, partnerships, and participant fees when needed.

Collection History

Products collected: Pesticides and household pesticide waste
Year of first collection: 1990
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 852,118 lbs.

Program Funding

Source: Pesticide registration fees, EPA grants, partnerships, and, in 1994, participant fees
Participant fee collected: Only when resources do not cover costs (in 1994)
Cost information: $850,000 to dispose of 400,000 pounds from 1990 to 1994

Collection Logistics

Method of collection: Fifteen permanent sites
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Variable
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes

Contact Information

Jack Knorek
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Pesticides & Plant Pest Management Division
P.O. Box 30017
Lansing, MI 48909
Tel: (517) 373-9744
Fax: (517) 335-3329
knorekj@state.mi.us
Website: http://www.mda.state.mi.us/environm/groundwater/cleansweep/index.html
(Clean Sweep specific)

Summary of Michigan's Waste Pesticide Disposal Program

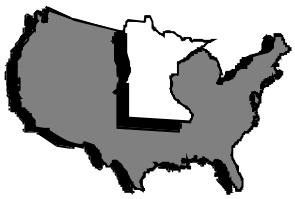
Between 1990 and 1994, over 200 tons of pesticides were collected at a cost of approximately $850,000 at single-day collection events (8 to 12 per year) serving all 83 Michigan counties and about 1,800 participants. This resulted in an average cost of about $2.13 per pound and an average quantity of 222 pounds per participant during this period. The resources (cash and in-kind) provided by the Michigan State University Extension Service, the county Environmental Health Divisions, the Farm Bureau, agricultural commodity groups, Michigan Chemical Council, Monsanto, Department of Natural Resources, the Department of Agriculture, EPA (FIFRA, RCRA, GLNPO) and other private sources such as the Northern Michigan Turf Manager's Association equaled the expenditures for disposal. In 1994, the funds were not sufficient to cover demand and participants were asked to pay for the cost ($1.77 per pound) of materials in excess of the average amount. State pesticide registration fees fund on-going disposal costs, and permanent sites are maintained by counties as a cooperative match.

Michigan Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)
1990	84,000
1991	84,000
1992	64,000
1993	84,000
1994	84,000
1995	60,000
1996	120,000
1997	63,940
1998	52,682
1999	59,281
2000	96,215
TOTAL	852,118

Information on the number of participants and program cost is not available.

MINNESOTA AT A GLANCE

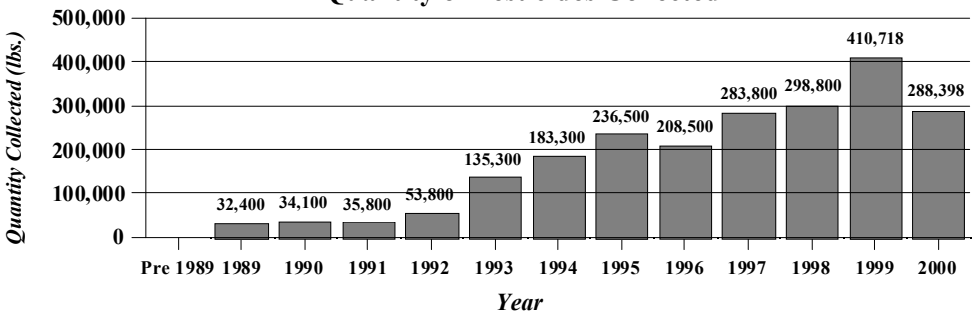


Since 1989 Minnesota has conducted clean sweep collections with the Department of Agriculture as the lead agency. The program, currently funded through pesticide registration fees and occasional EPA grants, has collected over two million pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1989
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 2,201,416 lbs.

Program Funding

Source: Pesticide registration fees and occasional EPA grants ($80,000 in 2000)

Participant fee collected: Individuals and businesses pay no fee for the first 300 pounds but are assessed following fees for amounts in excess of 301 pounds:
301 to 1,000 pounds - $1 per pound
1,001 to 2,200 pounds - $3 per pound
Fee for governmental agencies is $4 per pound

Cost information: Current cost is $1.60 per pound

Collection Logistics

Method of collection: Single day events, six permanent drop-off collection sites, and occasionally on-site pick up

Disposal method: Incineration (100%)
Exchange program: Information not available
1995 Universal Waste rule: Not adopted
Pre-registration: Not required any more. The requirement was dropped when it was determined that most participants were "walk-ins."

Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, government agencies, and the public. Abandoned pesticides are accepted anonymously.

Container Collection

Existing program: Yes

Contact Information

Stan Kaminski
Minnesota Department of Agriculture
Agronomy & Plant Protection Division
Waste Pesticide Disposal Program
90 West Plato Blvd.
St. Paul, MN 55107-2094
Tel: (651) 297-1062
Fax: (651) 297-2271
stan.kaminski@state.mn.us
Website: http://www.mda.state.mn.us/appd/wastepest (Clean Sweep specific)

Summary of Minnesota Waste Pesticide Disposal Program

Minnesota originally held regional collection events, but found that the volume of pesticides collected on a single day was very high and difficult to manage (15 tons or more). The revised collection plan provides a collection opportunity in every county at least once every other year. County officials work closely with MDA staff on development, implementation and promotion of public awareness and participation. Each year, various locations (highway garages, chemical dealerships, etc.) are designated as one-day pesticide drop-off sites. Occasionally, on-site pesticide pickups are made to accommodate situations where the waste is too impractical or hazardous to move to drop-off sites safely. On-site collections are rare because they are expensive and time-consuming. The MDA signs all hazardous waste manifests and assumes waste generator status. The frequency of occurrence of some older products at drop-off sites is decreasing. Minnesota accepts some dioxin-containing materials, and pesticides requiring an F code are accepted only if the permitted disposal facility is operating.

In 1997, MDA formed a partnership with several regional Household Hazardous Waste (HHW) programs to establish year-round pesticide drop-off locations. These sites accept pesticides from individuals or businesses that need timely disposal in an emergency situation. Collected pesticides are kept at storage facilities until a hazardous waste contractor collects them.

In 2000, Minnesota received a grant of $57,000 from EPA's Region 5 to target collection of persistent, bioaccumulative toxins (PBT) during Clean Sweep programs. Minnesota had determined that more than 150,000 pounds, or about 10% of the total pesticides collected were PBTs including nearly 30 tons of DDT. The grant was used to inform and alert participants who had not participated in previous events, provide incentives (e.g., more collection sites, shorter travel distance), provide guidance on storage, and target PBTs during collection events. The 2000 collection included over 4,200 pounds of PBTs in a total of over 123,000 pounds of unwanted pesticides.

Future waste pesticide collections are of concern because of the decreasing amounts of waste collected, which was already seen in 2000. The program has been successful in removing many of the large stores of waste pesticide. Practical collections with the reduced volumes will require re-evaluating contractor use and rethinking the scheduling of events. Adjustments over the next several years will address the reduced amount of stored waste and must still meet the needs of pesticide users looking for safe and proper disposal of waste pesticides.

Minnesota has been collecting empty pesticide containers since 1990, when the results of a pilot project prompted the state to expand it statewide. Each county has the opportunity to develop a collection method that best meets the needs of their growers and agricultural chemical dealers. Some counties decided not to take an active role in pesticide container collection. State statute now requires sellers to collect empty containers from their clients. If the county runs a countywide collection, the dealers are relieved of that responsibility, but must still notify their clientele of the container recycling program. The statute served to bring together private industry and county agencies.

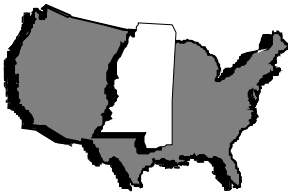
Minnesota Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)
1989	32,400
1990	34,100
1991	35,800
1992	53,800
1993	135,300
1994	183,300
1995	236,500
1996	208,500
1997	283,800
1998	298,800
1999	410,718
2000*	288,398
TOTAL	2,201,416

Information on the number of participants and program cost is not available.

* The final collection total for 2000 was received after much of the report was completed. The final total of 288,398 is included in this table but is not reflected in the tables and figures throughout the body of the report.

MISSISSIPPI AT A GLANCE

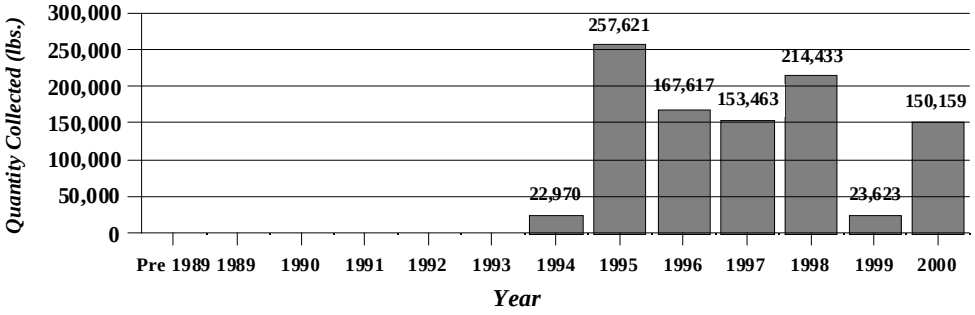


In 1994 Mississippi began its clean sweep collections with the Department of Agriculture and Commerce as the lead agency. The program has collected nearly 990,000 pounds of pesticides. Due to a sunset clause in funding legislation, effective mid-1998, the program is no longer funded through pesticide registration fees.

Collection History

Products collected: Pesticides and, in 1995, tires, waste oil, and batteries
Year of first collection: 1994
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 989,886 lbs.

Program Funding

Source: Pesticide registration fees (through 1998), other grant in 1999, EPA grant in 2000
Participant fee collected: No
Cost information: Costs through 1999 total $1,066,784, an average of $1.27 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Not required
Specific pesticides reported: Yes
Eligible participants: Farmers, private landowners, and, in 1998, commercial entities

Container Collection

Existing program: Yes

Contact Information

Rusty Crowe
Department of Agriculture & Commerce
Bureau of Plant Industry
P.O. Box 5207
Mississippi State, MS 39762
Tel: (662) 325-1269
Fax: (662) 325-0397
rustyc@mdac.state.ms.us
Website: http://www.mdac.state.ms.us/Library/BBC/PlantIndustry/PesticidePrograms/WastePesticideDisposalPrograms.html (Clean Sweep specific)

Summary of Mississippi Waste Pesticide Disposal Program

In 1994, the Mississippi Legislature authorized a four-year Waste Pesticide Collection and Disposal Program, funded through an increase in product registration fees, of which $50 went to pay for collection events. The program was conducted in five phases: planning, advertising and bid solicitation, contractor evaluation and bid award, logistical preparations, and collection. During its four year life, the program collected and disposed of more than 800,000 pounds of waste pesticide since it began. The collection events were held in different counties each year. Waste oil and batteries were collected with pesticides until funding became limited.

Program managers note that the main problem was the sunset clause in their funding legislation, resulting in the end of the program in that format on June 30, 1998. In 1999, a grant was obtained from the Tennessee Valley Authority and over 23,600 pounds of pesticide were collected. Funding for the 2000 collection came from an EPA grant under Section 319 of the Clean Water Act to the Mississippi Department of Environmental Quality.

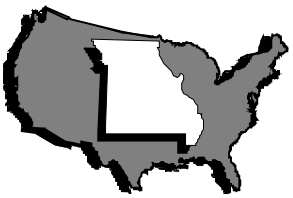
Dr. Jimmy Bonner, from Mississippi's Extension Environmental Education Unit, outlined the steps Mississippi followed and provided guidance on conducting a successful Clean Sweep program. This document, titled "Planning a Waste Pesticide Disposal Program," is an excellent resource and can be obtained from the Mississippi State University Extension Service website at http://msucares.com/pubs/pub2194.htm.

Mississippi Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Program Cost	Average Cost (per pound)
1994	22,970	$71,960	$3.13
1995	257,621	$311,964	$1.21
1996	167,617	$170,832	$1.02
1997	153,463	$222,667	$1.45
1998	214,433	$259,876	$1.21
1999	23,623	$29,485	$1.24
2000	150,159	no data	NA
TOTAL	989,886	More than $1,066,784	$1.27 (through 1999)

Information on the number of participants is not available.
NA = not applicable

MISSOURI AT A GLANCE

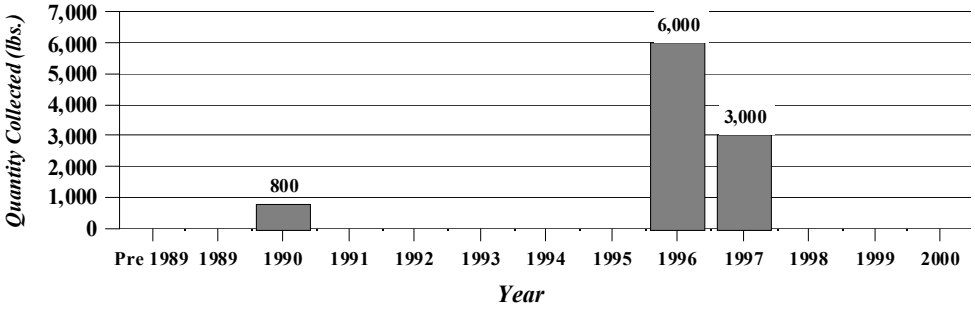


Missouri collected approximately 10,000 pounds of pesticides during 1990, 1996, and 1997. These collections were funded by EPA grants and the state and were led by the Department of Natural Resources.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Intermittent, inactive

Quantity of Pesticides Collected



Amount collected to date: 9,800 lbs.

Program Funding

Source: State funds and EPA grants
Participant fee collected: Information not available
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Information not available
Exchange program: Information not available
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Information not available
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

Roger Korenberg/June Sullens Tel: (573) 526-6627
Department of Natural Resources Fax: (573) 526-5808
P.O. Box 176
Jefferson City, MO 65102
Website: http://www.dnr.state.mo.us/homednr.htm
(Department of Natural Resources, not specific to Clean Sweeps)

Summary of Missouri Waste Pesticide Disposal Program

In 1990, Missouri conducted a hazardous waste collection and disposal program for both household and farm participants. The program was funded by the state of Missouri at no cost to the participants. Farm participation was about 10-15 percent which equated to 800 pounds.

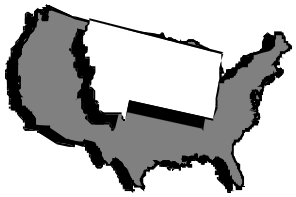
In 1996, a collection and disposal program was funded from federal grant money. In 1997, the Department of Natural Resources collected and disposed of 3,000 pounds of agricultural pesticides.

Missouri Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	800	no data	NA
1996	6,000	85	71
1997	3,000	no data	NA
TOTAL	9,800	NA	NA

Information on program cost is not available.
NA = not applicable

MONTANA AT A GLANCE

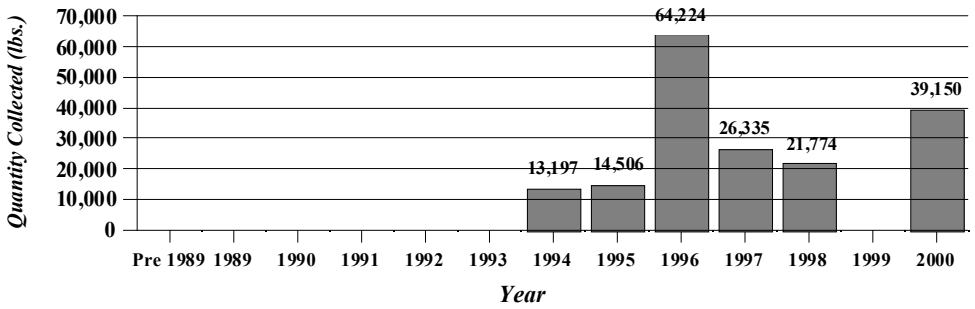


Since 1994 Montana has conducted a permanently funded clean sweep program with the Department of Agriculture as the lead agency. The program, funded through dealer and applicator license fees and participant fees, has collected over 179,000 pounds of pesticides.

Collection History

Products collected: Pesticides and household pesticide waste
Year of first collection: 1994
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 179,186 lbs.

Program Funding

Source: Dealer and applicator license fees (75%) and participant fees (25%). Funding reauthorized by legislature every five years
Participant fee collected: Yes, $1.00 per pound for first 200 pounds and $0.50 per pound for amounts in excess of 200 pounds
Cost information: The cost for disposal ranges from $1.70 to $2.70 per pound depending on the amount disposed

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, distributors, and the public

Container Collection

Existing program: No

Contact Information

Daniel Sullivan
Department of Agriculture
P.O. Box 200201
Helena, MT 59620-0201
Tel: (406) 444-3731
Fax: (406) 444-7336
dasullivan@state.mt.us
Website: http://www.agr.state.mt.us/programs/asd/pestdisp.shtml
(Clean Sweep specific)

Summary of Montana Waste Pesticide Disposal Program

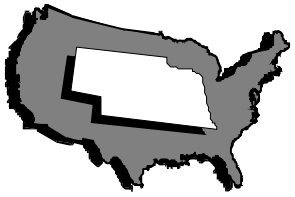
The annual pesticide collection program consists of two to three central collection events during a one-week period. The program is permanently funded to the extent that the Montana legislature must reauthorize the program every five years. The program is currently funded through 2003. The Montana Department of Agriculture inventories the waste pesticides in a targeted region and provides appointments for growers, who must preregister their unusable pesticides. Farmers represent about 80% of the number of participants. In terms of pesticide weight, however, retailers and distributors contribute the largest amount, 78% of the total in 2000. Participants pay $1 per pound for the first 200 pounds and $0.50 per pound for amounts in excess of 200 pounds. Licensed applicators and dealers receive a fee credit for that portion of their license fee earmarked for the disposal program. About 50 percent of the pesticides collected are banned or unregistered, with organochlorine insecticides, seed treatment pesticides and older herbicides the most common materials. Insecticides represent over 75% of the pesticides collected, and include DDT, chlordane and pentachlorophenol. Herbicides include 2,4,5-T, dinoseb and soil sterilants, and strychnine is the primary rodenticide collected.

Montana Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1994	13,197	107	123
1995	14,506	70	207
1996	64,224	125	514
1997	26,335	125	211
1998	21,774	108	202
1999	0	0	NA
2000	39,150	85	461
TOTAL	179,186	620	289

Information on program cost is not available.
NA = not applicable

NEBRASKA AT A GLANCE

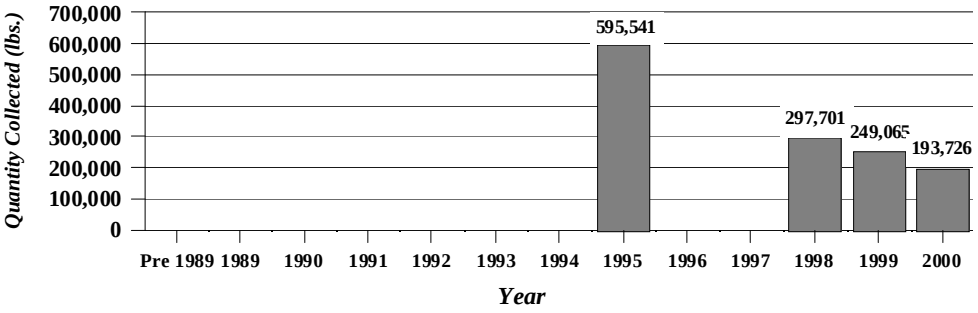


The Nebraska Department of Agriculture conducted its first clean sweep collection, funded with a substantial EPA grant, in 1995. State funds and pesticide registration fees now fund these collections. Nebraska has collected over 1.3 million pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1995
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 1,336,033 lbs.

Program Funding

Source: Pesticide registration fees, state funds, and EPA grants
Participant fee collected: No
Cost information: 2000 collection cost $252,020, an average of $1.30 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Not required
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes

Contact Information

Rich Reiman
Department of Agriculture
Bureau of Plant Industry
301 Centennial Mall
P.O. Box 94756
Lincoln, NE 68509
Tel: (402) 471-6851
Fax: (402) 471-6892
richer@agr.state.ne.us
Website: http://www.agr.state.ne.us/division/bpi/pes/pestl.htm (Department of Agriculture Bureau of Plant Industry, not Clean Sweep specific)

Summary of Nebraska Waste Pesticide Disposal Program

Nebraska benefitted from a one time grant of $744,000 from EPA from a budget of several million dollars that EPA had allocated to dispose of pesticides ruined or adulterated by the 1993 floods. Working with extension educators, local weed districts, natural resource districts and often directly with chemical distributors and dealers, the State publicized the 1995 collection by sending out over 130,000 letters, and publishing more than 150 articles in farm magazines and newspapers across the state. The first form received reported that the farmer had 700 pounds of DDT to turn in, and later, another farmer turned in 6,000 pounds. Clean Harbors won the disposal contract. Most of the products collected were canceled pesticides such as chlordane or 2,4,5-T.

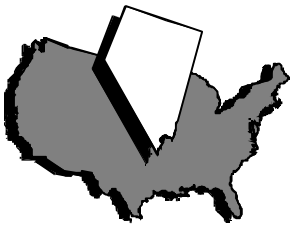
Nebraska has collected pesticide containers since 1992. During the first year, 8,000 containers were collected at two sites, and the program steadily grew to a collection of 135,000 containers at 55 sites in 1998. The program is self-supporting and has been run since its inception by Dr. Larry Schulze, an Extension Pesticide Coordinator at the University of Nebraska at Lincoln. In 1996, tighter regulations on accepting plastic containers at Nebraska landfills led to greater interest in recycling.

Nebraska Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Program Cost	Average Cost (per pound)
1995	595,541	$744,000	$1.25
1998	297,701	no data	NA
1999	249,065	no data	NA
2000	193,726	$252,020	$1.30
TOTAL	1,336,033	NA	NA

Information on the number of participants is not available.
NA = not applicable

NEVADA AT A GLANCE

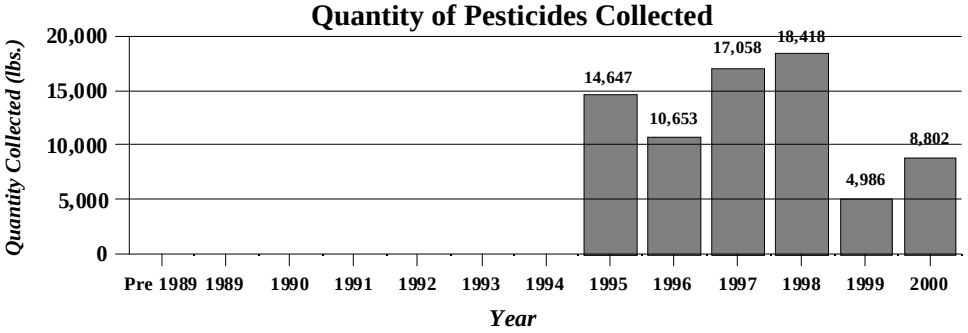


Since 1995 Nevada has conducted annual clean sweep collections with the Department of Agriculture as the lead agency. These collections, currently funded through pesticide registration fees, total nearly 75,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1995
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 74,564 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: Average cost to date is $2.28 per pound

Collection Logistics

Method of collection: Single day events and on-site pick up
Disposal method: Incineration
Exchange program: Yes, sometimes
1995 Universal Waste rule: Adopted, authorized in 1996
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, ranchers, commercial applicators, retailers, golf course managers, and other users including commercial and industrial firms. Pesticides from homeowners are accepted upon request.

Container Collection

Existing program: Yes

Contact Information

Jon Carpenter
Department of Agriculture
1200 East Winnemucca Blvd.
Winnemucca, NV 89445
Tel: (775) 623-6501
Fax: (775) 625-1200
jcarp@the-onramp.net
Website: http://agri.state.nv.us/pestprog/index.htm#Waste Pesticide Disposal
(Clean Sweep specific)

Summary of Nevada Waste Pesticide Disposal Program

The Nevada Pesticide Program began in 1995 and has conducted at least one yearly event from 1996 through 2000. It is funded by pesticide registration fees at a level of approximately $30,000 annually. The program is available to farmers, ranchers, pest control operators, and other pesticide users. However, in 1996, commercial and industrial firms were encouraged to participate. The program is promoted to all pesticide users except homeowners. In 1995, Nevada adopted the Universal Waste Rule which relaxes some of the procedures for storage and disposal of unwanted pesticides. The Nevada program requires the participant to inventory the unwanted pesticides and register these with the Department of Agriculture for an upcoming collection event. This inventory is used by the contractor for packaging and pick up. The program operation provides for the participant to deliver to a storage site or for the contractor to pick up from the farmer. In 1998, it was estimated that 10% of the pesticides collected were banned and or unregistered. Also, 18,418 pounds of pesticides (400 different pesticide products) were collected in 1998 from 70 participants. As of the fall of 2000, the Department of Agriculture stopped storing any dioxin products.

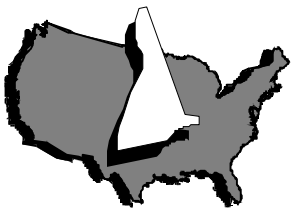
The success of the waste pesticide collection and disposal program in Nevada can be attributed to its simplicity. Pesticide users and the Nevada Department of Agriculture appreciate the ability to safely dispose of products without encountering mountains of government red tape. They hope to be able to continue the program with the same simplicity in the future.

Nevada Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1995	14,647	no data	NA
1996	10,653	no data	NA
1997	17,058	no data	NA
1998	18,418	70	263
1999	4,986	no data	NA
2000	8,802*	no data	NA
TOTAL	74,564	NA	NA

* The 2000 figure includes 1,244 pounds of dioxin precursor materials and 7,558 pounds of other pesticides.
Information on program cost is not available.
NA = not applicable

NEW HAMPSHIRE AT A GLANCE

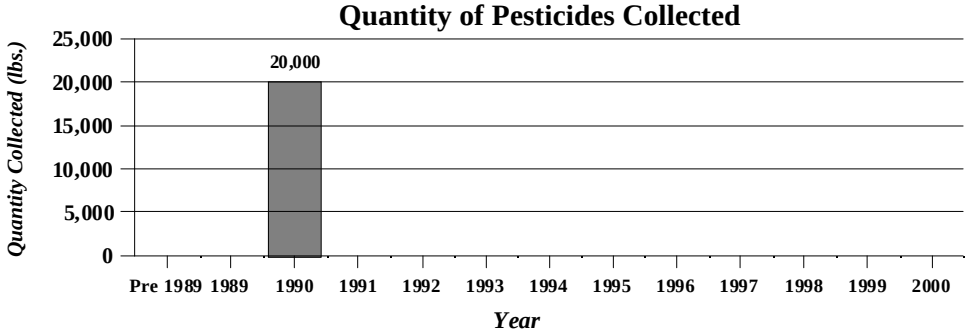


In 1990 the New Hampshire Department of Agriculture conducted a one-time, state-funded program, which collected approximately 20,000 pounds of agricultural pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Once

Quantity of Pesticides Collected



Amount collected to date: 20,000 lbs.

Program Funding

Source: State funds
Participant fee collected: No
Cost information: 1990 collection cost $75,000, an average of $3.75 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Information not available
Exchange program: No
1995 Universal Waste rule: Not adopted
Pre-registration: Not required
Specific pesticides reported: No
Eligible participants: Farmers

Existing program: No

Container Collection

Contact Information

Wendy Chapley, Director
Department of Agriculture, Markets and Food
Division of Pesticide Control
P.O. Box 2042
Concord, NH 03302-2042
Website: http://www.state.nh.us/agric/aghome.html
(Department of Agriculture, Markets and Food, not specific to Clean Sweeps)

Tel: (603) 271-3550
Fax: (603) 271-1109
pesticides@agr.state.nh.us

Summary of New Hampshire Waste Pesticide Disposal Program

In 1990, New Hampshire conducted an amnesty program for the collection and disposal of agricultural pesticides. The program was limited to farmers, who could participate free of charge. The collection event had no limits on the amount of pesticides that could be brought to the collection site. About 20,000 pounds of agricultural pesticides were collected and disposed, with participation of 132 farmers. The program was conducted at a direct cost of $75,000. No agricultural collection and disposal programs have been conducted in New Hampshire since the 1990 event.

New Hampshire is in the process of adopting the Universal Waste Rule.

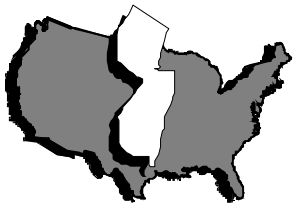
In 1997, a questionnaire was distributed in an attempt to estimate the quantity of pesticides "out there." Even though responders didn't have to identify themselves, the survey had an extremely low return rate.

The New Hampshire Department of Environmental Services, Waste Management Division sponsors household hazardous waste collection events throughout the state. Homeowners are allowed to bring small quantities of pesticides to these events.

New Hampshire Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1990	20,000	132	152	$75,000	$3.75
TOTAL	20,000	132	152	$75,000	$3.75

NEW JERSEY AT A GLANCE

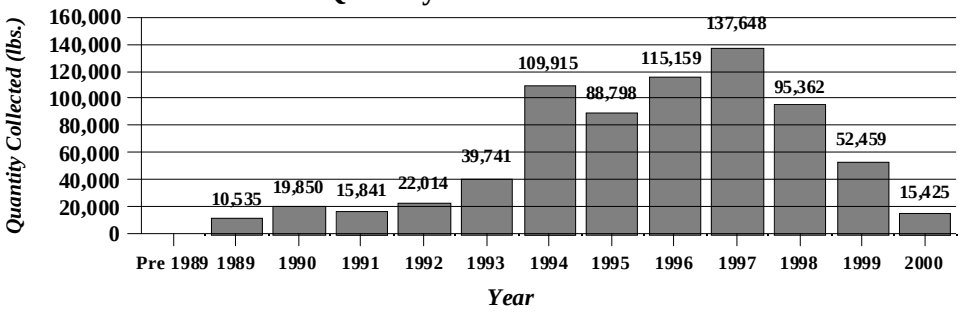


Many New Jersey counties collect hazardous wastes and at least 14 counties allow farmers to participate. These counties have collected over 722,000 pounds of household and agricultural pesticides since 1985 using state and county funding.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1985
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 722,747 lbs.

Program Funding

Source: State and county funds
Participant fee collected: Fee dependent upon county and amount of material collected
Cost information: Information not available

Collection Logistics

Method of collection: Single day events and permanent sites
Disposal method: Information not available
Exchange program: Information not available
1995 Universal Waste rule: Not adopted
Pre-registration: Information not available
Specific pesticides reported: Yes, in one county
Eligible participants: The public and, in some counties, farmers

Container Collection

Existing program: Information not available

Contact Information

Fran Gerding Tel: (609) 984-6894
Department of Environmental Protection Fax: (609) 984-6555
Pesticide Control Program fgerding@dep.state.nj.us
CN-411
Trenton, NJ 08625

Fred Stanger Tel: (732) 745-4170
Middlesex County Fax: (732) 745-3010
Division of Solid Waste Management mcdswm@superlink.net
96 Bayard Street, 2nd Floor
New Brunswick, NJ 08901

Websites: http://www.state.nj.us/dep/enforcement/pcp/ and http://www.state.nj.us/dep/index.html (Department of Environmental Protection, not specific to Clean Sweeps) and http://www.njhazwaste.com (Association of New Jersey Household Hazardous Waste Coordinators, not specific to Clean Sweeps)

Summary of New Jersey Waste Pesticide Disposal Program

New Jersey does not have a state-wide collection and disposal program for agricultural pesticides. However, the counties in New Jersey have continuous programs for the collection of household wastes. At least fourteen counties allow farmers to participate in the HHW collections. See New Jersey Table 3 for details about which counties allow farmers to participate, whether farmers can participate for free and the estimated amount of pesticides collected from farmers by county.

The initial year of county collection days took place in 1985 as a pilot project conducted by the New Jersey Department of Environmental Protection Pesticide Control Program. This project collected unwanted pesticides from the public, farmers and commercial applicators in four counties. Since that successful pilot, the counties reflected in New Jersey Table 2 have taken the initiative and interest to continue the effort. Fred Stanger in Middlesex County is a leader in this effort.

New Jersey Table 1 - Quantity of Pesticides Collected: Statewide
(Includes household and agricultural pesticides; based on information from 14 counties.)

Year	Quantity of Pesticides (pounds)
1989	10,535
1990	19,850
1991	15,841
1992	22,014
1993	39,741
1994	109,915
1995	88,798
1996	115,159
1997	137,648
1998*	95,362
1999*	52,459
2000*	15,425
TOTAL	722,747

* Incomplete totals for 1998, 1999, and 2000. Information on the number of participants and program cost is not available.

New Jersey Table 2 - Quantity of Pesticides Collected: By County

County	Farmers? [1]	Quantity of Pesticides (pounds)										
		1991[2]	1992	1993	1994	1995	1996	1997	1998	1999	2000	Subtotal
Atlantic	yes		11,640	0	3,581	3,857	3,298	2,048	3,200			27,624
Bergen	no	some	some	some	30,373	34,425	29,700	24,975	24,300	25,650		169,423
Burlington	yes				4,081	2,481	2,648	6,157	5,191			20,558
Camden	no			7,083	8,027	3,474	1,937	1,822	649			22,992
Cape May	yes				2,660	3,300	2,300	2,240				10,500
Cumberland	yes									4,072		4,072
Middlesex	yes [3]		6,750	6,350	21,223	19,800	21,100	19,350	20,300	15,650	15,425	145,948
Monmouth	yes							4,455	2,725			7,180
Morris	yes				1,600	4,840	7,140	9,940				23,520
Ocean	yes						21,917	32,917				54,834
Passaic	no	912	3,222	3,621	4,870	7,586	NA [4]	8,425	8,490	7,087		44,213
Salem	yes	1,029	402	3,087	2,100	436	310	1,975	630			9,969
Somerset [5]	yes	44,285		19,600	31,400	8,599	16,259	16,144	28,277			164,564
Sussex	yes						8,550	7,200	1,600			17,350
TOTAL	--	46,226	22,014	39,741	109,915	88,798	115,159	137,648	95,362	52,459	15,425	722,747

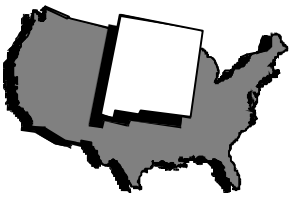
NOTES:
1. This column indicates whether or not the county allows farmers to participate in its HHW collection programs.
2. This column represents the amount of pesticides collected in the years prior to and including 1991.
3. Farmers are allowed to participate on a case-by-case basis in Middlesex County.
4. NA = not available.
5. The amount listed for Somerset County in 1991 includes 10,535 lbs from 1989; 19,850 pounds for 1990; and 13,900 pounds for 1991.

New Jersey Table 3 - County-by-County Information for New Jersey Household Hazardous Waste Collections[1]

County	Can farmers participate?[2]	Free or charge?[3]	Amount of pesticides from farmers?[4]
Atlantic	Yes	Free	Unknown
Burlington	Yes	Charge	2-3%
Cape May	Yes	Charge $2/gal if over 12 gal; $1/lb if over 20 lb	3-5%
Cumberland	Yes	Free	25%
Gloucester	Yes	Free	About 15%
Mercer	Yes	Free	Unknown
Middlesex	On a case-by-case basis	No charge if contractor will accept; otherwise they must pay	Unknown
Monmouth	Yes	Free	Estimate 5-10%
Morris	Yes	Free up to 220 lbs; $1.25/lb above that	Unknown
Ocean	Yes	no answer	no answer
Salem	Yes	Free	Unknown
Somerset	Yes	Free	Unknown
Sussex	Yes	Charge for large loads	Unknown
Warren	Yes	Free	Less than 5%
Bergen	No	Not applicable	Not applicable
Camden	No	Not applicable	Not applicable
Essex	No Response	No Response	No Response
Hackensack Meadowlands Development Commission	No HHW Program	No HHW Program	No HHW Program
Hudson	Not applicable	Not applicable	Not applicable
Hunterdon	No Response	No Response	No Response
Passaic	Not applicable	Not applicable	Not applicable
Union	No	Not applicable	Not applicable

Notes:
1 The information in the first four columns is from a fax from Fred Stanger, Middlesex County Department of Planning, to Wayne Holtzman, U.S. EPA, October 7, 1998.
2 This column lists the response to the question “Do you allow farmers to utilize your HHW program to dispose of pesticides?”
3 This column lists the response to the question “If yes [farmers are allowed to participate], is it free or do you charge the farmers?”
4 This column lists the response to the question “If so [farmers are allowed to participate], what percentage (estimated) of pesticides collected through your HHW program is contributed by farmers?”

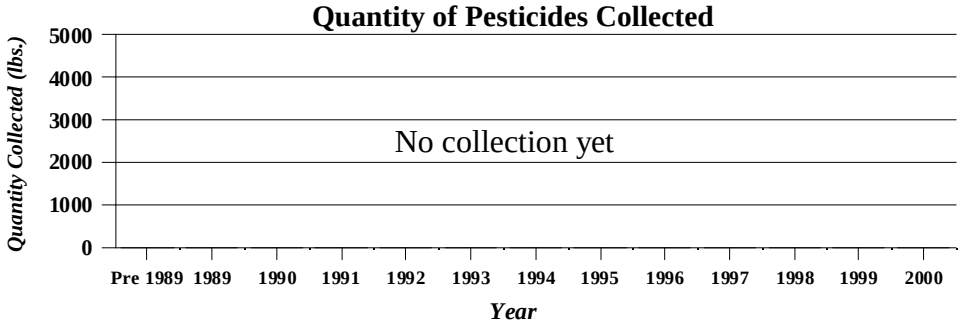
NEW MEXICO AT A GLANCE



New Mexico does not currently have a clean sweep program.

Collection History

Products collected: Not applicable
Year of first collection: Not applicable
Program Status: None



Amount collected to date: 0 lbs.

Program Funding

Source: Not applicable
Participant fee collected: Not applicable
Cost information: Not applicable

Collection Logistics

Method of collection: Not applicable
Disposal method: Not applicable
Exchange program: Not applicable
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Not applicable
Specific pesticides reported: Not applicable
Eligible participants: Not applicable

Container Collection

Existing program: Yes

Contact Information

Doug Henson
Department of Agriculture
Division of Pesticide Management
P.O. Box 30005, MSC-3AQ
Las Cruces, NM 88003-8005
Website: http://nmdaweb.nmsu.edu/
(Department of Agriculture, not specific to Clean Sweeps)

Tel: (505) 646-2133
Fax: (505) 646-5977
dhenson@nmda-bubba.nmsu.edu

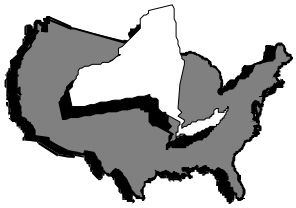
Summary of New Mexico Waste Pesticide Disposal Program

No state agricultural pesticide collection program exists in New Mexico. No funds have been available or are projected to be available in the near future for pesticide collection programs. However, if the legislature increases the Department of Agriculture's annual appropriations or allows an increase in pesticide registration fees, part of the increase would be targeted as funding for a Clean Sweep program.

Several cities in New Mexico conduct HHW programs. For example, the City of Las Cruces collected over 21,000 pounds of pesticides from residents from 1991 through 1997. It is assumed that these are household pesticides and not agricultural pesticides.

New Mexico is working with the Ag Container Recycling Council and has conducted annual plastic container collection programs since 1993. Approximately 328,000 pounds of plastic were collected through 1999. The primary contractor, USAg Recycling, averaged 64,000 pounds of high-density polyethylene pesticide containers collected each year from 1997 through 1999.

NEW YORK AT A GLANCE

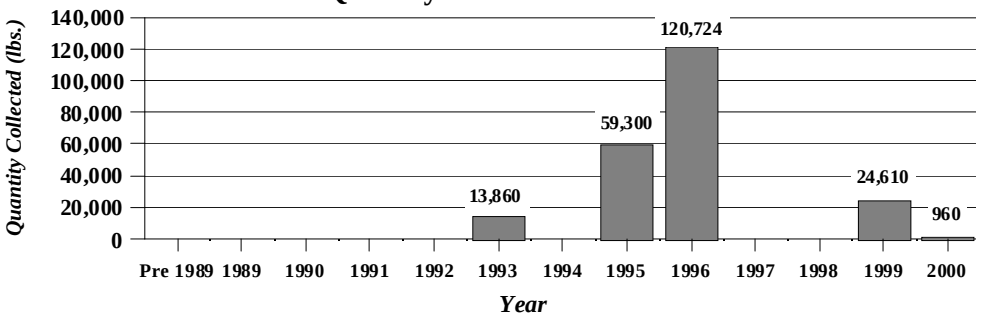


New York counties play the key role in clean sweep collections in collaboration with the Department of Environmental Conservation, and since 1993 they have collected over 219,000 pounds of pesticides. EPA grants and the counties primarily fund these collections, although state funds have also been used.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1993
Program Status: Intermittent, active

Quantity of Pesticides Collected



Amount collected to date: 219,454 lbs.

Program Funding

Source: EPA grants, county funds, and state funds
Participant fee collected: Information not available
Cost information: 1999 collection cost $50,708

Collection Logistics

Method of collection: Single day events
Disposal method: Information not available
Exchange program: Information not available
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, schools, parks, and the public

Container Collection

Existing program: Information not available

Contact Information

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Department of Environmental Conservation
Division of Hazardous Waste Regulation
50 Wolf Road, Room 212
Albany, NY 12333-7253
Tel: (518) 457-7337
Fax: (518) 457-1283
dxvitale@gw.dec.state.ny.us

Website: http://www.dec.state.ny.us/website/dshm/pesticid/pesticid.htm
(Department of Environmental Conservation, Pesticide Program and Hazardous Waste Program, not specific to Clean Sweeps)

Summary of New York Waste Pesticide Disposal Program

New York State's counties have taken the initiative to organize and fund farm pesticide collection programs. Two examples are Erie County and a group of four counties operating a regional program, consisting of Genesee, Livingston, Orleans and Wyoming counties (GLOW).

Erie County

In 1993, Erie County held a demonstration Clean Sweep project using EPA funds and county in-kind contributions. A total of 13,860 pounds of pesticide were collected from 54 participants. This experience allowed Erie County to coordinate with and provide technical support to other counties a few years later.

In 1996, Erie County, on behalf of EPA Region 2, announced the availability of Clean Sweep Project applications for collecting waste agricultural pesticides from New York State Great Lakes Basin farms. Six central New York counties participated in what was dubbed CS96 (Clean Sweep Projects 1996) and consisted of three collection events, collecting over 65,800 pounds from 168 participants. Federal EPA Coastal Environmental Management funds of $46,700 leveraged $52,000 in combined regional county funds to pay for the associated contractual collection and disposal charges. CS96 also provided technical services to two other counties which were self-funded and state funded, respectively, and collected 47,000 pounds from 74 participants. The counties held collections on different days and were able to share contracted hazardous waste disposal services. While local project approach varied between project groups, the end product that served the farmers was the same. Attention to safety, liability control, and regulatory constraints were priorities guiding all the tasks performed by Erie County's Environmental and Planning Staff and project manager. Erie County tried to simplify implementation by providing boiler-plate documents and walking the project leaders through important processes. Erie County also obtained a waiver from the usual transportation requirements from the New York State Department of Transportation. Participants had to attend an information/registration session and pick up packing materials if needed. Drop-off times were assigned to avoid participants having to wait in long lines. Products which are no longer registered made up more than half of those turned in. Dinoseb, a banned dioxin precursor, was turned in at 1.5 to 2.5 percent of the collection weights despite repeated recalls as late as 1992. Most products were in fair to good condition, indicating that they were responsibly managed.

To protect the privacy of preregistered participants, applications were given to the Farm Bureau, a private organization which codified their identities. A pre-existing situation involving allegedly pesticide-contaminated property caused interest in any information that could be obtained through the Clean Sweep process. The plaintiff's motion to request the discovery documents they sought were denied in a local New York State Supreme Court, based upon the opinion that in the interest of public benefit and preserving the environment, farmers should be encouraged to participate and come forward with unwanted chemicals without fear of reprisals.

CS96 made several recommendations. First, they stressed the importance of the preregistration or survey form, which vary significantly in format. It is important to remember that the survey form conveys potential information only, and that the project leaders have the responsibility to translate, confirm, convert and summarize the information. This is very important because the project budget controls participation.

Each additional pound represents $1.50 to $14 in disposal costs; each laboratory sample may cost $250 to $1,500. They recommend:
- the survey and registration forms be multi-purpose
- the forms represent exactly the information needed by project planners and contractors
- the forms are easily understood with examples provided
- the forms easily translate into a database
- products in large or special containers be more easily identified.

Second, CS96 provided a hazardous waste provider checklist designed for temporary collection sites which could be modified for permanent sites.

GLOW Counties

In 1995, the GLOW counties were awarded funding to conduct a Farm Pesticide Amnesty Collection. In 1997, believing a second farm pesticide collection was warranted, they sought funding from N.Y. State, which was denied, but then applied in 1998 to EPA and received $70,000. Representatives from agencies within the four counties formed a Coordinating Committee. Four thousand color posters were distributed and newsletters and direct mailings publicized the collections. Since preregistrations were lower than expected and below what was fundable, GLOW asked for and got permission to allow farmers from seven adjacent counties to participate on "as approved" basis. All participants were required to attend a 3-hour training course on such topics as handling spills and packaging materials for transport. Participants were issued a travel waiver from the N.Y. State Department of Transportation which allowed them to transport their materials to the site. Farmer attendees also received applicator credits toward their state licenses. During the spring of 1999, 24,610 pounds of pesticides were collected from 43 farmers, of which 2,013 are classified as persistent, bioaccumulative and toxic (PBT) pesticides. Training and disposal costs totaled $39,990, and additional costs for publicity and personnel totaled $10,718, for a total of $50,708, or an average of $1,179 per participant.

Schuyler County

In May 2000, the Recycling and Solid Waste Program of Cornell Cooperative Extension of Schuyler County held a one-day combined farm pesticide/household hazardous waste/used tire collection program. This was the county's first collection since 1997, and was funded mainly by the county, with supplemental funding from the U.S. EPA. The waste hauler's manifest, which includes the overpack drums, listed 960 pounds (9 drums) of farm pesticide waste that were collected from 14 agricultural participants (farmers and agribusinesses). An additional 1.5 tons of household hazardous waste collected from 120 residents included at least 168 pounds of pesticides. Including the residents who brought tires, more than 300 people participated in the program. The relatively poor farmer participation was attributed to farmer's preference to keep pesticides until after harvest and hesitancy to preregister. A total of 451 pounds of agrichemicals (an underestimate of the actual amount collected) were identified on the registration forms submitted by the agricultural participants. These agrichemicals included approximately 24 pounds of PBT pesticides, including 15 pounds of DDT.

Six months prior to the collection day, the county began sending out a series of press releases describing the event and publishing articles in the Cooperative Extension and Chamber of Commerce publications. Mailings were done to over 300 farmers and fliers were posted around the county in

churches, schools and businesses. Participants indicated that the newspaper announcements were the most effective medium. Participants were required to pre-register several weeks before the collection day, and farmers were assigned a registration number to protect anonymity. Those who registered were assigned a time slot to bring their wastes to the collection point so as to avoid congestion. Farmers and agribusinesses were encouraged to attend a training session covering handling and transport of wastes. Although attendance was low, the session was well-received, and those who did not attend received a fact sheet. Documentation for farmers and agribusinesses was kept separately from that of other wastes.

New York Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1993	13,860	54	257	$31,800 disp $71,800 all	$2.29 (disp)
1995	59,300	203	292	no data	NA
1996	120,724	247	489	$213,804	$1.77
1999	24,610	43	572	$39,990 disp $50,708 all	$1.62 (disp)
2000	960	14	69	no data	NA
TOTAL	219,454	561	391	more than $336,312	NA

disp = disposal costs; all = all costs; NA = not applicable

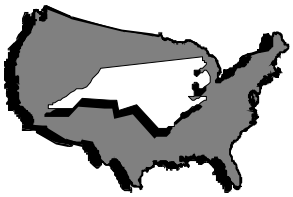
New York Table 2 - Quantity of Pesticides Collected: Per Program

Year	Name/Location of Collection	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1993	Erie County	13,860	54	257	$31,800 disp $71,800 all	$2.29 (disp)
1993	***Subtotal***	***13,860***	***54***	***257***	***$31,800 disp***	***$2.29***
1995	Western NY Regional [1]	32,300	203 (include GLOW)	NA	no data	NA
1995	GLOW Counties [2]	27,000	see above	NA	no data	NA
1995	***Subtotal***	***59,300***	***203***	***292***	***NA***	***NA***
1996	CESQG in Erie & Niagara [3]	11,043	19	581	$28,810 disp	$2.61
1996	CS96 Event 1 - Ontario & Seneca Cty	25,000	80	313	$38,304 disp	$1.53
1996	CS96 Event 2: Cayuga Cty	12,400	36	344	$24,831 disp	$2.00
1996	CS96 Event 3: Wayne, Schuyler, Yates Cty	28,427	52	547	$35,612 disp	$1.25
1996	Columbia Cty	27,254	24	1,136	$44,603 disp	$1.64
1996	Monroe Cty	16,600	36	461	$41,644 disp	$2.51
1996	***Subtotal***	***120,724***	***247***	***489***	***$213,804***	***$1.77***
1999	GLOW (& other) Cty [4]	24,610	43	572	$39,990 disp $50,708 all	$1.62 (disp)
1999	***Subtotal***	***24,610***	***43***	***572***	***$39,990 disp***	***$1.62***
2000	Schuyler Cty	960	14	69	no data	NA
2000	***Subtotal***	***960***	***14***	***69***	***NA***	***NA***
Total	-----	219,454	561	391	NA	NA

disp = disposal costs; all = all costs; NA = not applicable

1. The Western New York Regional collection included Erie, Niagra, Chautauqua and Cattarougus Counties.
2. This collection included Genesee, Livingston, Wyoming and Orleans Counties.
3. This collection included Conditional Exempt Small Quantity Generators (schools, parks, retailer, and agribusinesses) in Erie and Niagra Counties.
4. This collection included Genesee, Livingston, Wyoming, Orleans, Niagara, Monroe, Wayne and Erie Counties.

NORTH CAROLINA AT A GLANCE

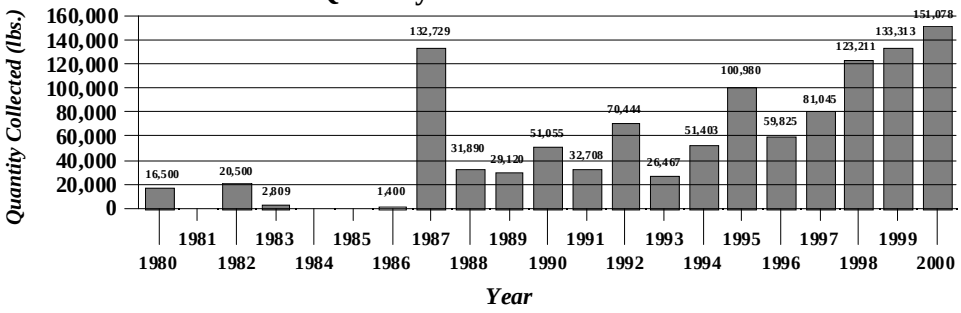


North Carolina adopted regulations governing the disposal of pesticides in 1976, and the state began collecting them in 1980. This state-funded effort has collected over 1.1 million pounds of pesticides since its inception. The North Carolina Department of Agriculture and Consumer Services is the lead agency.

Collection History

Products collected: Pesticides and household pesticide waste
Year of first collection: 1980
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,116,477 lbs.

Program Funding

Source: State funds
Participant fee collected: No
Cost information: Less than $1.00 per pound

Collection Logistics

Method of collection: Single day events, permanent sites, and on-site pick up, which is limited to special circumstances
Disposal method: Incineration and landfill (minor amount)
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1998
Pre-registration: Not required for less than 5 gallons bulk liquid or less than 2,000 total pounds solids
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf courses, and the public

Container Collection

Existing program: Yes

Contact Information

Royce Batts or Derrick Bell
Department of Agriculture and Consumer Services
Food and Drug Protection Division
Pesticide Disposal Assistance Program
4110 Reedy Creek Road
Raleigh, NC 27607
Website: http://www.agr.state.nc.us/fooddrug/pesticid/pestdisp.htm
(Clean Sweep specific)

Tel: (919) 715-9023
Fax: (919) 733-6801
royce.batts@ncmail.net
derrick.bell@ncmail.net

Summary of North Carolina Waste Pesticide Disposal Program

In 1976, the North Carolina Pesticide Board adopted regulations governing the disposal of pesticides. These regulations make it illegal in North Carolina to dispose of hazardous waste (which includes pesticides) in sanitary landfills. As a result of this dilemma, the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) created the Pesticide Disposal Assistance Program in 1980 through appropriations from the North Carolina General Assembly.

With these appropriations, the Pesticide Disposal Assistance Program was able to provide an available, free-of-charge, and environmentally acceptable mechanism in which any homeowner, farmer, or institution could properly dispose of unwanted or unusable pesticides. This program was the first of its kind in the entire United States.

From 1980 through 1996, state inspectors collected pesticides and transported the material to storage facilities located throughout the state. The material staged in the storage facilities was then transported and consolidated at a central location in Raleigh, where it was collected by a contractor. In January 1997, the program changed from collecting pesticides at farm and home sites to collecting pesticides at both designated single day pesticide disposal collection sites and at permanent household hazardous waste collection sites. For the single day type of collections, the contractor is on-site for the events to collect, package, and prepare the waste for manifesting and shipment each day. For shipment, the NCDA&CS signs the manifest as the generator. Contractor participation at the permanent HHW sites depends largely upon the anticipated volume of collection and scheduling.

In 1999, the NCDA&CS sponsored 35 Collection Day events. With the assistance of the North Carolina Cooperative Extension Service, the Pesticide Disposal Assistance Program supervised the collection and disposal of 133,313 pounds of pesticide waste. Of this total, 20,484 pounds of pesticides damaged by Hurricane Floyd flooding were collected from 10 counties in eastern North Carolina. While the immediate Hurricane response efforts are over, NCDA&CS continues to see flood-damaged pesticides brought to the regularly scheduled collection days.

As of March 31, 2000, the Pesticide Disposal Assistance Program of the NCDA&CS had disposed of over 1 million pounds of unwanted pesticides since the program's inception. The program is paid for with state funds, with a budget of about $325,000 per year.

The program's goal for the future is to conduct approximately 40 collection day events per year throughout the state in an attempt to have a pesticide collection day in each of the 100 counties in the state at least once every other year. The program also intends to continue collections at the permanent HHW sites. The program will also continue to assist and promote the establishment of permanent household hazardous waste collection sites in those counties without permanent facilities.

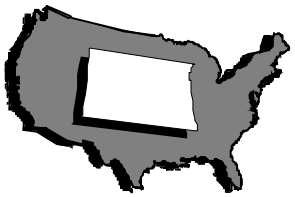
The Pesticide Disposal Assistance Program of the North Carolina Department of Agriculture and Consumer Services, with the support granted by the North Carolina General Assembly, can continue to protect human health and the environment so that North Carolina will be a safer place to live.

North Carolina Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)
1980	16,500
1981	0
1982	20,500
1983	2,809
1984	0
1985	0
1986	1,400
1987	132,729
1988	31,890
1989	29,120
1990	51,055
1991	32,708
1992	70,444
1993	26,467
1994	51,403
1995	100,980
1996	59,825
1997	81,045
1998	123,211
1999	133,313
2000	151,078
TOTAL	1,116,477

Information on the number of participants is not tracked. Information on program cost is not available.

NORTH DAKOTA AT A GLANCE

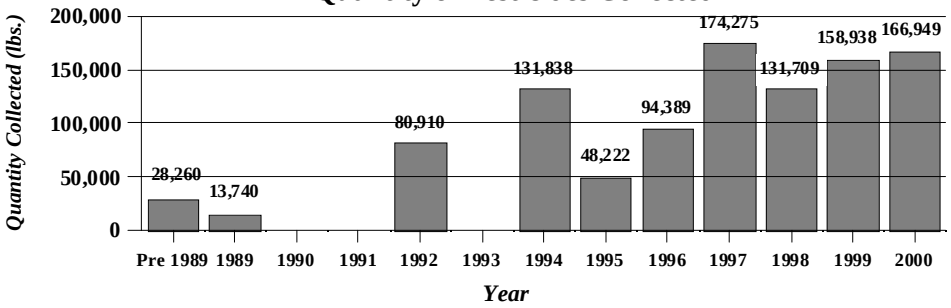


North Dakota collected some pesticides in the 1980's before it began its permanently funded program in 1992. The state's program, called "Safe Send," is administered through the Department of Agriculture with an advisory board of interested groups and agencies. The program, funded through pesticide registration fees, has collected over 1.0 million pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1980
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,029,230 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required until 1997, currently not required
Specific pesticides reported: Yes
Eligible participants: Program targets farmers, ranchers, commercial applicators, and retailers but is open to all North Dakota residents, including golf course managers and the public

Container Collection

Existing program: Yes

Contact Information

Judy Carlson
Department of Agriculture
600 East Boulevard, Dept. 602
Bismarck, ND 58505-0020
Website: http://www.agdepartment.com
(Department of Agriculture, not specific to Clean Sweeps)

Tel: (701) 328-4997
Fax: (701) 328-4567
jcarlson@state.nd.us

Summary of North Dakota Waste Pesticide Disposal Program

Prior to 1992, the North Dakota Department of Health collected 42,000 pounds of pesticides. In 1992, the Department of Agriculture was authorized to establish a pesticide disposal and empty container recycling program. The waste disposal program evolved into the current and continuous North Dakota Project Safe Send collection and disposal program. Through the middle of 2000, more than one million pounds of unwanted pesticides have been collected and disposed. Project Safe Send is administered through the North Dakota Department of Agriculture with an advisory board that includes the Farm Bureau, Farmers Union, State University Extension Service, State Department of Health and others.

Project Safe Send is open to all North Dakota residents, however it is targeted to farmers, ranchers, pesticide dealers and applicators. The program is free to participants, and is funded by the state with product registration fees paid by pesticide manufacturers. Initially, pre-registration was a requirement of Safe Send, but in 1997 the Department of Agriculture made it optional and at the same time increased the number of waste collection sites. Project Safe Send participation increased after these changes were implemented.

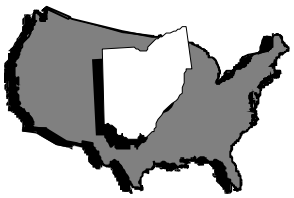
Project Safe Send requires participants to bring unwanted pesticides to a local collection site during the hours of operation. The program is supported by contractors who are selected through a competitive process. Contractors unload wastes, collect paperwork, pack and label the waste, and transport it to incinerators outside the state of North Dakota. Also, the contractor prepares the shipping manifests and bills of lading which essentially transfers liability when the contractor accepts the waste and signs the manifest as the generator.

North Dakota Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1980	6,300	no data	NA
1984	11,500	no data	NA
1988	10,460	no data	NA
1989	13,740	no data	NA
1992	80,910	396	204
1993	0	0	NA
1994	131,838	608	217
1995	48,222	145	333
1996	94,389	341	277
1997	174,275	484	360
1998	131,709	367	359
1999	158,938	321	495
2000	166,949	332	503
TOTAL	1,029,230	More than 2,994	330 (since 1992)

Information on program cost is not available.
NA = not applicable

OHIO AT A GLANCE

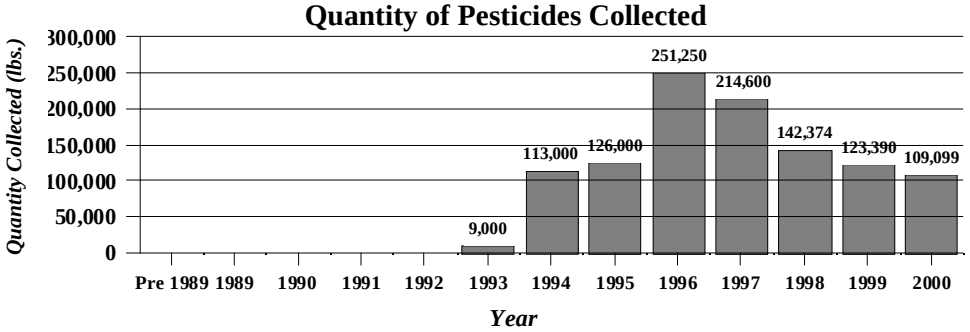


Since 1993 Ohio has conducted annual clean sweep collections. The Department of Agriculture is the lead agency, but other state agencies and local groups collaborate closely. Pesticide registration fees primarily fund the collections. Nearly 1.1 million pounds of pesticides have been collected.

Collection History

Products collected: Pesticides
Year of first collection: 1993
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,088,713 lbs.

Program Funding

Source: Pesticide registration fees and EPA grants (less than 6%)
Participant fee collected: No
Cost information: Costs to date exceed $1.5 million

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration (whenever possible) and landfill
Exchange program: No but usable products are donated
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, golf course managers, state and local agencies, nurseries, garden centers, landscapers, and structural pest control operators

Container Collection

Existing program: Yes

Contact Information

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(Department of Agriculture, not specific to Clean sweeps)

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berger@odant.agri.state.oh.us

Summary of Ohio Waste Pesticide Disposal Program

The Ohio Department of Agriculture (ODA) has the lead for the Clean Sweep projects, although support and collaboration is provided by the county Extension Services, Farm Service Agencies, Soil & Water Conservation Districts, Health Departments, and Solid Waste Management Districts. Farm support organizations like the Farm Bureau and commodity associations help to publicize the program. The Department of Agriculture also works closely with the Ohio Environmental Protection Agency.

Ohio's Clean Sweep program has cost over $1.5 million so far. With the exception of $80,000 received from EPA for Lake Erie counties under the Coastal Environmental Management Program, the state budget has paid all program costs, largely from state pesticide registration fees.

Ohio required preregistration at the beginning of the program to be sure of keeping within their limited budget. There was concern that some people would not participate due to fear of punitive action, but as the program grew and word traveled that those with unwanted stocks were neither identified nor penalized, no one was hesitant to preregister. The preregistration also allowed Ohio to accurately identify the name and weights of the products expected. Participants were notified by mail of a date and time slot for turning in their pesticides, which alleviated traffic congestion and long lines and was very popular with participants. When the program began in 1993, the disposal cost was $6 per pound, but as the project progressed, the price dropped to $1.25 per pound. The price drop was attributed in part to the fact that the contractor was able to offer a lower price due to the accuracy of the estimate and its impact on the amount of packing materials, crew size and number of trucks needed. The preregistration required more work prior to the collection event, adding an additional $.15 to $.20 per pound, but it resulted in overall savings.

In terms of safety, participants are assigned time slots to control traffic flow and are given instructions for safe transportation and what to do if there is an accident. Ohio has had excellent safety results. In over 20 projects with more than 2,865 participants, there have been no accidents. Just in case, the ODA notifies local emergency responders when a collection will take place in their area.

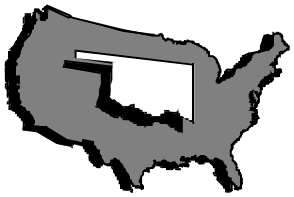
Many of the collected pesticides are old; some have been more than 50 years old. ODA believes "a large percentage of very old pesticides" have been collected, but still believes there is a need for collections. They will start to target businesses and household users.

Ohio Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1993	9,000	60	150
1994	113,000	318	355
1995	126,000	240 (for an 84,000 lb event)	350 (for the one event)
1996	251,250	618 (3 events, 211,000 lb)	341 (for the three events)
1997	214,600	671 (3 events, 204,000 lb)	304 (for the three events)
1998	142,374	169 (for a 50,000 lb event)	296 (for the one event)
1999	123,390	373	331
2000	109,099	416	262
TOTAL	1,088,713	more than 2,865	315 *

* This is based on the full programs in 1993, 1994, 1999 and 2000 and the specifically mentioned events for 1995 through 1998.
Information on program cost is not available.

OKLAHOMA AT A GLANCE

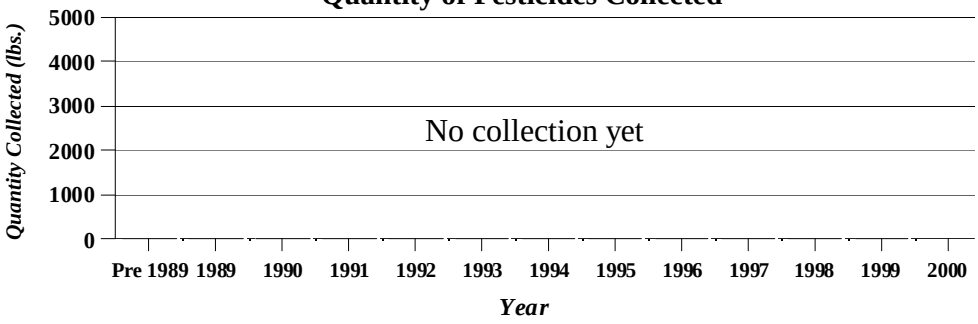


Oklahoma does not currently have a clean sweep program. Agricultural pesticides are allowed at HHW collections which are held twice a year in the large cities.

Collection History

Products collected: Not applicable
Year of first collection: Not applicable
Program Status: None

Quantity of Pesticides Collected



Amount collected to date: 0 lbs.

Program Funding

Source: Not applicable
Participant fee collected: Not applicable
Cost information: Not applicable

Collection Logistics

Method of collection: Not applicable
Disposal method: Not applicable
Exchange program: Not applicable
1995 Universal Waste rule: Adopted, authorized 1998
Pre-registration: Not applicable
Specific pesticides reported: Not applicable
Eligible participants: Not applicable

Container Collection

Existing program: Yes

Contact Information

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(Department of Agriculture, not specific to Clean Sweeps)

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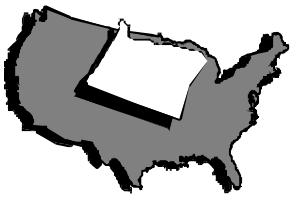
Summary of Oklahoma Waste Pesticide Disposal Program

Oklahoma does not have a program to collect and dispose of unwanted agricultural pesticides. To date, funds are not available to support a collection effort. Household hazardous waste collection programs exist in Tulsa and Oklahoma City. These collections are conducted on a regular basis, twice a year, and allow for the collection of agricultural pesticides.

In 1998, a survey was conducted by Oklahoma State University to determine the quantities of unwanted pesticides that certified pesticide applicators had on hand. Approximately 12,000 survey forms were mailed with a follow-up of reminder cards. A total of 1,775 surveys were returned, of which about 87% (1,545) reported having no unwanted pesticides. The other 230 responses reported about 9,900 pounds of unwanted pesticides that were identified by name.

OREGON AT A GLANCE

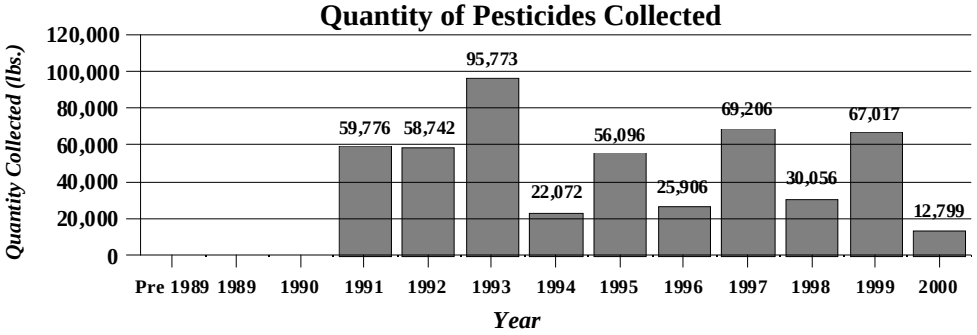


Since 1991 Oregon has conducted clean sweep collections with the Department of Environmental Quality as the lead agency. Participant fees are the main source of funding for the collection of agricultural pesticides. More than 497,000 pounds of pesticides have been collected from agricultural participants, conditionally exempt small quantity generators (CESQGs), and households.

Collection History

Products collected: Pesticides and household and CESQG waste
Year of first collection: 1991
Program Status: Continuous, active

Quantity of Pesticides Collected



Amount collected to date: 497,443 lbs.

Program Funding

Source: Participant fees and EPA grants
Participant fee collected: No for household participants. For others, the fee was $2.40 per pound of pesticide in 2000.
Cost information: The cost to dispose of most pesticides is $2.40 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration whenever possible and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, the public, and CESQGs

Container Collection

Existing program: Yes, conducted by Oregon Agricultural Chemical and Fertilizers Association

Contact Information

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(Department of Environmental Quality, not specific to Clean Sweeps)

Summary of Oregon Waste Pesticide Disposal Program

In 1991, the Oregon Department of Environmental Quality conducted its first waste agricultural pesticide pilot collection event for approximately 40 farmers. A total of 20,000 pounds of waste was collected. In 1993, the Department conducted a second pilot collection for 318 farmers at two separate events. A total of 88,374 pounds of pesticides was collected, with an average of 278 pounds per farmer, at a cost of $500,000.

Beginning in 1997, the Department began collecting waste pesticides as universal waste in conjunction with its household hazardous waste (HHW) and conditionally exempt small quantity hazardous waste (CESQG) collection events. This allowed the same contractor to collect the different waste streams at one location, reducing collection costs. Collected agricultural pesticide wastes are not commingled with the CESQG and HHW waste.

Primary funding for the Oregon Agricultural Pesticide Collection Program comes from the waste disposal fee. Agricultural participants and CESQGs are charged $2.40 per pound. Household participants are not charged a fee for disposing of their wastes.

Participation in the pesticide collection program requires a submission of a registration form to the Department's waste contractor. The form requires information on types and estimated weights of the pesticides. The approved registration form serves as a bill of lading for transportation of the waste to the collection site, where it is compared with the registration information before collection. When possible, waste pesticides are disposed of by incineration.

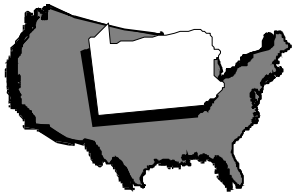
In 1999, the Oregon Department of Agriculture received a $60,000 "Clean Sweep" grant from the EPA, which enabled participants to dispose of their waste pesticides for $1.00 per pound for most pesticides.

Oregon Table 1 - Quantity of Pesticides Collected

Year	Total Quantity of Pesticides (pounds)	Quantity of Pesticides Collected in Agricultural Events (pounds)	Quantity of Pesticides Collected in Conditionally Exempt Generator Events (pounds)	Quantity of Pesticides Collected as Household Hazardous Waste (pounds)
1991	59,776	20,000	176	39,600
1992	58,742	0	7,690	51,052
1993	95,773	88,374	1,755	5,644
1994	22,072	0	7,447	14,625
1995	56,096	36,056	3,617	16,423
1996	25,906	0	220	25,686
1997	69,206	15,850	2,634	50,722
1998	30,056	3,003	5,980	21,073
1999	67,017	15,084	443	51,490
2000	more than 12,799	12,799	no data	no data
TOTAL	more than 497,443	191,166	more than 29,962	more than 276,315

Information on the number of participants and program cost is not available

PENNSYLVANIA AT A GLANCE

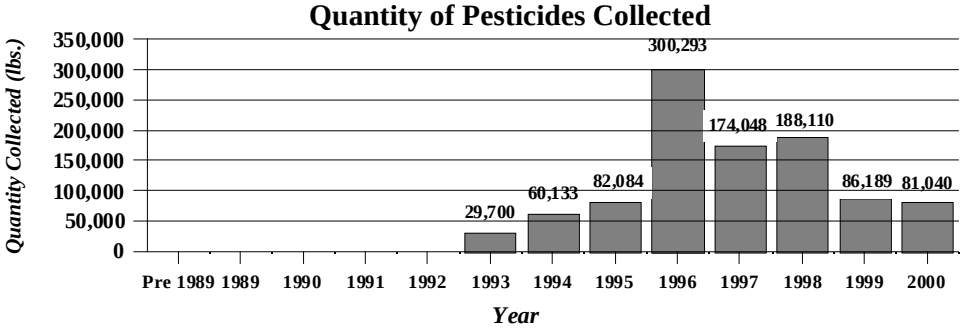


In 1993 Pennsylvania started "Chemsweep," its pesticide disposal program, with the Department of Agriculture as the lead agency. The program, currently funded through pesticide registration fees, has collected over 1.0 million pounds of pesticides, mostly by picking up the pesticides from the participants' sites.

Collection History

Products collected: Pesticides
Year of first collection: 1993
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,001,597 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No, but commercial participants may be assessed a fee for a portion of large quantities
Cost information: Information not available

Collection Logistics

Method of collection: Single day events and on-site pick up
Disposal method: Incineration (95%) and landfill (5%)
Exchange program: Yes
1995 Universal Waste rule: Adopted, authorized in 2000
Pre-registration: Required for on-site pick up; not required for single day events in 2000
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes

Contact Information

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Fax: (717) 783-3275
Phil Pitzer Tel: (717) 772-5206
Environmental Safety Specialist ppitzer@state.pa.us
Website:
http://www.state.pa.us/PA_Exec/Agriculture/bureaus/plant_industry/index.html
(Clean Sweep specific)

Summary of Pennsylvania Waste Pesticide Disposal Program

The Pennsylvania Department of Agriculture started Chemsweep as an on-going pesticide disposal program in 1993. This program provided farmers a means to dispose of unwanted pesticides in six counties. A total of 29,700 pounds of pesticides was collected and disposed of by incineration.

Chemsweep is operated by a contractor who is selected by competitive bid. To participate in Chemsweep, every participant must complete an inventory form and submit it to the Department of Agriculture within a specified time frame. The collection process operates with the participant delivering the unwanted pesticides to the site or the contractor making farm pick-ups. This latter method is used extensively in Pennsylvania. Before the collection of the pesticides, inspectors from the Department of Agriculture visit each site to "confirm inventory, evaluate whether a 'clean-up' is required, and sample unknown materials". Some of the most commonly collected pesticides include zineb, copper sulfate, DDT, 2,4-D, chlordane, atrazine, dinoseb and parathion. During the period 1993-1997, approximately 89,722 pounds of these pesticides were collected. Trends show that 95% of collected pesticides are disposed of by incineration and those remaining are placed in hazardous waste landfills permitted by EPA.

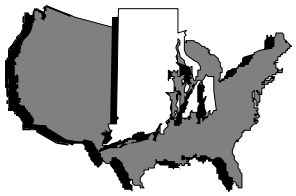
Chemsweep had a goal to provide every county in Pennsylvania with an opportunity to participate in the free disposal program by 1998. This goal was met, with participation from all 67 counties in the state. Chemsweep now has a goal to cover the state for a second time. Chemsweep has been successful, with a total collection and disposal of more than one million pounds of pesticides for the period 1993 through 2000.

Pennsylvania Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1993	29,700	179	166
1994	60,133	380	158
1995	82,084	345	238
1996	300,293	980	306
1997	174,048	421	413
1998	188,110	657	286
1999	86,189	157	549
2000	81,040	no data	NA
TOTAL	1,001,597	More than 3,119	295 (through 1999)

Information on program cost is not available.
NA = not applicable

RHODE ISLAND AT A GLANCE

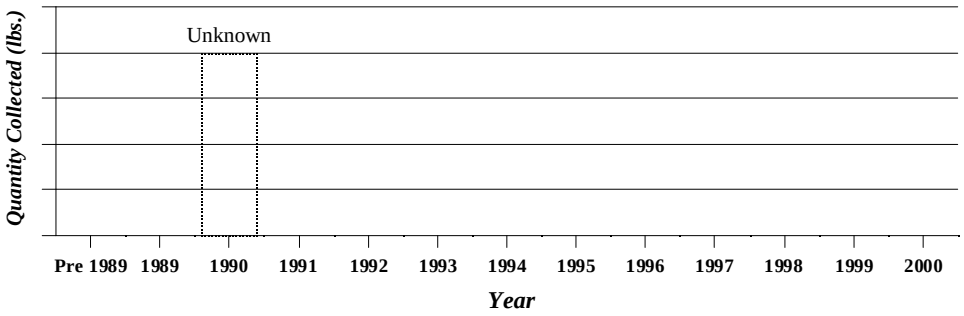


Rhode Island collected an undetermined quantity of agricultural pesticides in 1990. Farmers are not allowed to participate in the state's HHW program. A survey is planned to determine the need for a clean sweep.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Once

Quantity of Pesticides Collected



Amount collected to date: unknown

Program Funding

Source: Information not available
Participant fee collected: No
Cost information: 1990 collection cost was $45,000

Collection Logistics

Method of collection: On-site pick up
Disposal method: Landfill
Exchange program: No
1995 Universal Waste rule: Not adopted
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers and commercial applicators

Container Collection

Existing program: Yes

Contact Information

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Website: http://www.state.ri.us/dem/programs/bnatres/agricult/index.htm
(Department of Environmental Management, Pesticide Unit, not specific to Clean Sweeps)

Summary of Rhode Island Waste Pesticide Disposal Program

Rhode Island does not have a program to collect and dispose of unwanted agricultural pesticides. There is an on-going household hazardous waste collection program. However, farmers and other businesses are prohibited from participating in the HHW program by state regulations.

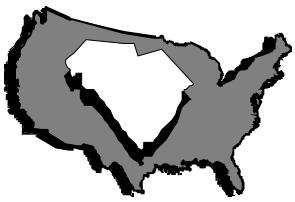
Rhode Island has plans for 1999/2000 to develop and distribute a survey to growers to determine the amount of unwanted agricultural pesticides that require disposal. Additionally, the Division of Agriculture is seeking the funds necessary to conduct a pesticide collection and disposal program.

Rhode Island Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	no data	6 farms/ companies	NA
TOTAL	no data	6 farms/ companies	NA

Information on program cost is not available.
NA = not applicable

SOUTH CAROLINA AT A GLANCE

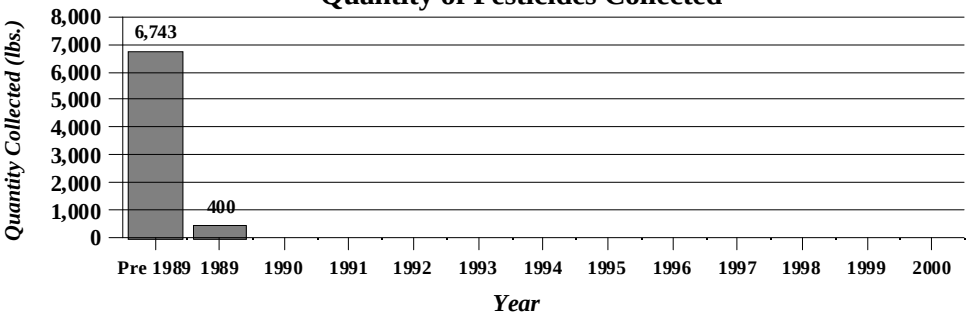


South Carolina collected an estimated 7,100 pounds of pesticides in 1988 and 1990. Recent state efforts to establish a Clean Sweep program have been inhibited by liability questions and budget shortfalls.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1988
Program Status: Intermittent, inactive

Quantity of Pesticides Collected



Amount collected to date: 7,143 lbs.

Program Funding

Source: In kind services for 1988 collection
Participant fee collected: No
Cost information: Value of 1988 services estimated at approximately $38,500

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration (primarily), landfill, and fuel for cement plant
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Not required
Specific pesticides reported: Yes
Eligible participants: Farmers and the public

Container Collection

Existing program: Yes

Contact Information

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Regulatory and Public Service Programs
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nogg@clemson.edu

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Dept. of Health & Environmental Control
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Columbia, SC 29201
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Fax: (803) 896-4110
kinneyrw@columb34.dhec.state.sc.us

Website: http://cufp.clemson.edu/dpr/index_flash.html
(Department of Pesticide Regulation at Clemson, not specific to Clean Sweep)

Summary of South Carolina Waste Pesticide Disposal Program

In 1988, the Orangeburg County Extension conducted a Clean Sweep program to educate residents and farmers about the dangers of hazardous chemicals and wastes and to collect and dispose of the hazardous chemicals. The program was coordinated with Clemson University and the South Carolina Department of Health and Environmental Control (DHEC). This was the first Clean Sweep conducted in South Carolina. GSX Chemical Services provided the manpower, expertise, hauling, and disposal at no cost. The value of services was $38,500 for an estimated 6,743 pounds of waste from 17 households and 29 farmers.

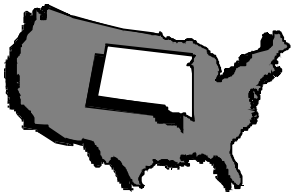
In the past few years South Carolina has worked to establish a Clean Sweep program for agricultural pesticides. However, the development of a program ran into a few obstacles due to the unique structure of South Carolina's pesticide regulatory agency. In South Carolina, the Department of Pesticide Regulation (DPR) is part of Clemson University rather than the Department of Agriculture. Clean Sweep programs are often set up so the pesticide agency becomes the official generator of the waste for the purposes of the hazardous waste regulations. This created a problem, though, because the Clemson University Board of Directors was concerned about the potential liability to the school from incurring the generator role and handling the pesticides. The Department of Pesticide Regulation pursued legislation that would resolve this dilemma by allowing the university to have an active role in Clean Sweep programs, but to limit its liability. However, recent budget shortfalls have precluded efforts by the DPR to operate a waste pesticide program. To the extent that South Carolina holds waste pesticide programs in the near future, the programs will reside with the DHEC. The DPR handles the pesticide container recycling program.

South Carolina Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)*	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1988	6,743	46**	147
1990	400	14-16***	25 to 29
TOTAL	7,143	60 to 62	115 to 119

* Quantities are estimated.
** Total includes 29 farmers and 17 households.
*** Total is farmers only.
Information on program cost is not available.

SOUTH DAKOTA AT A GLANCE

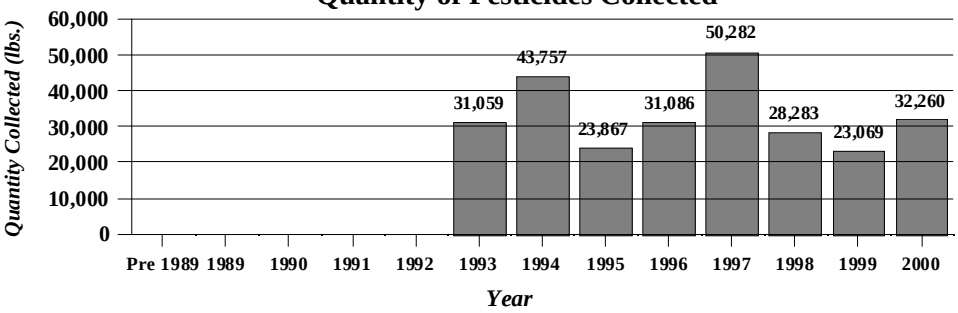


Since 1993 South Dakota has conducted annual clean sweep collections with the Department of Agriculture as the lead agency. The program, funded through pesticide registration fees, has collected over 263,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1993
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 263,663 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: 1999 program cost $38,525, an average of $1.67 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 2000 but not for pesticides
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes

Contact Information

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Summary of South Dakota Waste Pesticide Disposal Program

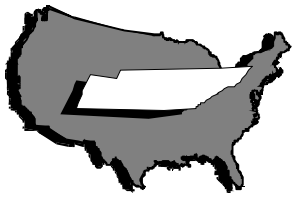
In 1992, the South Dakota legislature adopted legislation that allowed the Department of Agriculture to collect pesticide registration fee surcharges. Since 1993, pesticide disposal programs have been performed using these funds. Participants transport waste pesticides to a central collection site and the Department of Agriculture personnel screen the waste pesticides. The Department takes generator status of the waste. In 1999, statewide collections netted 23,069 pounds of pesticides (50 percent were banned or unregistered) from 66 participants at a cost of $38,525.

South Dakota Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1993	31,059	no data	NA	no data	NA
1994	43,757	no data	NA	no data	NA
1995	23,867	no data	NA	no data	NA
1996	31,086	no data	NA	no data	NA
1997	50,282	no data	NA	no data	NA
1998	28,283	114	248	no data	NA
1999	23,069	66	350	$38,525	$1.67
2000	32,260	no data	NA	$42,062	$1.30
TOTAL	263,663	NA	285 for two years with data	NA	NA

NA = not applicable

TENNESSEE AT A GLANCE

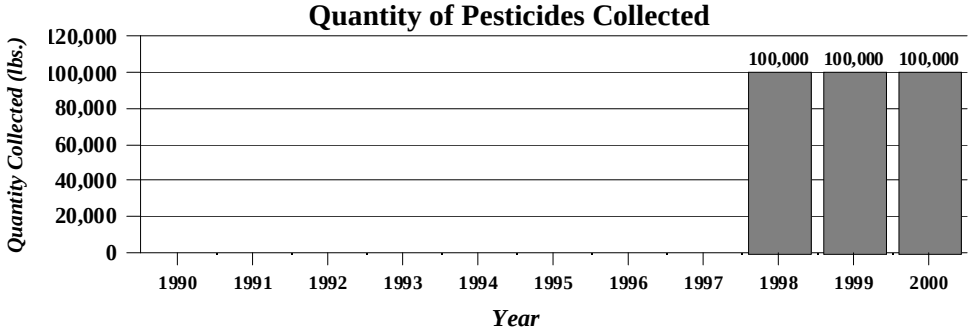


The Tennessee Department of Agriculture began a pesticide collection program in 1998. The program, scheduled for seven years, is funded by the state, EPA grants, and pesticide registration fees. It has collected an estimated 300,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1998
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 300,000 lbs.

Program Funding

Source: Pesticide registration fees, state funds, and EPA grants

Participant fee collected: No fee for farmers up to 1,000 pounds, but commercial and industrial firms pay a fee

Cost information: Costs are $1.36 per pound plus a set-up cost of $3,000

Collection Logistics

Method of collection: Single day events and on-site pick up
Disposal method: Incineration (97%), landfill (3%), recycling (less than 1%)
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Not required
Specific pesticides reported: No
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public including commercial and industrial firms

Container Collection

Existing program: Yes, occasionally

Contact Information

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Website: http://www.state.tn.us/agriculture/regulate/wastes.html
(Clean Sweep specific)

Summary of Tennessee Waste Pesticide Disposal Program

The Tennessee Department of Agriculture, in cooperation with the Tennessee Valley Authority (TVA), EPA, University of Tennessee Agricultural Extension Service, and others, initiated the Tennessee Agricultural Pesticide Waste Collection Program as part of Tennessee's State Management Plan for Protection of Groundwater from pesticides.

The Tennessee waste collection program, planned to run for seven years, began in the spring of 1998. For the initial events, counties were selected on the basis of high volume sales and usage rates. In the first year, 100,000 pounds of pesticide wastes were collected. The waste collection program is projected to give every farmer in the state an opportunity to participate. Every collection event will be accompanied by a fully trained Department of Agriculture representative and a commercial, licensed pesticide disposal company to receive chemical wastes safely.

Farmers are eligible to participate at no cost for up to 1,000 pounds per farmer/vehicle. Greater amounts will be accepted if prior notice is given to and approved by the Tennessee Department of Agriculture collection site manager or the county extension agent. Commercial and industrial entities are allowed to participate if arrangements are made with the disposal company in advance of the collection event, but a fee is charged for the disposal services.

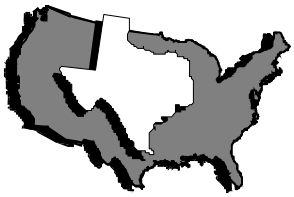
Participants transport pesticide wastes to the collection sites and are responsible for spillage, damage, cleanup and restoration resulting from transportation of pesticide wastes to the site. Upon entering the collection site, participants are first interviewed by a department representative to gather general information that will be used to help improve future collections. Personnel trained in handling hazardous materials inspect vehicles for leaking containers. Participants are instructed to remain in vehicles and are not allowed to exchange materials between vehicles. Authorized personnel carefully remove, identify and sort pesticide waste.

Tennessee Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1998	100,000	359	279
1999	100,000	290	345
2000	100,000	285	351
TOTAL	300,000	934	321

Information on program cost is not available.

TEXAS AT A GLANCE

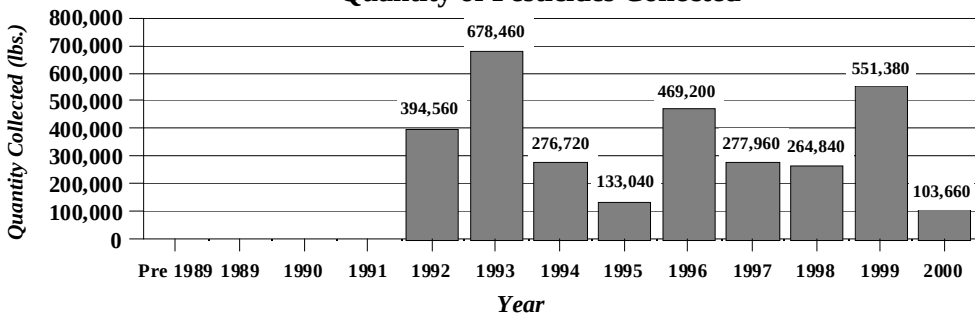


Since 1992 Texas has conducted clean sweep collections with the Texas Natural Resource Conservation Commission as the lead agency. The program, currently funded from a variety of sources, has collected over 3.1 million pounds of pesticides. Clean sweeps are often combined with HHW and country clean-up events.

Collection History

Products collected: Pesticides, household waste, and other materials
Year of first collection: 1992
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 3,149,820 lbs.

Program Funding

Source: Hazardous waste generation fees, in-kind contributions from recyclers, and in-kind and mobilization contributions from river authorities
Participant fee collected: No
Cost information: 2000 cost was $1.21 per pound including the mobilization cost

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration (90%) and landfill (10%)
Exchange program: Yes for HHW collections
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Not required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public but no manufacturers

Container Collection

Existing program: Yes

Contact Information

Ronnie May
Natural Resource Conservation Commission
P.O. Box 13087
Austin, TX 78711-3087
Tel: (512) 239-4749
Fax: (512) 239-3175
cleantx@tnrcc.state.tx.us
Website: http://www.tnrcc.state.tx.us/exec/oppr/agwaste/agwaste.html
(Clean Sweep specific)

Summary of Texas Country Cleanup and Agricultural Waste Pesticide Collection Programs

Texas has a comprehensive recycling program and a pesticide disposal program, the Texas Country Cleanup and the Agricultural Waste Pesticide Collection Program. The state began recycling containers in 1991 in partnership with the South Texas Agricultural Chemical Association. In 1992, a separate waste pesticide collection program was started. In 1994, the Empty Pesticide Container Program added battery, tire, oil and oil filter collection and the name was changed to the Texas Country Cleanup Program. TNRCC conducts 35-45 Texas Country Cleanups and 10-15 Agricultural Waste Pesticide Collections annually. The Texas Country Cleanup and the Agricultural Waste Pesticide Collection events often combine together and sometimes include household hazardous waste collection to form a comprehensive waste management option for rural Texans. Tire collection has been limited since January of 1999, due to the privatization of tire collection in Texas. Some cleanups offer tire recycling through Supplemental Environmental Project funding, an enforcement penalty program. Other items that have been collected at cleanups include wire, metal, poly pipe and "ag film."

The ACRC contributes container granulation services through its southern contractor, USAg Recycling. Battery, oil and other recyclables are collected for free. Oil filters are also collected and their disposal costs are paid for using hazardous waste registration fees. Also, the Agricultural Waste Pesticide Collection Program is funded by hazardous waste registration fees. Regional recyclers provide collection services and cosponsors include the Texas Agricultural Extension Service, the Texas Department of Agriculture, the Brazos River Authority, Lower Colorado River Authority and local environmental groups.

Texas Table 1 - Quantity of Pesticides Collected

Year	Number of Sites	Quantity of Pesticides (tons)	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds per participant)
Spring 1992	4	197.28	394,560	284	1,389
1992 Subtotal	***4***	***197.28***	***394,560***	***284***	***1,389***
Spring 1993	3	84.93	169,860	139	1,222
Fall 1993	6	254.30	508,600	515	988
1993 Subtotal	***9***	***339.23***	***678,460***	***654***	***1,037***
Fall 1994	4	138.36	276,720	324	854
1994 Subtotal	***4***	***138.36***	***276,720***	***324***	***854***
Spring 1995	2	66.52	133,040	220	605
1995 Subtotal	***2***	***66.52***	***133,040***	***220***	***605***
Spring 1996	3	186.26	372,520	366	1,018
Fall 1996	3	48.34	96,680	213	454
1996 Subtotal	***6***	***234.60***	***469,200***	***579***	***810***
Spring 1997	4	74.79	149,580	344	435
Fall 1997	3	64.19	128,380	156	823
1997 Subtotal	***7***	***138.98***	***277,960***	***500***	***556***
Spring 1998	4	78.08	156,160	307	509
Fall 1998	5	28.74	57,480	126	456
Fall 98 floods	3	25.6	51,200	142	361
1998 Subtotal	***12***	***132.42***	***264,840***	***575***	***461***
Spring 1999 [1]	6	143.66	287,320	2348	122
Fall 1999 [2]	10	132.03	264,060	1272	208
1999 Subtotal	***16***	***275.69***	***551,380***	***3620***	***152***
Spring 2000 [3]	5	51.83	103,660	154	673
2000 Subtotal	***5***	***51.83***	***103,660***	***154***	***673***
TOTAL	65	1,574.91	3,149,820	6,910	456

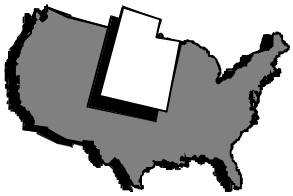
1 The spring 1999 collections included one urban household hazardous waste (HHW) event.
2 The fall 1999 collections included four rural HHW events.
3 The spring 2000 collections included two rural HHW events.
Information on program cost is not available.

Texas Table 2 - Texas Country Clean Up and Empty Pesticide Container Collection Totals

Year*	Number of Participants	Number of Collections	Number of Containers	Number of Tires	Amount of Oil (gallons)	Number of Filters	Number of Batteries
1991	50	5	3,989	0	0	0	0
1992	300	20	39,549	0	0	0	0
1993	445	38	58,496	0	0	0	0
1994	1,750	54	71,545	24,187	32,248	36,968	5,285
1995	1,728	45	78,787	22,097	31,994	36,949	4,149
1996	1,347	41	57,380	26,819	27,620	46,670	3,152
1997	1,484	37	34,703	24,053	27,255	49,621	2,677
1998	1,508	43	48,691	19,884	38,098	62,660	2,416
1999	2,713	43	41,396	49,405	37,313	55,660	3,842
2000	2,521	34	37,692	48,618	28,743	55,035	3,565
Totals	13,846	360	472,228	215,063	223,271	343,563	25,086

* Fiscal year, not calendar year.

UTAH AT A GLANCE

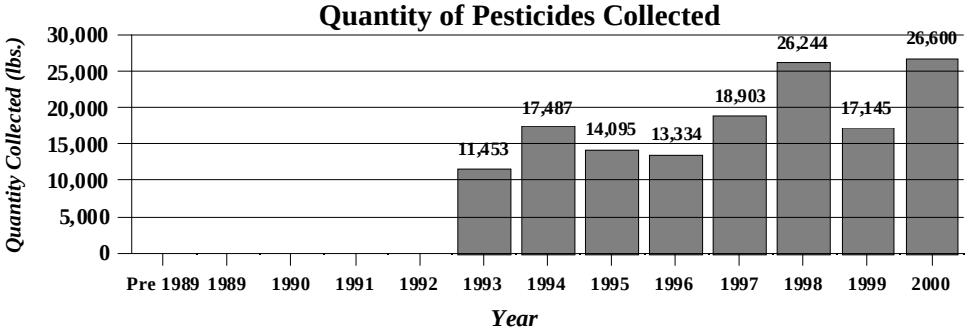


Since 1993 Utah has conducted annual clean sweep collections with the Department of Agriculture and Food as the lead agency. The program, currently funded through pesticide registration fees, has collected over 145,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1993
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 145,261 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: Cost for 1993-2000 period was $394,887, an average of $2.72 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: Yes if the container is unopened and label is legible
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers, ranchers, commercial applicators, retailers, and golf course managers; city, state, and federal parks and recreational facilities

Container Collection

Existing program: Yes

Contact Information

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agmain.callen@email.state.ut.us

Website: http://ag.utah.gov/plantind/pest_app.shtml (State Pesticide Applicator Training Guide, not specific to Clean Sweeps)

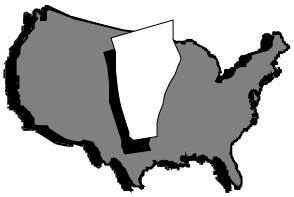
Summary of Utah Waste Pesticide Disposal Program

The Utah Department of Agriculture has conducted annual pesticide collection programs since 1993. Preregistration is a requirement of the program. The Department of Agriculture and Food periodically surveys the agricultural community to monitor the amount of pesticides that needs to be collected. Participants transport the pesticides, in containers provided by the Department of Agriculture and Food, to a central site in the participant's region. Participants are protected from risk or penalty. Participation in the program is free, and the Department does not keep any record of the participant upon completion of the collection event. A contractor is responsible for collecting the pesticides at the central point and transporting them to a disposal site. The Utah collection and disposal program will continue annually using the same format.

Utah Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1993	11,453	21	545	$51,539	$4.50
1994	17,487	27	648	$78,692	$4.50
1995	14,095	45	313	$49,333	$3.50
1996	13,334	27	494	$46,669	$3.50
1997	18,903	25	756	$47,258	$2.50
1998	26,244	29	905	$44,090	$1.68
1999	17,145	31	552	$36,832	$2.15
2000	26,600	46	578	$40,474	$1.52
TOTAL	145,261	251	579	$394,887	$2.72

VERMONT AT A GLANCE

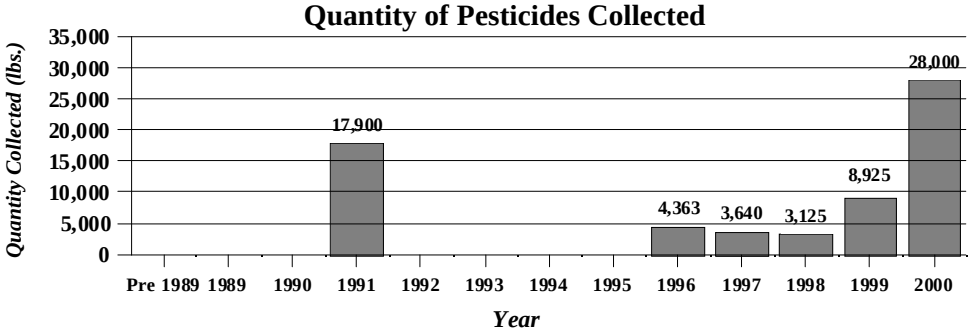


Vermont first collected unwanted pesticides in 1991 and has collected them every year since 1996. The Department of Agriculture, Food and Markets is the lead agency. Pesticide registration fees currently fund the program, which has collected nearly 66,000 pounds of pesticides.

Collection History

Products collected: Pesticides and household waste
Year of first collection: 1991
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 65,953 lbs.

Program Funding

Source: Pesticide registration fees
Participant fee collected: No
Cost information: Estimated at $2.00 per pound

Collection Logistics

Method of collection: Single day events, permanent sites, and on-site pick up
Disposal method: Incineration (95%) and landfill (5%)
Exchange program: Yes, attempting with golf courses
1995 Universal Waste rule: Adopted, authorized in 1999
Pre-registration: Not required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes

Contact Information

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116 State Street, Drawer 20
Montpelier, VT 05620-2901
Tel: (802) 828-3479
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annie@agr.state.vt.us
Website: http://www.state.vt.us/agric/wastepest.htm (Clean Sweep specific)

Summary of Vermont Waste Pesticide Disposal Program

The state of Vermont held a program to collect and dispose of unwanted pesticides in 1991. In late 1995, the program became permanent and continuous. In 1997, for the first time, farmers and growers were able to dispose of unwanted pesticides at no charge at hazardous waste collections. The Department of Agriculture, Food and Markets established a policy to pay for disposal costs of unwanted and banned pesticides from the collection of pesticide registration fees. Since 1996, Vermont has allocated $60,000 per year to the Clean Sweep program. 2000 was the first year in which the entire allocation was spent.

Vermont's collection and disposal program works with assistance from 14 solid waste districts and a few municipalities, with each district running two to twelve collection events per year. The Department of Agriculture, Food and Markets contracts with each solid waste district to pay disposal costs. Each waste district contracts with a waste hauler for transportation and disposal of the wastes. The program is open to farmers, home owners and all other pesticide users in the state and is successful. From 1991 through 2000, Vermont has collected a total of 65,953 pounds of pesticides. Vermont has information on the amount of specific pesticides that have been collected, because reporting that information is a requirement for receiving funding.

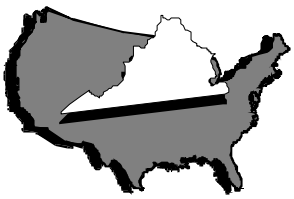
Agricultural chemical dealers run the container collections at their facilities. Dealers will take back any triple-rinsed containers of products they sell to private and commercial applicators. The ACRC provided a chipping machine to the dealers so that the containers can be chipped and recycled.

Vermont Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Program Cost	Average Cost (per pound)
1991	17,900	no data	NA
1996	4,363	less than $60,000	NA
1997	3,640	less than $60,000	NA
1998	3,125	less than $60,000	NA
1999	8,925	less than $60,000	NA
2000	28,000	$60,000	$2.14
TOTAL	65,953	NA	NA

Information on the number of participants is not tracked.
NA = not applicable

VIRGINIA AT A GLANCE

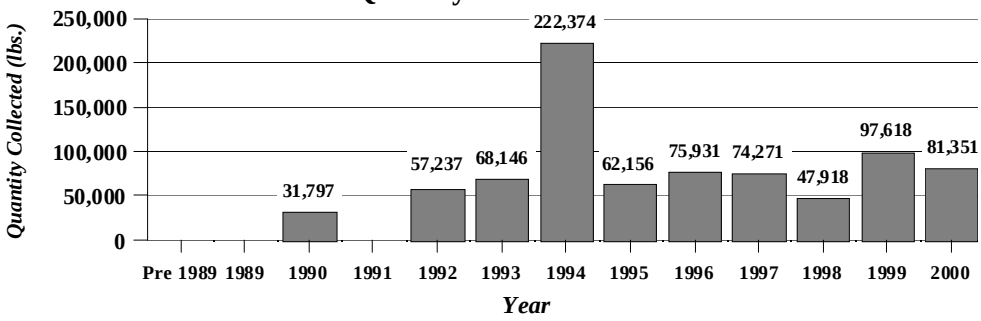


Virginia conducted a pilot pesticide collection in 1990 and has collected pesticides annually since 1992. The Department of Agriculture and Consumer Services cooperates with the Pesticide Control Board in managing this effort, which is funded with pesticide registration fees and EPA grants. The program has collected nearly 819,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1990
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 818,799 lbs.

Program Funding

Source: Pesticide registration fees and EPA grants
Participant fee collected: No
Cost information: Cost through 1999 is $1,795,067, an average of $2.43 per pound

Collection Logistics

Method of collection: On-site pick up
Disposal method: Incineration and landfill
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 2000
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, and structural pest control firms

Container Collection

Existing program: Yes

Contact Information

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Office of Pesticide Services
P.O. Box 1163
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dschweitzer@vdacs.state.va.us
Website: http://www.vdacs.state.va.us/pesticides/disposal.html
(Clean Sweep specific)

Summary of Virginia Waste Pesticide Disposal Program

The Virginia Department of Agriculture and Consumer Services, in cooperation with the Virginia Pesticide Control Board, implemented a pilot Clean Sweep Program in late 1990 and has continued with successful permanent programs, planned through 2002. With the conclusion of the 1998 Clean Sweep Program, the Department of Agriculture and Consumer Services completed total coverage of the state. Currently, a second round of collections is being undertaken with each Virginia locality (county/independent city) having the opportunity to participate. To implement the second collections, Virginia was subdivided into four regions with a Clean Sweep Program conducted in a different region annually between 1999-2002 and each locality within a region participating once during the four year period.

Clean Sweep programs are awarded to successful contractors, the most recent being Care Environmental Corp. In addition to the normal collection and disposal functions, the contractor may visit and inspect collection sites (pesticide storage facilities) prior to the actual collection event. In addition, the contractor is required to visit and inspect collection sites determined by the Department of Agriculture and Consumer Services or Virginia Cooperative Extension as requiring special handling and/or packaging including collection sites with spilled pesticides, open or deteriorating pesticide containers or collection sites with questionable accessibility. Any unknown material above 5 gallons liquid or 50 pounds solid is sent to the laboratory services of the Virginia Department of General Services, where it is analyzed to determine if it is or contains a pesticide. If the analysis determines that the unknown is a pesticide or contains a pesticide, the unknown is collected as part of the Clean Sweep Program.

Virginia employs an on-site pick up type of Clean Sweep Program, where the disposal contractor visits the participants' facilities to package, manifest and transport the pesticide waste to EPA-licensed disposal facilities. This approach requires participants to preregister to participate in the program. It eases the burden on participants by not requiring them to package the pesticides and transport them to a central collection facility.

From 1990 through 1999, funding for the direct disposal costs (i.e., not including travel) came from the following sources:

Virginia Table 1 - 1990-99 Disposal Funding

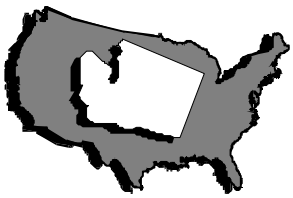
Funding Source	Amount	Percent of Total
Pesticide Registration Fees	$804,993	44.8%
EPA Grants (all sources)	$990,074	55.2%
FIFRA	$510,674	28.5%
CWA Section 106	$295,000	16.4%
CWA Section 319	$184,400	10.3%
TOTAL	$1,795,067	100.0%

Virginia Table 2 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost *	Average Cost (per pound)
1990	31,797	69	461	$158,977	$5.00
1991	0	0	NA	NA	NA
1992	57,237	191	300	$225,264	$3.94
1993	68,146	111	614	$222,100	$3.26
1994	222,374	531	419	$624,983	$2.81
1995	62,156	235	264	$174,132	$2.80
1996	75,931	159	478	$144,024	$1.90
1997	74,271	172	432	$86,073	$1.16
1998	47,918	111	432	$60,559	$1.26
1999	97,618	149	655	$116,150	$1.19
2000	81,351	149	546	$103,620	$1.27
TOTAL	818,799	1,877	436	$1,915,882	$2.34

* Cost includes disposal contractor, analysis of unknowns and cooperative extension support on a calendar year. This is different than the costs in the first page of the profile, which are for disposal only.
NA = not applicable

WASHINGTON AT A GLANCE

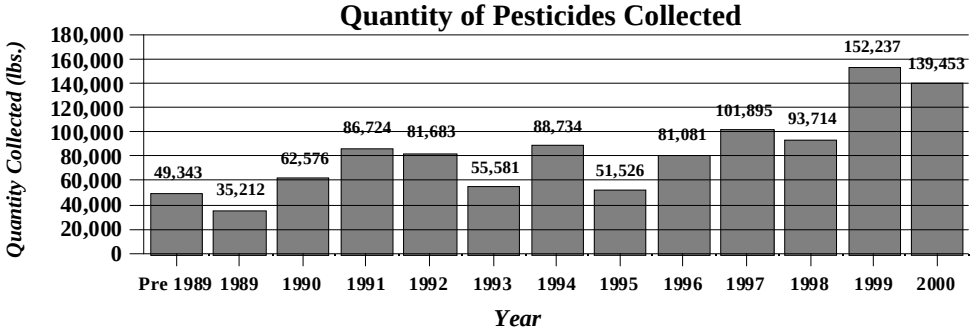


Since 1988 Washington has conducted annual clean sweep collections with the Department of Agriculture as the lead agency. The program, currently funded through the State Model Toxics Control Account, has collected over 1.0 million pounds of agricultural pesticides.

Collection History

Products collected: Agricultural pesticides; no household pesticides
Year of first collection: 1988
Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,079,759 lbs.

Program Funding

Source: State Model Toxics Control Account
Participant fee collected: No
Cost information: 2000 cost averaged $1.98 per pound including cylinders

Collection Logistics

Method of collection: Single day events and on-site pick up of certain materials
Disposal method: Incineration (most) and landfill (for pesticides that cannot be incinerated)
Exchange program: No
1995 Universal Waste rule: Adopted, authorized in 2000 but not for pesticides
Pre-registration: Required
Specific pesticides reported: Yes
Eligible participants: Farmers, commercial applicators, retailers, golf course managers, and others. All state residents are eligible, although home consumer pesticides are not accepted because most counties have HHW programs

Container Collection

Existing program: Yes

Contact Information

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Department of Agriculture
Pesticide Management Division
P.O. Box 42589
Olympia, WA 98504-2589
Tel: (360) 902-2048
Fax: (360) 902-2093
jhoffman@agr.wa.gov
Website: http://www.wa.gov/agr/pmd/pesticides/collection.htm
(Clean Sweep specific)

Summary of Washington Waste Pesticide Disposal Program

The Washington State Department of Agriculture (WSDA) has operated the Waste Pesticide Identification and Disposal Program since 1988. This program is fully funded from the state Model Toxics Control Account, which was established by citizen's initiative in 1988. The pesticide disposal program receives approximately 1.3% of the fund's revenues and has been highly successful in reducing the amount of unusable pesticides. It has realized a dramatic decrease in disposal costs since the peak in the early 1990s.

The program consists of collection sites where customers dispose of unwanted pesticides free of charge. The majority of pesticides are collected at regional events. Some pesticides, such as pressurized cylinders, are collected at the customer's location due to special handling or safety requirements. The collection program is open to farmers and anyone else who needs to dispose of agricultural pesticides. The program, however, does not collect home consumer pesticides since most counties in the state have HHW programs, which collect these exempt pesticides.

As of December 2000, the WSDA had collected and disposed of 1,079,759 pounds of unusable pesticides including nearly 1,400 different types. The one million pound threshold was passed at a May 2000 collection and an award was presented to the customer who brought in the one millionth pound.

The WSDA is the generator and participants' names do not appear on any disposal documents. A hazardous waste contractor packages the wastes for transport to a disposal facility, primarily a hazardous waste incinerator in El Dorado, Arkansas. Lead arsenate and pesticides that cannot be incinerated are stabilized and disposed of at permitted hazardous waste landfills.

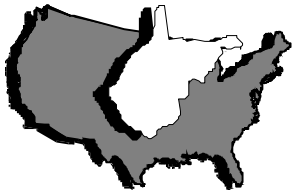
The top four pesticides collected are dinoseb, DDT, 2,4-D and endrin. Others in the top ten are malathion, parathion, sulfur, 2,4,5-T, captan and zineb. To date, the oldest verified waste pesticide collected is a package of lead arsenate manufactured in 1913.

Washington Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1988	49,343	137	360
1989	35,212	86	409
1990	62,576	121	517
1991	86,724	355	244
1992	81,683	284	288
1993	55,581	218	255
1994	88,734	332	267
1995	51,526	177	291
1996	81,081	247	328
1997	101,895	400	255
1998	93,714	353	265
1999	152,237	532	286
2000	139,453	377	370
TOTAL	1,079,759	3,619	298

Information on program cost is not available.

WEST VIRGINIA AT A GLANCE

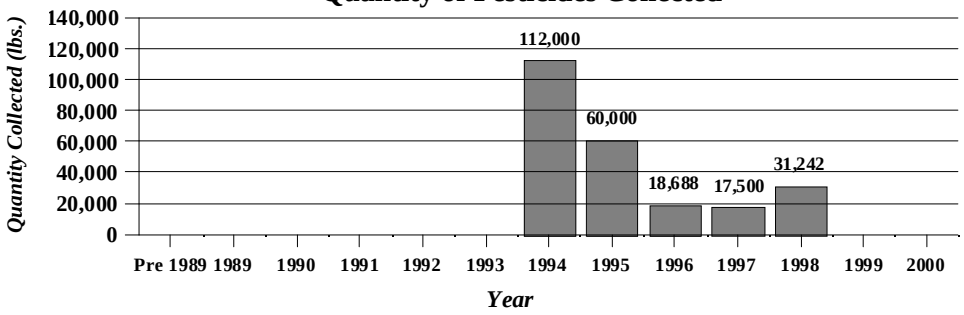


From 1994 through 1998 West Virginia conducted annual clean sweep collections with the Department of Agriculture as the lead agency. Pesticide registration fees and the state currently fund the program, which has collected over 239,000 pounds of pesticides.

Collection History

Products collected: Pesticides
Year of first collection: 1994
Program Status: Continuous, inactive

Quantity of Pesticides Collected



Amount collected to date: 239,430 lbs.

Program Funding

Source: Pesticide registration fees and state funds
Participant fee collected: No
Cost information: 1996 cost averaged $1.57 per pound

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: Information not available
1995 Universal Waste rule: Adopted, authorized in 2000
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers

Container Collection

Existing program: Yes

Contact Information

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Department of Agriculture
Pesticide Regulatory Program
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Fax: (304) 558-2228
dhudson@ag.state.wv.us
Website: http://www.state.wv.us/agriculture/home/home.html
(Department of Agriculture, not specific to Clean Sweeps)

Summary of West Virginia Waste Pesticide Disposal Program

In 1994, the Department of Agriculture, with grant funding, conducted a pilot AgChem Collection Program in the eastern panhandle area. Preregistration was required and the unwanted pesticides were collected from individual farms. Actual collections resulted in larger quantities than those recorded in the preregistration inventory. As an example of the disparity, one farmer registered 100 pounds of pesticides. Realizing it truly was an amnesty program, he provided an additional 5,000 pounds to the AgChem Collection Program. The pilot program accounted for the collection of 56 tons of agricultural pesticides.

In 1995, the Eastern Panhandle and Potomac Valley Soil Conservation District provided a grant for $25,000 to fund an AgChem Collection Program. Approximately 60,000 pounds of pesticides were collected at a cost of $2.50 per pound. Participants, based on financial necessity, were selected on a first-come-basis.

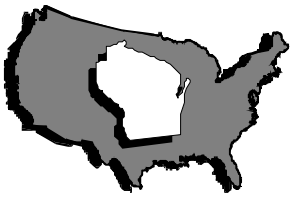
In 1996, the Department of Agriculture conducted a collection and disposal event using a ground water grant. Because so few applicators participated, the program was "topped off" with a collection from a state prison farm and a defunct demonstration farm. A total of 18,688 pounds of pesticides was collected. Cost of the program was $1.57 per pound.

West Virginia Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)	Program Cost	Average Cost (per pound)
1994	112,000	no data	NA	no data	NA
1995	60,000	30	2,000	$150,000	$2.50
1996	18,688	11	1,699	$29,340	$1.57
1997	17,500	no data	NA	no data	NA
1998	31,242	25	1,250	no data	NA
TOTAL	239,430	More than 66	1,666 for the years with data	NA	NA

NA = not applicable

WISCONSIN AT A GLANCE



Since 1990 Wisconsin has conducted annual clean sweep collections with the Department of Agriculture, Trade and Consumer Protection (DATCP) as the lead agency. Pesticide registration fees, channeled through DATCP as competitive grants to counties, fund the collections. The state has collected over 1.5 million pounds of pesticides.

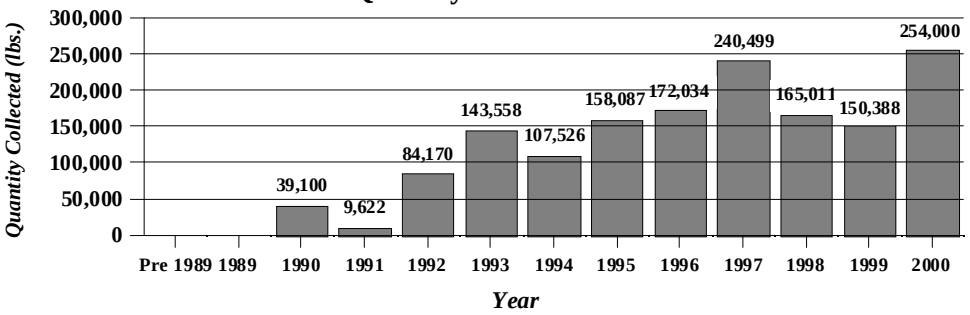
Collection History

Products collected: Pesticides, household waste from farm households, and non-pesticide chemicals from non-pesticide businesses

Year of first collection: 1990

Program Status: Permanently funded

Quantity of Pesticides Collected



Amount collected to date: 1,523,995 lbs.

Program Funding

Source: Pesticide registration fees and occasional EPA grants

Participant fee collected: No charge to farmers for first 200 pounds. Businesses pay 50% of disposal costs

Cost information: 1999 cost was $272,079, an average of $1.80 per pound

Container Logistics

Method of collection: Single day events, permanent sites in ten counties, and multi-county collections

Disposal method: Incineration (90%), landfill (7%), and reclamation/reprocessing (3%)

Exchange program: Yes, allowed but not encouraged

1995 Universal Waste rule: Adopted, not yet authorized

Pre-registration: Required for businesses, strongly encouraged for farmers

Specific pesticides reported: Yes

Eligible participants: Anyone with agricultural pesticides including farmers, commercial applicators, retailers, golf course managers, and the public

Container Collection

Existing program: Yes, the DATCP works with the Wisconsin Fertilizer and Chemical Association

Contact Information

Roger E. Springman
Wisconsin Department of Agriculture, Trade and Consumer Protection
P.O. Box 8911
Madison, WI 53708-8911
Tel: (608) 224-4545
Fax: (608) 224-4656
roger.springman@datcp.state.wi.us
Website: http://datcp.state.wi.us/arm/agriculture/pest-fert/clean-sweep/
(Clean Sweep specific)

Summary of Wisconsin Waste Pesticide Disposal Program

In 1998, the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) celebrated the collection of its one millionth pound of waste pesticide. The program, which has operated since 1990, expanded in 1996 to include agricultural businesses, golf courses, cooperatives, landscape contractors and aerial applicators. DATCP funds the program through pesticide registration fees, and has one full-time and one part-time staff coordinating the program.

The DATCP operates the Agricultural Clean Sweep as a competitive grants program for Wisconsin counties, offering $560,400 annually. To receive a grant, counties must provide a $3,000 (minimum) cost-share match, a local coordinator, volunteers to help with the collection, and a collection site. The state's hazardous waste contractor must be used at all single-day events. The DATCP provides technical and educational assistance along with grants of up to $22,000 for single-day events, which are used to pay the program's waste hauler to transport the collected wastes for incineration. The average cost of a single-day collection runs about $15,500.

The Department also offers grants to counties with permanent collection facilities. These counties are eligible for grants of up to $30,000 per year and they can select their own waste hauler. A $3,000 services match can be substituted for the $3,000 cash requirement.

Counties are discouraged from creating local fee schedules for the collection of agricultural wastes. All sites, both one-day and permanent, serve as collection sites for business or Very Small Quantity Generator (VSQG) wastes. Businesses with agricultural pesticides for disposal can receive a 50% subsidy from the Department upon the completion of necessary paperwork. Many counties have found it desirable to offer HHW service at the same time they offer agricultural and business service.

Wisconsin inventories specific pesticides, and in 1998 confirmed that banned or canceled products comprised nearly 20% of the waste stream. Some of the more common chemicals collected that year included 2 tons of atrazine, 2.5 tons of 2,4-D, 1 ton of DDT, 2 tons of parathion and 1 ton of dioxin-containing materials.

When Wisconsin expanded its program in 1996, 42 agricultural businesses participated. The DATCP considered this low, and learned from a survey that a new approach was needed. They created partnerships with agricultural business associations, created a special 10% "sweetener", simplified pre-registration procedures and reduced disposal prices. The business program increased the amount of staff time needed for publicity, promotional material development and county coordination.

Permanent sites have posed an interesting challenge for Agricultural Clean Sweep. Most counties begin these efforts believing that farmers will drive into urban areas to drop off chemicals. However, history has shown that only a few farmers are willing to drive wastes into cities. Consequently, permanent facilities have been strongly encouraged to create satellite sites and special "farm chemical collection weeks". This has made a big difference in site performance.

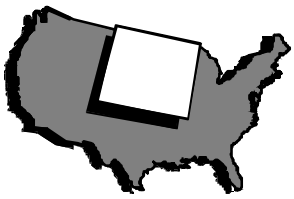
Since 1992, the DATCP has worked with the Wisconsin Fertilizer and Chemical Association (WFCA) to support its Plastic Pesticide Container Recycling Project. In 1998, the program collected and chipped nearly 150,000 pounds of plastic from 55 dealer sites. WFCA has done an excellent job in promoting this stewardship effort. Presently DATCP is cooperating with them in the collection and incineration of mini-bulks. A pilot project in Rock County proved very successful in the fall of 2000.

Wisconsin Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1990	39,100	279	140
1991	9,622	122	79
1992	84,170	736	114
1993	143,558	1,446	99
1994	107,526	934	115
1995	158,087	1,061	149
1996	172,034	1,035	166
1997	240,499	865	278
1998	165,011	858	192
1999	150,388	732	205
2000	254,000	1,314	193
TOTAL	1,523,995	9,382	162

Information on program cost is not available.

WYOMING AT A GLANCE

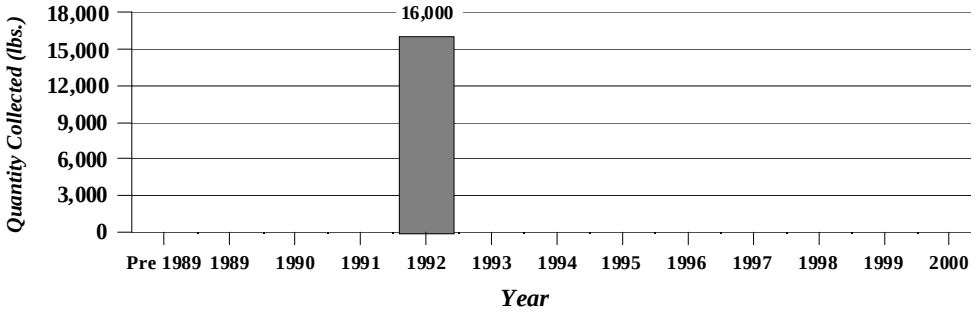


In 1992 Wyoming collected about 16,000 pounds of agricultural pesticides during an EPA-funded pilot project collection, which involved several state agencies. Farmers are not permitted to participate in the intermittent HHW collections held by municipalities.

Collection History

Products collected: Pesticides
Year of first collection: 1992
Program Status: Once

Quantity of Pesticides Collected



Amount collected to date: 16,000 lbs.

Program Funding

Source: EPA grants
Participant fee collected: No
Cost information: Information not available

Collection Logistics

Method of collection: Single day events
Disposal method: Incineration
Exchange program: Yes
1995 Universal Waste rule: Adopted, not yet authorized
Pre-registration: Required
Specific pesticides reported: No
Eligible participants: Farmers, ranchers, commercial applicators, and the public

Container Collection

Existing program: Yes

Contact Information

Jim Bigelow
Wyoming Department of Agriculture
2219 Carey Avenue
Cheyenne, WY 82002
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Fax: (307) 777-6593
tlink@missc.state.wy.us
Website: http://wyagric.state.wy.us/ (Department of Agriculture, not specific to Clean Sweeps)

Summary of Wyoming Waste Pesticide Disposal Program

In 1992, Wyoming held an agricultural pesticide collection day for farmers and ranchers in five counties. The project involved the Department of Environmental Quality, Department of Agriculture, University of Wyoming, Conservation Districts, and Wyoming Weed & Pest Council. A total of 40 farmers and ranchers participated and 37 drums/containers of waste were collected. (This was estimated to be about 16,000 pounds, assuming 27 of them were 55-gallon drums and 10 were 30-gallon drums.)

Since the 1992 event, Wyoming has not held a state-directed agricultural collection and disposal program. Funding has not been available.

Some household hazardous waste programs are conducted at the city level, but not on a regular basis. Normally, these household waste programs do not permit farmer participation.

Wyoming Table 1 - Quantity of Pesticides Collected

Year	Quantity of Pesticides (pounds)	Number of Participants	Average Quantity of Pesticides per Participant (pounds/participant)
1992	16,000 (estimated)	40	400
TOTAL	16,000 (estimated)	40	400

Information on program cost is not available.

Appendix II - Pesticides That are RCRA-Listed Hazardous Wastes

RCRA ID	Pesticide		
RCRA F List: Hazardous Wastes from Non-specific Sources [261.31]			
F027	pentachlorophenol	F027	2,4,6-trichlorophenol
F027	2,3,4,6-tetrachlorophenol	F027	2,4,5-T
F027	2,4,5-trichlorophenol	F027	Silvex

RCRA P List: Discarded Commercial Chemical Products, Acute Hazardous Wastes [261.33(e)]			
P003	acrolein	P197	formparanate
P070	aldicarb	P059	heptachlor
P203	aldicarb sulfone	P063	hydrogen cyanide (hydrocyanic acid)
P004	aldrin	P192	isolan
P005	allyl alcohol	P196	manam (manganese dimethyldithiocarbamate)
P006	aluminum phosphide	P199	methiocarb
P008	4-aminopyridine	P066	methomyl
P010	arsenic acid	P071	methyl parathion
P011	arsenic pentoxide	P128	mexacarbate
P012	arsenic trioxide	P072	alpha-naphthylthiourea
P021	calcium cyanide	P075	nicotine and salts
P127	carbofuran	P085	octamethylpyrophosphoramide
P022	carbon disulfide	P194	oxamyl
P189	carbosulfan	P089	parathion (ethyl)
P024	p-chloroaniline	P092	phenylmercury acetate (PMA)
P202	m-cumenyl methylcarbamate	P094	phorate
P030	cyanides	P098	potassium cyanide
P033	cyanogen chloride	P201	promecarb
P034	2-cyclohexyl-4,6-dinitrophenol	P102	propargyl alcohol
P037	dieldrin	P105	sodium azide
P040	O, O-diethyl O-pyrazinyl phosphorothioate (Zinophos)	P106	sodium cyanide

P044	dimethoate	P058	sodium fluoroacetate
P191	dimetilan	P108	strychnine and salts
P047	4,6-dinitro-o-cresol and salts	P109	tetraethyldithiopyrophosphate (Sulfotepp)
P048	2,4-dinitrophenol	P111	tetraethyl pyrophosphate (TEPP)
P020	dinoseb	P115	thallium sulfate
P039	disulfoton	P045	thiofanox
P050	endosulfan	P185	tirpate
P088	endothall	P123	toxaphene
P051	endrin	P001	warfarin (concentrations > 0.3%)
P097	famphur	P122	zinc phosphide
P057	fluoroacetamide	P205	ziram
P198	formetanate hydrochloride		

RCRA U List: Discarded Commercial Chemical Products, Toxic Wastes [261.33(f)]			
U002	acetone	U127	hexachlorobenzene
U009	acrylonitrile	U130	hexachlorocyclopentadiene
U011	amitrole	U131	hexachloroethane
U280	barban	U132	hexachlorophene
U278	bendiocarb	U134	hydrofluoric acid
U271	benomyl	U140	isobutyl alcohol
U019	benzene	U142	Kepone
U136	cacodylic acid	U144	lead acetate
U279	carbaryl	U129	lindane
U372	carbendazim	U148	maleic hydrazide
U367	carbofuran phenol	U151	mercury
U211	carbon tetrachloride	U247	methoxychlor
U034	chloral (hydrate)	U154	methyl alcohol (methanol)
U036	chlordane	U029	methyl bromide
U037	chlorobenzene	U045	methyl chloride
U038	chlorobenzilate	U159	methyl ethyl ketone
U039	4-chloro-m-cresol	U161	methyl isobutyl ketone

Appendix II

U044	chloroform	U080	methylene chloride (dichloromethane)
U048	o-chlorophenol	U165	naphthalene
U049	4-chloro-o-toluidine	U169	nitrobenzene
U051	creosote	U170	p-nitrophenol
U052	cresylic acid (cresols)	U184	pentachloroethane
U056	cyclohexane	U185	pentachloronitrobenzene
U057	cyclohexanone	U188	phenol
U240	2,4-D	U087	phosphoric acid, O,O-diethyl,methyl ester
U060	DDD	U192	pronamide (propyzamide)
U061	DDT	U373	propham
U062	diallate	U411	propoxur
U066	1,2-dibromo-3-chloropropane	U196	pyridine
U069	dibutyl phthalate	U201	resorcinol
U070	o-dichlorobenzene	U203	safrole
U072	p-dichlorobenzene	U205	selenium sulfide (selenium disulfide)
U075	dichlorodifluoromethane	U207	1,2,4,5-tetrachlorobenzene
U025	dichloroethyl ether	U209	1,1,2,2-tetrachloroethane
U083	1,2-dichloropropane (propylene dichloride)	U410	thiodicarb
U084	1,3-dichloropropene	U409	thiophanate-methyl
U028	diethylhexyl phthalate	U244	thiram
U102	dimethyl phthalate	U220	toluene
U041	epichlorohydrin	U389	triallate
U112	ethyl acetate	U226	1,1,1-trichloroethane (methyl chloroform)
U067	ethylene dibromide (EDB)	U228	trichloroethylene
U077	ethylene dichloride	U121	trichloromonofluorormethane
U115	ethylene oxide	U248	warfarin (concentrations ,= 0.3%)
U122	formaldehyde	U239	xylene
U125	furfural	U249	zinc phosphide

Appendix III - Sample Contract

Note: EPA deleted specific references to the state and the contractor and replaced those references with [State] and [contractor].

1. PARTIES
   - A. The [State] Department of Agriculture (hereafter Department).
   - B. [The Contractor] (hereafter Contractor).

2. TERM OF CONTRACT

   This contract is effective from the date of final signature until all the terms of this contract are satisfied.

3. STATEMENT OF SERVICES

   The Contractor agrees to perform the services provided, in this contract.

   The parties agree that the Contractor is and assumes the responsibilities of, the generator of the waste collected under this contact, based on the following:

   1. The Contractor is a corporation engaged in the business of collection, storage, transportation, and disposal of waste; and the Contractor has technical expertise in such business and all licenses required to perform the business.
   2. the Contractor's technical expertise was critical to the Department's determination to enter into this contract with the Contractor.
   3. The Contractor is responsible for the final treatment/disposal of all materials collected pursuant to this contract.
   4. The Contractor makes all necessary decisions and determinations regarding the arrangements for collection, storage, transportation, and disposal of waste, except as herein specifically stated. The responsibilities of the Contractor for these decisions and determinations are included in the following provisions of this contact:

      § 10. INDEMNITY
      § 12. SUPERVISION AND COORDINATION
      § 22. INDEPENDENT CONTRACTOR
      § 24. MATERIALS AND SERVICES
      § 28. SPILL RESPONSIBILITIES
      § 29. SAFETY
      § 33. CONTRACTOR'S DUTIES
      § 34. EQUIPMENT AND PERSONNEL FOR LOADING
      § 36. WASTE RECORDS AND PACKAGING
      § 37. MANIFESTING, SHIPPING, TREATMENT AND DISPOSAL DOCUMENTATION
      § 39. HAZARDOUS WASTE TRANSPORTATION
      § 40. FINAL TREATMENT/DISPOSAL

4. CONTRACTOR'S REPRESENTATIVE
   - A. Responsibility Contractor's representative shall function as the primary point of contact, shall ensure supervision and coordination and shall take corrective action as necessary to meet contractual requirements.

B. Availability Contractor's representative, or designee, shall be available at all times throughout the term of the contract.

5. CONFLICT AND SEVERABILITY

A. In the event of conflict between contract documents and applicable laws, codes, ordinances, regulations, or orders or in the event of any conflict between such applicable laws, ordinances, regulations, or orders, the most stringent or legally binding requirement shall govern and be considered as a part of this contract in order to afford the Department the maximum benefits thereof.

B. Any provision of this document found to be prohibited by law shall be ineffective to the extent of such prohibition without invalidating the remainder of the contract.

6. NONDISCRIMINATION AND AFFIRMATIVE ACTION

Contractor shall abide by the terms and conditions of Section 601. Title VI. Civil Rights Act of 1964, as may be amended:

In that "No person in the United States shall, on the grounds of race, color, national origin, sex or age, be excluded from participation in, be denied the benefits of ,or be subject to discrimination under any program or activity receiving Federal financial assistance. In addition, "No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

Unless exempted by Presidential Executive Order #11246, as may be amended or replaced and applicable regulations thereunder, Contractor shall not discriminate against any employee or applicant for employment.

7. MINORITY AND WOMEN'S BUSINESS ENTERPRISES (MWBE)

MWBE requirements are incorporated into this contract.

8. RIGHTS AND REMEDIES

In the event of any claim for default or breach of contract, no provisions in this contract shall be construed, expressly or by implication, as a waiver by the Department of any existing or future right and/or remedy available by law. Failure of the Department to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract or by law, or the acceptance of (or payment for) materials, equipment or services, shall not release the Contractor from any responsibilities or obligations imposed by this contract or by law, and shall not be deemed a waiver of any right of the Department to insist upon the strict performance of the contract. Acceptance by the Department of unsatisfactory performance with or without objection or reservation shall not waive the right to claim damage for breach nor constitute a waiver of requirements for satisfactory performance of any obligation remaining to be performed by Contractor.

9. DISPUTE RESOLUTION

Any disputes arising under this contract will be resolved under [State] law.

10. INDEMNITY

A. Contractor shall indemnify, defend and save harmless the State of [State] (hereafter State), the [State]

Department of Transportation, the Department, their agents and employees, from any claims, demands, suits, actions, proceedings, losses, costs and damages of every kind and description, including any attorneys' fees and/or litigations expenses, which may be brought or made against or incurred by the State, the [State] Department of Transportation, the Department, their agents and employees, on account of losses of or damage to any property or for injuries to or death of any person, caused by, arising out of, or contributed to, in whole or in part, by reasons of any act, omission, professional error, fault, mistake or negligence of Contractor, Contractor's employees, agents, representatives or subcontractor, their employees, agents or representatives in connection with or incidental to the performance of this contract, or arising out of Worker's Compensation claims, Unemployment Compensation claims or Unemployment Disability Compensation claims of employees of Contractor and/or subcontractors or claim under similar such laws or obligations.

B. Contractor shall pay all attorney's fees and expenses incurred by the State, the [State] Department of Transportation, and the Department in establishing and enforcing their rights under this paragraph, whether or not suit is instituted. In the event a suit is initiated or judgment is entered against the State, the [State] Department of Transportation, or the Department, their agents or employees, the Contractor shall indemnify them for all costs and expenses, including legal fees and any judgment arrived at or satisfied or settlement entered.

C. Upon receipt of wastes at the collection sites, the Contractor assumes full accountability and physical custody for such wastes. Neither the State, the [State] Department of Transportation, nor the Department assumes liability for any damage to the property of the Contractor, to the property of any person, or public property or for personal injuries , illness, disabilities or death to the Contractor, Contractor's employees, and any other person subject to the Contractor's control or any other person including members of the general public, caused, in whole or in part, by (a) Contractor's breach of any term or provision of this contract; or (b) any negligent or willful act or omission of the Contractor, its employees or subcontractors in the performance of this contract. The Contractor agrees to indemnify, save harmless and defend the State, the [State] Department of Transportation, the Department, their agents and employees, from and against any and all liabilities, claims, penalties, forfeitures, suits and the costs and expenses incident thereto (including costs of defense, settlement and reasonable attorneys fees), which it may hereafter incur, become responsible for, or pay out as a result of acts or omissions covered by (a) or (b) within this paragraph.

D. Contractor will be liable for all costs, penalties, and obligations, including remediation, that may be imposed for generation, collection, storage, transportation, arranging for disposal and disposal, or remediation of the waste collected under this contract. Contractor shall indemnify, defend and save harmless the State of [State], the [State] Department of Transportation, the Department, their agents and employees, from any claims, demands, suits, actions, proceedings, losses, costs and damages of every kind and description, including any attorneys' fees and/or litigation expenses, which may be brought or made against or incurred by the State, the [State] Department of Transportation, the Department, their agents and employees, for liability under any and all federal and state environmental laws, including but not limited to:

1. [State] Hazardous Waste Management Act (citation) and [State] Hazardous Waste Rules (citation).
2. Federal Resource Conservation and Recovery Act of 1976 (RCRA).
3. Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

4. Federal Hazardous Material Transportation Regulations (49 C.F.R. Parts 171, 172, 173. and 177 for hazardous materials transportation regulations).

5. Water Pollution Control Act (citation).
6. Solid Waste Management Act and Solid Waste Management Rules (citation).

11. PERSONAL LIABILITY

No official, officer, employee or agent of the State, including the Department, shall be personally liable or responsible for any covenant or agreement herein contained whether expressed or implied, nor for any statement or representation made herein or in any connection with this contract.

12. SUPERVISION AND COORDINATION

Contractor shall:

A. Competently and efficiently supervise and direct the implementation and completion of all contract requirements.

B. Promote and offer only those materials, equipment and/or services as allowed for by contractual requirements.

13. ADVERTISING

The Contractor may refer to this Contract in future solicitations, newsletters and similar publications.

14. SUBCONTRACTS/ASSIGNMENT

Contractor shall not subcontract or assign its obligations under this contract without the prior written consent of the Department and, if such subcontracting is approved, all requirements of the contract apply to subcontractors. The Department reserves the right to prohibit the Contractor from employing the services of a subcontractor. The use of subcontractors does not relieve the Contractor of any requirement set forth herein and the Contractor is responsible for insuring that any subcontractor performs in accordance with all of the terms and conditions of this contract.

15. TAXES AND FEES

A. Contractor shall pay and maintain in current status all taxes which are necessary for contract performance.

B. The Contractor shall pay and maintain in current status, any license fees. assessments, permit charges, etc., which are necessary for contract performance. It is the Contractor's sole responsibility to monitor and determine any changes or the enactment of subsequent regulations for fees, assessments or charges and to immediately comply with changes or regulations during the entire terms of this contract.

16. CHANGES

This contract may be amended only by written mutual agreement of the parties.

17. ADDITIONS OR DELETIONS

The Department reserves the right to add or delete items such as agricultural pesticides and waste pesticide containers or site locations. Added items or locations will not represent a significant increase or decrease in size or scope of the contract.

18. CONTRACT SUSPENSION

The Department may at any time and without cause, suspend the contract or any portion thereof, for a period of not more than thirty (30) calendar days, by written notice to the Contractor. Contractor shall resume performance within fifteen (15) calendar days written notice from the Department.

19. TERMINATION

A. Termination for Convenience. The Department may terminate this contract, in whole or in part, at any time and for any reason by giving written termination notice to Contractor. Upon such termination, the only damages to which contractor is entitled are: (1) a sum computed and substantiated in accordance with standard accounting practices for those reasonable costs incurred by Contractor prior to the date of termination for orderly phase out of performance as requested by the Department in order to minimize the costs of the termination; and (2) a reasonable profit for such work performed. However, the Department shall not be liable to the Contractor for any anticipated profits on the terminated portion of the contract, or claims of unabsorbed overhead or other fixed costs. In no event shall the Department become liable to pay any sum in excess of the price of this contract for the terminated services.

B. Termination for Breach. Except in the case of delay or failure resulting from circumstances beyond the control and without the fault or negligence of the Contractor or of the Contractor's suppliers or subcontractors, the Department shall be entitled, by written or oral notice, to cancel this contract in its entirety or in part, for breach of any of the terms, and to have all other rights against Contractor by reason of Contractor's breach as provided by law. A breach shall mean, but shall not he restricted to, any one or more of the following events: (1) Contractor fails to perform the services by the date required or by such later date as may be agreed to in a written amendment to the contract signed by the Department; (2) Contractor breaches any warranty, or fails to perform or comply with any term or agreement in the contract; (3) Contractor makes any general assignment for the benefit of creditors; (4) in *the* Department's opinion. Contractor becomes insolvent or in an unsound financial condition so as to endanger performance of the contract; (5) Contractor becomes the subject of any proceeding under any law relating to bankruptcy, insolvency or reorganization or relief from debtors; (6) any receiver, trustee or similar official is appointed for Contractor or any of Contractor's property; or (7) the Department is not satisfied with the Contractor's performance of the contract. If it is subsequently found that Contractor was not in breach, the rights and obligations of the parties shall be the same as if a Notice of Termination had been issued pursuant to subparagraph 19.A.

C. Termination by Mutual Agreement. The Department and the Contractor may terminate this contract in whole or in pant at any time, by mutual agreement in writing.

D. Termination by Misrepresentation. Contractor shall not misrepresent the scope of this contract. Misrepresentation is cause for contract termination.

20. NOTICE OF DEFAULT

If the Department chooses, it may issue a written notice of default providing a period in which Contractor shall have an opportunity to cure the default. Time allowed for cure shall not diminish or eliminate Contractor's liability for liquidated or other damages.

21. LEGAL FEES

The Contractor agrees that in the event suit is instituted by the Department for any default on the pan of the Contractor, and the Contractor is adjudged by a court of competent jurisdiction to be in default, Contractor shall pay to the Department all costs, expenses expended or incurred by the Department and reasonable attorneys fees.

Appendix III

22. INDEPENDENT CONTRACTOR

The Contractor shall perform as an independent entity under this agreement. The Contractor, its employees, agents and representatives are not employees of the State. No part of this agreement shall be construed to represent the creation of an employer/employee relationship. The Department does not have the right to control the manner in which the work is completed or other details of the work except to the extent specified by this contract.

23. INSURANCE

A. General Requirements. Contractor shall, at its own expense, obtain and keep in force insurance until completion of the contract. By March, 3, 1997, the Contractor shall furnish the Department certificates of insurance and a certified copy of all required insurance policies. Failure to provide proof of insurance as required will result in cancellation of the contract. All required insurance must be an occurrence policy which ensures coverage for the period of insurance even if the claim is made after the insurance period, except for General Liability and Pollution Liability coverage that are written on a Claims Made form and shall include die following:

1. The "Retro Date" must be shown, and must be before the date of the Contract or the beginning of Contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the Contract, or earlier termination thereof.
3. If coverage is canceled or non-renewed, and not replaced with another claims made policy form with a "Retro Date" prior to the effective date of the Contract, the Contractor must purchase "extending reporting" coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements must be submitted to the Department for review.

B. Specific Requirements

(1) Workers Compensation. The Contractor shall certify that its operations are covered by the [State] State Workers Compensation Fund, and provide the corresponding account numbers to the Department by March 4, 1997. If self-insured, Contractor shall provide proof of insurance including certificate of qualification number.

(2) Commercial General Liability

a.

Description	Each Occurrence	Aggregate
- General Liability: Combined Bodily Injury and Property Damage	$5,000,000	$ 10,000,000

Description	Each Occurrence
- Automobile: Combined Bodily Injury and Property Damage	$ 1,000,000

b. Insurance policy(ies) shall include the following provisions:

1. The Contractor's policy(ies) shall be primary over any other valid and collectible insurance.
2. A thirty (30) calendar day written notice shall be given to the Department prior to termination of or my material changes to the policy(ies) as it relates to the contract:

provided that a thirty (30) calendar day written notice shall be given for surplus line insurance cancellation: and in the event of cancellation for nonpayment of premiums, such notice shall not be less than ten (10) calendar days prior to such date.

c. The insurance coverage provided shall protect against claims for personal injury; bodily injury, including illness, disease and death: and property damage caused by an occurrence arising out of or in consequence of the performance of this Contract by the Contractor or subcontractor or anyone employed by either.

d. The limits of all insurance required to be provided by the Contractor shall be no less than the minimum amounts specified. However coverage in the amount of these minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits.

(3) Pollution Liability Insurance. The Contractor shall obtain Pollution Liability Insurance, including environment impairment liability endorsements, in the minimum amount of $2,000,000 per occurrence and $4,000,000 tn aggregate, inclusive of legal defense costs.

(4) The State shall be an additional insured.

24. MATERIALS AND SERVICES

The Contractor shall furnish all materials, equipment and/or services necessary to perform the requirements of this contract. The Contractor shall also furnish appropriate personal protective equipment for up to six representatives of the Department. Materials and work in the construction of equipment for this contract shall conform to all codes, regulations, and requirements for such equipment. Materials shall be manufactured in accordance with the best commercial practices and standards for this type of equipment.

25. RETENTION OF RECORDS

Contractor shall retain all records relating to this contract for a period of ten (10) years following the date of final payment. The record retention period is automatically extended in the event of any civil, criminal or administrative action. Any authorized representative of the state or federal government shall have access to and the right to examine, audit, excerpt, copy, and transcribe all records related to this contract.

26. OSHA REQUIREMENTS

Contractor agrees to comply with conditions of the Federal Occupational Safety and Health Act of 1970 (OSHA), as may be amended, if it has a workplace within the State, the standards and regulations issued thereunder and certifies that all services and items furnished and purchased under this contract will conform to and comply with said standards and regulations. Contractor further agrees to indemnify and hold harmless the Department from all damages assessed against the Department as a result of Contractor's failure to comply with the acts and standards thereunder and for the failure of the services and items furnished under this contract to so comply.

27. COMPLIANCE WITH HEALTH AND SAFETY, ENVIRONMENTAL AND TRANSPORTATION REGULATIONS

Contractor agrees to comply with all applicable federal, state, and local laws and regulations, including the following laws and regulations as may be amended, and any standards and regulations which may be promulgated thereunder. Contractor certifies that both services and items furnished under this contract will comply with all applicable federal and state laws, standards and regulations.

Contractor further agrees to indemnify and hold harmless the State, Department, employees and agents from all damages assessed against the State, Department, employees, and agents as a result of Contractor's failure to comply with all applicable federal and state laws, standards, and regulations including, but not limited to, the following laws and regulations:

A. [State] Hazardous Waste Management Act (citation) and [State] Hazardous Waste Rules (citation).
B. Federal Occupational Safety and Health Act of 1970 (OSHA)
C. Federal Resource Conservation and Recovery Act of 1976 (RCRA).
D. Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).
E. Federal Hazardous Material Transportation Regulations (49 C.F.R. Parts 171, 172, 173 and 177 for hazardous materials transportation regulations).
F. Water Pollution .Control Act (citation).
G Solid Waste Management Act and Solid Waste Management Rules (citation).

28. SPILL RESPONSIBILITIES

A. The Contractor is solely responsible for any and all spills or leaks during the performance of this Contract which occur as a result of or are contributed to by the actions of its agents, employees, or subcontractors. The Contractor agrees to reasonably, evacuate and warn those persons who may be affected by the spill and Contractor shall clean up such spills or leaks to the satisfaction of the Department and in a manner that complies with applicable federal, state, and local laws and regulations. The cleanup shall he at no cost to the Department. If the spill should occur within [State], the Contractor shall immediately contact the State's emergency spill response personnel at (phone number).

B. If directed by the Department, the Contractor shall take surface water and/or soil samples before, during, or after the collection events using standard sampling procedures to adequately represent the collection area. Quality assurance and quality control shall he maintained of any samples taken. The potential nature of spills that may occur and conditions may vary from site to site. Sampling will be conducted if potential remediation is identified by the Department, and the cost of sampling will he paid for by the Contractor. The determination of the need for analyses of the samples shall he made by the Department within seventy-two (72) hours. The parameters to be tested would be determined by the nature of the spill.

C. The Contractor shall immediately report by telephone all spills or leaks, regardless of their quantity to the Department. A written follow-up report shall be submitted to the Department not later than seven (7) days after the initial telephonic report. The written report shall be in narrative form and as a minimum include the following:

(1) Description of waste spilled (including identity, quantity, manifest number).
(2) Amount spilled and whether it is EPA/state reportable, and if so, whether it was reported.
(3) Exact time and location of spill, including a description of the area involved.
(4) Containment procedures initiated.
(5) The direction and estimated speed of the wind and estimated temperature at the time of the spill.
(6) Summary of any communications Contractor has had with press or other government officials.
(7) Description of clean-up procedures employed or to be employed at the site, including disposal location of spill residue.
(8) Any witnesses involved and names of all individuals involved in preparing any reports required by this part.

29. SAFETY

Contractor must have and maintain an adequate health and safety program to safeguard people and property from injury or damage. The Contractor must perform all operations in a prudent, conscientious, safe and professional manner. At a minimum, Contractor personnel and equipment shall comply with applicable federal and state laws, safety regulations and procedures, and will ensure that its agents, employees, and subcontractors perform in a safe manner. The Contractor shall ensure that all personnel involved in handling and packaging the hazardous waste be trained for the level of expertise required for the proper performance of the task and, in particular, in the areas of chemical incompatibility, general first aid procedures and spills. Personnel protective equipment shall be provided by the Contractor and must be appropriate to ensure safe handling of the hazardous waste. The Contractor agrees that its personnel and equipment are subject to safety inspections by the State. The Contractor shall provide the Department safety and emergency plans for each collection event prior to the collection event(s). The Contractor shall conduct safety meetings at each collection site to ensure the Contractor and Department personnel are familiar with and understand the health and safety plan and site layout, including location of emergency equipment and the chemical handling area.

The Contractor should be prepared to provide an emergency response capability to control and cleanup an accident/spill that may occur by program participants en route to the site location.

30. PERMITS

Contractor shall, without additional expense to the Department, secure and maintain any licenses and permits necessary for compliance with federal, state, and local regulations, rules or ordinances. These shall include, but not be limited to, the following:

A. RCRA and State permits for storage, treatment, and disposal facilities.

B. EPA identification numbers and any permits necessary for transportation of hazardous waste in [State] and any other states through which wastes will be transported.

C. Provide documentation that scales to be used during collection program have been tested and approved by a state weights and measures agency or have the scales certified by the [appropriate State agency] prior to the collections.

31. COLLECTION SITE SPECIFIC LOCATIONS AND CONDITIONS

The collection events will be conducted in sequence at locations in [the state] as specified in writing by the Department. There will be a minimum of five collection locations. The Contractor should assume that there is no water, electrical power, or communications equipment at the collection sites,

32. COLLECTION SITE PREPARATION AND RESTORATION

The Contractor is responsible for setup and the restoration of each collection site to the satisfaction of the Department. The Contractor shall coordinate plans for setup, preparation, and operation with the Department. Prior to the collection event, the waste handling/work area of each collection site shall be surrounded by a berm adequate to contain any spilled waste and a plastic tarp shall be placed over this area.

The Contractor is responsible for placing and removing the berm material and for providing the necessary equipment to do so. The Contractor will evaluate the participants load condition prior to unloading to determine the potential for spillage while unloading, and if the materials and conditions warrant, the vehicle unloading area shall be covered with an impermeable material able to keep spilled materials from contacting the surface area. Collection sites will be restored by the Contractor to the satisfaction of the Department.

Appendix III

33. CONTRACTOR'S DUTIES

Contractor shall:

A. Attend any organizational meeting(s) as required by the Department prior to the pesticide collection days.

B. Make an on-site inspection of each collection site.

C. Be responsible for site safety, preparation, security and restoration including placement of berms, and tarping adequate for spill containment and cleanup, and inclement weather.

D. Provide twenty-four hour site security personnel from site set up to completion of site restoration.

E. Clearly mark the chemical handling area. Establish and monitor ingress and egress for the area,

F. Post signs indicating that participants are to remain in their vehicles; no smoking, eating or drinking; eye wash and shower locations; and fire extinguisher locations.

G Place cones to show traffic pattern for entering and exiting collection site.

H. Unload vehicles, sort, inventory, package, store and arrange for the final treatment or disposal of all collected waste and transporting of the waste to treatment and disposal facilities.

I. All waste materials are to be packed by the end of each collection event and transported off-site the same day, or the following day with Department approval.

J. Keep records for each waste source including pesticide wastes by trade/generic name and amounts collected for each collection event. Participants' registration forms will be provided to the Contractor prior to the events.

K. Assign U.S. Department of Transportation (DOT), and Environmental Protection Agency (EPA) hazardous waste numbers.

L. Provide all materials necessary to labpack or overpack the wastes, e.g., drums, absorbent, labels, tools; any item not mentioned, but required. Prepare labpacks and overpacks for treatment or disposal.

M. Prepare drum inventory lists, shipping labels or manifests, and waste profiles as required.

N. The bulking procedures shall be conducted only after the collection is completed, and participants have left the site.

O. Transport wastes to licensed treatment or disposal facility and contract for and ensure the wastes final disposal or treatment.

34. EQUIPMENT AND PERSONNEL FOR LOADING

The Department will not provide equipment nor personnel to assist the Contractor to load its truck(s) at the time of waste collection. It is the Contractor's responsibility to provide necessary equipment and personnel to complete the collection. Loading may be performed before or after State's normal work hours, on Saturdays, Sundays or holidays, with prior approval from the Department.

35. WASTE SAMPLING AND ANALYSIS

A. The Contractor will identify all unknown pesticide wastes through field hazardous waste characterization "Hazcat" tests and profile as required for acceptance by facilities for final treatment or disposal. If a particular pesticide waste must be sampled for laboratory analysis, the Contractor shall immediately notify the Department, and shall establish appropriate documentation.

B. If samples are submitted for laboratory analysis, these samples shall be handled, sorted, and analyzed in accordance with appropriate sampling and laboratory practices in accordance with State and EPA. The Contractor or Contractor's laboratory will strictly adhere to prescribed methods, including provisions for sample preparation, prescribed equipment, detection limits and quality assurance and quality control procedures.

C. Written analysis results must be submitted to the Department within fourteen (14) calendar days of sample submission. Rush analyses must be completed within forty-eight (48) hours of sample submission.

D. The Contractor must identify any wastes from the registration forms which may not be accepted by any treatment or disposal facility. The Contractor will be responsible for all waste collected to ensure proper and appropriate treatment or disposal.

E. Waste includes the containers as provided by participants during collection events.

36. WASTE RECORDS AND PACKAGING

A. The Contractor shall provide a complete log of the waste by source, shipping container device and number, weight or volume, waste characteristic(s) and the destination facility adequate to fully account for all waste material from the point of collection (source) to the point of reuse, recycling, treatment or disposal.

B. If any storage facilities are expected to be used, the Contractor will notify the Department of these facilities, and provide a description of the facilities, including state and Resource Conservation and Recovery Act (RCRA) (42 USC section 6901 et seq.) permit status.

C. The Contractor shall label and mark containers as required by [State regulation citation] and 40 C.F.R Part 262.

37. MANIFESTING SHIPPING. TREATMENT AND DISPOSAL DOCUMENTATION

A. The Contractor will comply with the manifest system of record keeping as required in [State regulation citation] and by 40 C.F.R. Parts 262 and 263. A current uniform hazardous waste manifest or manifest required by the consignment state is required for removal of all hazardous wastes from the collection sites.

B. The Contractor shall provide and prepare all manifests. If necessary, several manifests may be prepared from each location. The manifest will be reviewed, and approved by a representative of the Department prior to or at the time of waste pick up. Manifests shall be submitted as prescribed by the State and EPA regulations.

C. The following documents are to be returned to the Department by the Contractor.

(1) A copy of the signed manifests within 24 hours of the Contractor/Generator's signature.

(2) Certificates of treatment and/or disposal signed by a responsible Disposal Facility Official within thirty (30) days of receipt of signed manifest. If a certificate of disposal is not available within thirty (30) days, the Department requires an estimate, submitted in writing of when the waste will be treated and/or disposed. This estimate must be submitted within thirty (30) days and the estimated final date of treatment or disposal must be within six (6) months. A certificate of disposal is required by the Department when the waste is ultimately treated or disposed.

38. REPORTS AND DOCUMENTATION

The Contractor shall promptly complete the following reports. All reports required under this section must be thoroughly and accurately completed to the satisfaction of the Department

A. All records of wastes received during the collection events and manifests prepared must be submitted to the Department within ten (10) days of completion of the collection events.

B. A spill incident report for each spill containing the information of [State regulation citation].

C. Any deviation of more than ten (10) days from the project schedule provided in the Contract and the cause for such deviation.

D. Any land ban exemption notifications provided to EPA.

E. Manifest discrepancy reports, if necessary.

F. Certificates of final treatment and/or disposal.

G A final report summarizing all activities which occurred during the project period must he completed after final treatment/disposal of all wastes received during the coflection events and prior to final payment

H. Provide documentation that scales can be certified for use in [the state].

39. HAZARDOUS WASTE TRANSPORTATION

A. Contractor agrees to provide the Department with the name, address, EPA identification number and a brief description of each of the hazardous waste transporters it intends to use in the performance of this contract. The Contractor shall provide the Department with the hauling permit numbers for each transporter for each of the states, in addition to the State of [State], in which the transporter will operate. Contractor agrees that no transporter other than those listed will be used without obtaining the prior written approval of the Department.

B. Placarding of each transportation vehicle will be in compliance with [State regulation citation] and by C.F.R. Part 262. In the event of a discharge of the waste during transportation, the Contractor shall take immediate action to protect public health and the environment as required by [State regulation citation] and by 40 C.F.R. Part 263.

40. FINAL TREATMENT/DISPOSAL

A. All collected wastes are to be incinerated. The Contractor shall inform the Department of any waste that cannot be incinerated prior to any other treatment and/or disposal. The type and quantity of the waste varies, but its characteristics and toxicity are such that these waste materials should not be disposed of in solid waste landfills.

B. Final treatment/disposal means either treatment so that such wastes no longer meet the definition of a hazardous waste as defined in 40 C.F.R. 261 et. seq. or disposal of a waste by a RCRA handling method specified in 40 C.F.R., Parts 264/265. Waste handling codes that describe methods of storage do not meet the definition of final treatment /disposal under this contract. Interim treatment of the waste such that the waste still meets the definition of a hazardous waste as defined in 40 C.F.R. 261 et. seq. does not meet the definition of final treatment/disposal under this contract. Further, the Contractor shall comply with the State's land disposal restrictions (reference [State regulation citation] and 40 C.F.R. Part 268).

C. All facilities used for interim treatment or final treatment/disposal of wastes shall have as a minimum, an EPA/State approved interim status permit showing EPA hazardous waste numbers for each waste the facility is permitted to handle, as described by 40 C.F.R. 261 Subparts C and D.

D. Mere acceptance of the hazardous waste at a properly permitted treatment, storage, or disposal facility does not meet the definition of final treatment/disposal undcr this contract. It is the Contractor's responsibility to obtain all necessary documentation to prove that the final treatment/disposal has been accomplished

E. The facilities which will be used for final treatment and/or disposal shall be fully in compliance with 40 C.F.R. Parts 264 and 265.

F. The Contractor shall notify the Department of any circumstances which could cause delays at facilities to achieve final treatment or disposal.

41. LAND DISPOSAL RESTRICTIONS AND TREATMENT STANDARDS

The Contractor shall comply with all aspects of state and EPA land disposal restrictions and treatment standards. The Contractor is responsible for the preparation of all land disposal restriction documentation which will be verified by the Department.

42. ADDITIONAL WASTES

The Department shall determine if additional wastes will be accepted at each collection location. If so, Contractor shall weigh the additional wastes and immediately inform the Department.

43. INVOICING

A. Contractor shall provide an original and two (2) copies of invoices to the Department.

B. Payment invoices must include the following information:

(1) Invoice date;

(2) Name of Contractor;

(3) Pounds of waste collected;

(4) Manifest numbers and date of shipment, including bill of lading number and weight of shipment; and

(5) Waste Profile Numbers as applicable.

44. PAYMENT

Payments shall be made by the Department on the basis of actual services completed according to the following schedule:

(A) The Department shall compensate the Contractor for its services at $2.07 per pound for the first 30,000 pounds collected, but if more than 30,000 pounds of waste is collected then the rate shall be $1.42 per pound of waste collected. In additional to the rate per pound, an additional payment of $1,000 shall be paid to the Contractor for each additional collection location,

(B) The Contractor will receive fifty percent (50%) of the compensation to which it is entitled from the Department upon:

1. Successful completion of the collection events and submission of required reports including the invoices, and

2. Successful completion of the laboratory characterization of unknown waste and submission of required reports.

(C) An additional forty-five percent (45%) of the compensation which the Contractor is entitled will be paid as certificates of treatment or disposal are received. This payment will be made on a pro-rata basis. For example, if certificates are received covering 10% of the waste collected, 10% of the 45% will be paid.

(D) The final five percent (5%) shall be retained by the Department for payment until submission of a final contract report is approved and accepted by the Department and until final treatment/disposal of all wastes received during collection events, including the submission of “Certificates of Disposal” documenting the final treatment and/or disposal of the wastes.

(E) Payments to Contractor shall fully compensate Contractor for all risk, loss, damages or expense of whatever nature and acceptance of payment shall constitute a waiver of all claims Contractor may have. This shall be the sole and complete compensation for services rendered by the Contractor.

Appendix III

45. MERGER CLAUSE

This agreement constitutes the entire agreement between the parties. No waiver, consent, modification or change of terms of this agreement shall bind either party unless in writing, signed by the parties, and attached hereto. Such wavier, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.

Appendix IV - Contact Information for Some Hazardous Materials Contractors

Advanced Environmental Technical Services (AETS)
121000 Browns Gulch Road Butte, MT
(406) 782-4201
Tel: (800) 735-8964

Care Environmental Corp.
10 Orben Drive
Landing, NJ 07850
Tel: (973) 361-7373
Fax: (973) 361-5550
Out of NJ: (800) 494-CARE
info@careenv.com
http://www.careenv.com/

Clean Harbors Environmental Services
Corporate Offices
1501 Washington Street
P.O. Box 859048
Braintree, MA 02185-9048
Tel: (781) 849-1800 or (800) 282-0058
http://www.cleanharbors.com/

Ecoflo, Inc
8520-K Corridor Road
Savage, MD 20763
Tel: (301) 498-4550

ENSCO Services
National Sales Office
309 American Circle
El Dorado, AR 7130
Tel: (800) 844-7173
Fax: (870) 864-3653
Contact: Molly Zeigler
http://www.enscoinc.com

HAZ-M.E.R.T. Inc.
2633 Laurel Circle
Rogers, AR 72758
Tel: (501) 621-9707
Fax: (501) 621-5263
http://www.hazmert.com

Heritage Environmental Services, LLC
2 Avenue D
Williston, VT 05495
Phone: (802) 860-1200
Fax: (802) 860-7313
Adam Hoy - Facility Manager
Ed McMahon - Sales Manager
Dan Harty - Technical Sales Representative
Kendra Demarest - Technical Sales Representative

Headquarters are located at:
7901 West Morris St.
Indianapolis, IN 46231
Phone: (317) 243-0811 or (800) 827-4374
Fax: (317) 486-5085
http://www.heritage-enviro.com/

LWD, Inc.
PO Box 327
Calvert City, KY 42029
Tel: (270) 395-8313
Fax: (270) 395-8153
http://www.lwd-inc.com/totalWasteManagement/content.html

MSE Environmental, Inc.
880 West Verdulera Street
Camarillo, CA 93010
Tel: (805) 987-0217
Fax: (805) 987-8718

Appendix IV

Onyx Environmental Services
3225 Aviation Avenue, Suite 400
PO: 33133
Miami, FL
Tel: (305) 854-2229
Fax: (305) 854-2272
Website : http://www.onyxindustrialservices.com

Philip Services Corporation
345 Horner Avenue
Toronto, ON Canada
M8W 1Z6
Tel: (416) 253-6000
Fax: (416) 253-6699
E-mail: info@demolish.org

Safety-Kleen, Inc.
Chemical Services Division
1122 Lady Street
Columbia, South Carolina 29201
(803) 933-4200
www.safety-kleen.com

Table V-1: Number of Participants

State	Pre-89	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTAL	Ave/ year	# yrs of data
WI			279	122	736	1,446	934	1,061	1,035	865	858	732	1,314	9,382	853	11
TX					284	654	324	220	579	500	575	3,620	154	6,910	768	9
WA	137	86	121	355	284	218	332	177	247	400	353	532	377	3,619	278	13
PA						179	380	345	980	421	657	157	no data	> 3,119	446	7
ND	no data [1]	no data			396		608	145	341	484	367	321	332	> 2,994	374	8
KS									1,348	699	353	427	287	3,114	623	5
OH						60	318	240 [2]	618 [2]	671 [2]	169 [2]	373	416	> 2,865	358	8
VA			69		191	111	531	235	159	172	111	149	149	1,877	188	10
IL			89	58			106	398			63	185	64	963	138	7
TN											359	290	285	934	311	3
KY				90				30	76	84	177	202	158	817	117	7
ME	93 [3]	173							100	139	65	39	48	> 657	94	7
LA			no data						621					> 621	621	1
MT							107	70	125	125	108		85	620	103	6
AL							414	56				81	26	577	144	4
NY						54		203	247			43	14	561	112	5
FL								no data	180	no data	39		273	> 492	164	3
IN			no data		35	73	110	33	no data	40	no data		39	> 330	55	6

State	Pre-89	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	TOTAL	Ave/ year	# yrs of data
CO								67		114		44	43	268	67	4
UT						21	27	45	27	25	29	31	46	251	31	8
MD								57	70	32	40	28		227	45	5
MA			no data								107	94	no data	> 201	101	2
SD						no data	no data	no data	no data	no data	114	66	no data	> 180	90	2
NH			132											132	132	1
HI	86	44												130	65	2
MO			no data						85	no data				> 85	85	1
CT			no data					26	49					> 75	38	2
NV								no data	no data	no data	70	no data	no data	> 70	70	1
WV							no data	30	11	no data	25			> 66	22	3
SC	46		14-16											60-62	30-31	2
WY					40									40	40	1
RI			6											6	6	1
Total	362	303	710-712	625	1,966	2,816	4,191	3,438	6,898	4,771	4,639	7,414	4,110	>42,243	273	155

Notes: (1) For North Dakota, there are no data on the number of participants in the 1980, 1984 and 1988 programs. (2) For Ohio, information on the number of participants isn't available for the full year from 1995 through 1998. This represents the number of participants for the events for which this information is known (from one to three events) during these years. (3) For Maine, there are no data on the number of participants in the 1982 and 1984 programs. There were 93 participants in 1986.

Table V-2 Average Quantity of Pesticides Collected per Participant (pounds)

State	pre-89	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Ave.
WV							no data	2,000	1,699	no data	1,250			1,666 [1]
LA			no data						649					649 [1]
UT						545	648	313	494	756	905	552	578	579
TX					1,389	1,037	854	605	810	556	461	152	673	456
FL								no data	103	no data	692		626	440 [1]
VA			461		300	614	419	264	478	432	432	655	546	436
WY					400									400
CT			no data					265	469					399 [1]
NY						257		292	489			572	69	391
MD								585	213	420	521	159		383
KY				562				290	691	521	212	252	218	341
ND	no data [2]	no data			204		217	333	277	360	359	495	503	330 [1]
AL							172	987				622	487	328
TN											279	345	351	321
OH						150	355	350 [3]	341 [3]	304 [3]	296 [3]	331	262	315
CO								254		297		404	368	315
MA			no data								364	232	no data	303 [1]
WA	360	409	517	244	288	255	267	291	328	255	265	286	370	298
PA						166	158	238	306	413	286	549	no data	295 [1]

State	pre-89	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Ave.
MT							123	207	514	211	202		461	289
SD						no data	no data	no data	no data	no data	248	350	no data	285 [1]
NV								no data	no data	no data	263	no data	no data	263 [1]
IL			146	113			257	271			422	300	243	262
WI			140	79	114	99	115	149	166	278	192	205	193	162
NH			152											152
IN			no data		123	82	82	244	no data	129	no data		432	150 [1]
ME	129 [4]	254							69	65	123	181	67	137 [1]
HI	145	114												134
SC	147	25-29												115-119
KS									72	66	54	96	467	108
MO			no data						71	no data				71 [1]

Notes: (1) This represents the average quantity for the year or years with data. (2) For North Dakota, there are no data for 1980, 1984 and 1988. (3) For Ohio, information on the number of participants isn't available for the full year from 1995 through 1998. This represents the average quantity per participant for the events for which the number of participants is known (from one to three events) during these years. (4) The information for Maine is for 1986. There are no data for 1982 and 1984.

Appendix VI - State Web Sites

Alabama: Department of Agriculture and Industries
http://www.agi.state.al.us/

Alaska: Department of Environmental Conservation, Division of Environmental Health (includes link to the pesticide program)
http://www.state.ak.us/dec/deh/pesticides/home.htm

Arizona: Department of Agriculture
http://agriculture.state.az.us/

Arkansas: State Plant Board (regulates pesticides and other things)
http://www.plantboard.org/pesticides_about.html

California: Department of Pesticide Regulation
http://www.cdpr.ca.gov/
Http://www.dtsc.ca.gov/index.html

Colorado: Dept. of Agriculture - Division of Plant Industry
http://www.ag.state.co.us/DPI/programs/programs.html

Connecticut: Department of Environmental Protection, Bureau of Waste Management, Pesticide Management Program
http://dep.state.ct.us/wst/index.htm

Delaware: Dept. of Agriculture Pesticides Section
http://www.state.de.us/deptagri/
http://www.dswa.com

Florida: Division of Agricultural Environmental Services - Bureau of Pesticides
Florida Department of Environmental Protection
http://www8.myflorida.com/myflorida/environment.htm
http://www.dep.state.fl.us/waste/
Clean sweep specific
http://www.dep.state.fl.us/waste/categories/cleansweep-pesticides/default.htm

Georgia: (Clean Sweep specific) Dept. of Agriculture Pesticide Division - Pesticide Recycling
http://www.agr.state.ga.us/plant_ind/html/pesticide_recycling.html
http://www.ag.state.ut.us/divisns/plantind/utahpest/

Hawaii: Dept. of Agriculture - Pesticides Branch
http://www.hawaiiag.org/hdoa/pi_pest.htm

Idaho: (Clean Sweep specific) Idaho State Dept. of Agriculture - Pesticide Disposal Program
http://www.agri.state.id.us/agresource/pdp.htm

Illinois: Dept. of Agriculture Environmental Programs - several pesticide program links
http://www.agr.state.il.us/Environment/Pesticide/pestuses.html

Indiana: Office of the State Chemist (regulates the distribution and application of pesticides)
http://www.isco.purdue.edu/index_pest.htm

Iowa: Dept. of Agriculture and Land Stewardship - Pesticide Bureau
http://www2.state.ia.us/agriculture/pesticidebureau.htm

Kansas: Dept. of Agriculture - Pesticide Section
http://www.ink.org/public/kda/phealth/phpest/index.htm
http://www.kdhe.state.ks.us/waste

Kentucky: (Clean Sweep specific) Brief description of the Office for Environmental Outreach/ Division Pesticides, which operates the Rinse and Return Program and the Pesticides Collection Program
http://www.kyagr.com/enviro_out/pestweed/programs/services/collection.htm

Appendix VI

Louisiana: Division of Pesticide and Environmental Programs (contact people list)
http://www.ldaf.state.la.us/

Maine: (Clean Sweep specific) Board of Pesticides Control - short description of Obsolete Pesticides Collection
http://www.state.me.us/agriculture/pesticides/homepage.htm

Maryland: (Clean Sweep specific) Maryland Department of Agriculture - Pesticide Disposal Program
http://www.mda.state.md.us/plant/disposal.htm

Massachusetts: (Clean Sweep specific) Pesticide Collection, Storage and Disposal page - various links from there to specific pages on Pesticide Collection programs
http://www.state.ma.us/dfa/pesticides/waste/index.htm

Michigan: (Clean Sweep specific) Michigan Groundwater Stewardship Program - Michigan Clean Sweep
http://www.mda.state.mi.us/environm/groundwater/cleansweep/index.html

Minnesota: (Clean Sweep specific) Minnesota Department of Agriculture - Waste Pesticide Collection Program
http://www.mda.state.mn.us/appd/wastepest

Mississippi: (Clean Sweep specific) Bureau of Plant Industry - Waste Pesticide Disposal Programs
http://www.mdac.state.ms.us/Library/BBC/PlantIndustry/PesticidePrograms/WastePesticideDisposalPrograms.html

Missouri: Department of Natural Resources
http://www.dnr.state.mo.us/homednr.htm

Montana: (Clean Sweep specific) Pesticide Collection Sponsored by Montana Dept. of Agriculture
http://www.agr.state.mt.us/programs/asd/pestdisp.shtml

Nebraska: Dept. of Agriculture Plant Industry Division - Pesticide Program
http://www.agr.state.ne.us/division/bpi/pes/pest1.htm

Nevada: (Clean Sweep specific) Waste Pesticide Disposal (as part of Dept. of Agriculture's Pesticide Programs page)
http://agri.state.nv.us/pestprog/index.htm#WastePesticideDisposal

New Hampshire: Department of Agriculture, Markets and Food
http://www.state.nh.us/agric/aghome.html

New Jersey: Department of Environmental Protection, Pesticide Control Program
http://www.state.nj.us/dep/enforcement/pcp/
http://www.state.nj.us/dep/index.html

Association of New Jersey Household Hazardous Waste Coordinators
http://www.njhazwaste.com

New Mexico: Department of Agriculture
http://nmdaweb.nmsu.edu/

New York: Dept. of Environmental Conservation - Pesticides Management Program
http://www.dec.state.ny.us/website/dshm/pesticid/pesticid.htm

North Carolina: (Clean Sweep specific) Dept. of Agriculture & Consumer Services - Pesticide Distribution, Storage, and Disposal (with link to Pesticide Disposal Assistance Program)
http://www.agr.state.nc.us/fooddrug/pesticid/pestdisp.htm

North Dakota: Dept. of Agriculture - Pesticide Division
http://www.agdepartment.com/

Ohio: Department of Agriculture
http://www.state.oh.us/agr/

Oklahoma: Department of Agriculture
http://www.state.ok.us/~okag

Oregon: Department of Environmental Quality, Waste Prevention and Management Program
http://www.deq.state.or.us/wmc/index.htm

Pennsylvania: (Clean Sweep specific) Dept. of Agriculture, Bureau of Plant Industry home page (little on pesticides)
http://www.state.pa.us/PA_Exec/Agriculture/bureaus/plant_industry/index.html

Rhode Island: Department of Environmental Management, Division of Agriculture
http://www.state.ri.us/dem/programs/bnatres/agricult/index.htm

South Carolina: Department of Pesticide Regulation (Clemson University)
http://cufp.clemson.edu/dpr/index_flash.html

South Dakota: (Clean Sweep specific) Dept. of Agriculture Pesticide Program - Unusable Pesticide Collection
http://www.state.sd.us/doa/das/hp-pest.htm#waste

Tennessee: (Clean Sweep specific) Agricultural Pesticide Waste Collection Program
http://www.state.tn.us/agriculture/regulate/wastes.html

Texas: (Clean Sweep specific) Agricultural Waste Pesticide Collection Program
http://www.tnrcc.state.tx.us/exec/oppr/agwaste/agwaste.html

Utah: Utah State Pesticide Applicator Training Guide
http://ag.utah.gov/plantind/pest_app.shtml

Vermont: (Clean Sweep specific) Waste Pesticide Collection Schedule for Farmers and Homeowners (from Dept. of Agriculture - Plant Industry Division homepage)
http://www.state.vt.us/agric/wastepest.htm

Virginia: (Clean Sweep specific) Pesticide Disposal Program
http://www.vdacs.state.va.us/pesticides/disposal.html

Washington: (Clean Sweep specific) Dept. of Agriculture Pesticide Management - Waste Pesticide Collection
http://www.wa.gov/agr/pmd/pesticides/collection.htm

West Virginia: Dept. of Agriculture Plant Industries Division - Pesticide Regulatory Programs
http://www.state.wv.us/agriculture/home/home.html

Wisconsin: (Clean Sweep specific) Agricultural Clean Sweep
http://datcp.state.wi.us/arm/agriculture/pest-fert/clean-sweep/

Wyoming: Department of Agriculture
http://wyagric.state.wy.us

Appendix VII - Sample Emergency Plan

MINNESOTA DEPARTMENT OF AGRICULTURE
WASTE PESTICIDE COLLECTION PROGRAM
SITE SAFETY AND EMERGENCY CONTINGENCY PLAN
Waste Pesticide Collections - Southeast Minnesota
June 2001

Prepared by: Stan Kaminski
Minnesota Department of Agriculture - Agronomy and Plant Protection Division
90 West Plato Boulevard – St. Paul, MN 55107-2094
Phone: (800) 657-3986 or (651) 297-1062 – FAX: (651) 297-2271

I. CONTACTS

A. MN Department of Agriculture (MDA): Stan Kaminski, 90 West Plato Blvd., St. Paul, MN 55107-2094, Phone: (651) 297-1062; FAX: (651) 297-2271.
B. Contractor: ONYX Environmental Services, 3230 101st Ave., NE, Blaine, MN 55449, Phone: (763) 786-9457; FAX: (763) 786-3514.
C. Counties – Southeast 2
Mower - Lowell Franzen, Mower County Ag Inspector, 507/437-9460
Freeborn - Richard Hoffman, Freeborn County Environmental Sce., 507/377-5186
Rice - Brad Carlson, MN Extension Service, Rice County, 507/332-6109
Steele - Tim Arit, MN Extension Service, Steele County, 507/444-7689

II. SCHEDULE AND FACILITIES

Collections from **8:00 AM to 11:00 AM** or **2:00 PM to 5:00 PM**
Wednesday, June 20, 8 AM - 11 AM: Harvest States Coop, Elkton
Wednesday, June 20, 2 PM - 5 PM: Freeborn County Fairgrounds, Albert Lea
Thurs., June 21, 8 AM - 11 AM: Rice Cnty Recy. Ctr, 3800 145th St. E,Dundas
Thurs., June 21, 2 PM - 5 PM: Central Coop Soil Sce, 3301 NW 21st Ave, Owatonna

III. SCOPE

Waste pesticide collections are safe and accessible waste pesticide disposal opportunities for farmers and businesses. Participants are invited to bring their waste insecticides, herbicides, and other pesticides to any MDA designated collection site.

IV. TASKS

The hazardous waste contractor will collect, segregate classify and package waste pesticides. Following the collection, the collected wastes will be transported to a licensed hazardous waste incinerator for destruction. Collected wastes will be handled, transported, and destroyed in compliance with all applicable regulations.

V. PERSONNEL AND WORK AREA LAYOUT

Approximately 4 people will be at the collection site during event hours: 3 contractor staff handling

collected wastes and one MDA staff supervising site activities. Generally two volunteer workers at the site collect data and direct traffic. It is expected that 20 to 30 persons will dispose of waste per site. Participants drive to unloading area where waste is removed. After their vehicle is unloaded, they leave the site. Unloaded wastes are identified, segregated and packed by contractor staff for transport. After packing, waste is loaded onto trucks for transport.

VI. EMERGENCY PREPAREDNESS AND EMERGENCY RESPONSE

An orientation session will be conducted prior to opening each collection site. The session provides an overview of the collection process, outlines specific work tasks, and reviews MDA implemented safety plans and emergency procedures. Site workers have access to running water, rest areas, a phone, and personnel protective and safety equipment including: protective clothing, eye wash station, first-aid kit, eye and skin neutralizer, and safety station, ground cover, spill response, portable fume hood, ABC fire extinguisher, respirators and self-contained breathing apparatus, decontamination facilities, and emergency warning system. MDA and contractor staff will be first responders to on-site emergencies, other responders may be called if more help is needed (fire, injury, or extensive release).

VII. EMERGENCY RESPONDERS, HOSPITAL DIRECTIONS & EVACUATION ROUTE

Wednesday, June 20: Harvest States Coop, Elkton

Hospital - St. Olaf Hospital , Austin	507/437-4551
Fire - Elkton Fire Department	911
Police - Elkton Police Department	911
Sheriff - Mower County Sheriff's Department	507/437-9400

Directions to Hospital: Exit site and head west on I-90 for 16 miles to Austin. Take the fifth Austin exit # 178A. Head south on 4th St. and take a left on 8th Ave. NW. Hospital is straight ahead.

Evacuation Route: Leave the site and travel north or south on highway.

[Equivalent phone numbers and directions given for Thursday, June 21]

VIII. OTHER EMERGENCY RESPONDERS

MN State Patrol, Dist. 2100 HQ, PO Box 6177, Rochester MN 55904 507/285-7406

HAZARD INFORMATION AND SERVICES

Chemtrek - Chemical and Incident Information	1-800-424-9300
Hazard Hotline -MSDS Information	651-221-3999 or 1-800-228-5635
Minnesota Duty Officer Incident Hotline - Pesticide Spills	1-800-422-0798
Minnesota Poison Control Center	651-347-3141 or 1-800-222-1222
National Response Center - Hazardous Material Spills	1-800-424-8802
Minnesota Department of Agriculture	651-297-2200
Minnesota Pollution Control Agency	651-221-3990 or 1-800-228-5635
Minnesota Department of Transportation	651-296-7109

Appendix VIII

COMPARISON OF PESTICIDES USED PER STATE VERSUS PESTICIDES COLLECTED AT CLEAN SWEEPS

Appendix VIII provides information on the estimated amount of pesticides used by the states and the amount of pesticides they have collected and disposed of during Clean Sweep programs. Data on the amount of pesticide active ingredient used in each state in 1992 and 1997 (from the National Center for Food and Agricultural Policy) was extrapolated to estimate the amount used from 1991 through 2000. EPA assumed that this same amount was used each decade beginning in the 1960's to estimate the pounds of pesticide active ingredient used by each state from 1961 to 2000. EPA chose 40 years because many of the pesticides collected at Clean Sweep events since 1980 are years or even decades old. Because the amount of active ingredient can range from less than 1 percent to over 80 percent of a formulated product, the total weight of formulated agricultural pesticides used per year is greater. The most common agricultural products contain from 10 percent to 50 percent active ingredient. This information was used to estimate a range of the amount of formulated product used in each state from 1960 to 2000. The amount of pesticides disposed through Clean Sweep programs can be compared to the estimated amount used.

The information in Appendix VIII can be used to provide rough estimates of the amount of uncollected pesticides in states with relatively new or less comprehensive programs. Texas has run an extensive Clean Sweep program for 9 years and has collected an estimated 0.06 percent of the pesticides used since 1961. Considering that the Texas program still collects significant quantities of pesticides, including more than 103,000 pounds in 2000, it is impossible to know what the final total (and percent) will be in Texas. However, if one assumes that Texas and Florida farmers and agricultural businesses have had similar pesticide management practices, Florida may have quite a bit of unwanted pesticides still requiring disposal. Florida just began a comprehensive Clean Sweep program last year, and has collected about 0.002 percent of the estimated amount of pesticides used in the last four decades. If the actual percent that needs to be disposed is similar to Texas' percent (assume 0.02 percent for simplicity), then the estimated amount that Florida may collect in a long-term, comprehensive Clean Sweep program is an order of magnitude larger than the current amount, or about 2.9 million pounds.

COMPARISON OF PESTICIDES USED PER STATE VERSUS PESTICIDES COLLECTED AT CLEAN SWEEPS

State	Estimated (lbs. A.I.) Total Used 1991 - 2000 [1]	Estimated (lbs. A.I.) Total Used 1960 - 2000 [2]	Estimated Range (lbs. Formulated) Total Formulated Product Used, assuming 10% to 50% A.I. 1960 - 2000 [3]	Amount Disposed (lbs. Formulated) in Clean Sweeps through year 2000	Total Disposed as % of Total Used 1960-2000	Midpoint of Disp vs. Used	Type of Pro-gram [4]
CA	1,621,361,000	6,485,444,000	12,970,888,000 - 64,854,444,000	1,186,828	0.002% - 0.009%	0.006%	C
FL	906,399,000	3,625,596,000	7,251,192,000 - 36,255,960,000	292,929	0.0008%-0.004%	0.002%	C
IA	550,028,000	2,200,112,000	4,400,224,000 - 22,001,112,000	1,130,555	0.005% - 0.03%	0.018%	P
IL	503,623,000	2,014,492,000	4,028,984,000 - 20,144,920,000	252,316	0.001% - 0.006%	0.004%	C
ID	470,340,000	1,881,360,000	3,762,720,000 - 18,813,600,000	322,604	0.002% - 0.009%	0.006%	P
WA	377,501,000	1,510,004,000	3,020,008,000 - 15,100,040,000	1,079,754	0.007% - 0.04%	0.024%	P
TX	363,298,000	1,453,192,000	2,906,384,000 - 14,531,920,000	3,149,820	0.02% - 0.10%	0.060%	P
NC	351,745,000	1,406,980,000	2,813,960,000 - 14,069,800,000	1,116,477	0.008% - 0.04%	0.024%	P
NE	349,158,000	1,396,632,000	2,793,264,000 - 13,966,320,000	1,336,033	0.01% - 0.05%	0.030%	C
IN	289,131,000	1,156,524,000	2,313,048,000 - 11,565,240,000	68,147	0.0006%-0.003%	0.002%	C
MN	282,216,000	1,128,864,000	2,257,728,000 - 11,288,640,000	2,036,380	0.02% - 0.09%	0.060%	P
GA	260,778,000	1,043,112,000	2,086,224,000 - 10,431,120,000	778,032	0.007% - 0.04%	0.024%	C
MI	216,015,000	864,060,000	1,728,120,000 - 8,640,600,000	852,118	0.01% - 0.05%	0.030%	P
KS	218,457,000	873,828,000	1,747,656,000 - 8,738,280,000	337,455	0.004% - 0.02%	0.012%	P
AR	205,826,000	823,304,000	1,646,608,000 - 8,233,040,000	35,689	0.0004%-0.002%	0.0012%	I
MO	207,423,000	829,692,000	1,659,384,000 - 8,296,920,000	9,800	0.0001%-0.0006%	0.0003%	I
OH	188,404,000	753,616,000	1,507,232,000 - 7,536,160,000	1,088,713	0.01% - 0.07%	0.040%	P
OR	190,785,000	763,140,000	1,526,280,000 - 7,631,400,000	497,443	0.007% - 0.03%	0.019%	C
MS	175,099,000	700,396,000	1,400,792,000 - 7,003,960,000	989,886	0.01% - 0.07%	0.040%	C
ND	170,164,000	680,656,000	1,361,312,000 - 6,806,560,000	1,029,230	0.02% - 0.08%	0.050%	P
LA	161,993,000	647,972,000	1,295,944,000 - 6,479,720,000	408,200	0.006% -0.03%	0.018%	I
CO	162,703,000	650,812,000	1,301,624,000 - 6,508,120,000	84,498	0.001% - 0.006%	0.004%	I
SD	157,839,000	631,356,000	1,262,712,000 - 6,313,560,000	263,663	0.004% - 0.02%	0.012%	P
WI	153,507,000	614,028,000	1,228,056,000 - 6,140,280,000	1,523,995	0.03% - 0.12%	0.075%	P
SC	119,669,000	478,676,000	957,352,000 - 4,786,760,000	7,143	0.0001% - 0.0007%	0.0004%	I
NY	106,773,000	427,092,000	854,184,000 - 4,270,920,000	219,454	0.005% - 0.03%	0.018%	I

State	Estimated (lbs. A.I.) Total Used 1991 - 2000 [1]	Estimated (lbs. A.I.) Total Used 1960 - 2000 [2]	Estimated Range (lbs. Formulated) Total Formulated Product Used, assuming 10% to 50% A.I. 1960 - 2000 [3]	Amount Disposed (lbs. Formulated) in Clean Sweeps through year 2000	Total Disposed as % of Total Used 1960-2000	Midpoint of Disp vs. Used	Type of Pro-gram [4]
KY	94,681,000	378,724,000	757,448,000 - 3,787,240,000	278,367	0.007% - 0.04%	0.024%	P
AL	87,279,000	349,116,000	698,232,000 - 3,491,160,000	189,393	0.005% - 0.03%	0.018%	I
VA	92,660,000	370,640,000	741,280,000 - 3,706,400,000	818,799	0.02% - 0.11%	0.060%	P
PA	86,519,000	346,076,000	692,152,000 - 3,460,760,000	1,001,597	0.03% - 0.15%	0.09%	P
TN	80,566,000	322,264,000	644,528,000 - 3,222,640,000	300,000	0.009% - 0.05%	0.03%	P
MT	67,325,000	269,300,000	538,600,000 - 2,693,000,000	179,186	0.0007% - 0.03%	0.02%	P
OK	64,871,000	259,484,000	518,968,000 - 2,594,840,000	0			N
AZ	61,058,000	244,232,000	488,464,000 - 2,442,320,000	0			N
MD	36,066,000	144,264,000	288,528,000 - 1,442,640,000	86,990	0.006% - 0.03%	0.018%	C
NM	27,183,000	108,732,000	217,464,000 - 1,087,320,000	0			N
NJ	23,492,000	93,968,000	187,936,000 - 939,680,000	722,747	0.08% - 0.39%	0.240%	C
ME	24,484,000	97,936,000	195,872,000 - 979,360,000	120,209	0.01% - 0.06%	0.040%	C
WY	14,478,000	57,912,000	115,824,000 - 579,120,000	16,000	0.003% - 0.01%	0.007%	O
UT	14,322,000	57,288,000	114,456,000 - 572,880,000	145,261	0.03% - 0.13%	0.080%	P
DE	13,438,000	53,752,000	107,504,000 - 537,520,000	30,423	0.006% - 0.03%	0.018%	O
WV	9,233,000	36,932,000	73,864,000 - 369,320,000	239,430	0.07% - 0.32%	0.200%	C
MA	7,852,000	31,408,000	62,816,000 - 314,080,000	158,989	0.05% - 0.25%	0.150%	C
VT	5,158,000	20,632,000	41,264,000 - 206,320,000	65,953	0.03% - 0.16%	0.100%	P
CT	3,037,000	12,148,000	24,296,000 - 121,480,000	46,100	0.04% - 0.19%	0.120%	I
NH	1,882,000	7,528,000	15,056,000 - 75,280,000	20,000	0.03% - 0.13%	0.080%	O
NV	1,746,000	6,984,000	13,968,000 - 69,840,000	74,564	0.11% - 0.53%	0.320%	P
RI	488,000	1,952,000	3,904,000 - 19,520,000	some			O
AK	0	0	0	0			N
HI	0	0	0	17,471			I
Total	9,578,053,000	38,312,212	76,624,304,000 - 383,122,116,000	24,608,646	0.006% - 0.03%	0.018%	--

Notes: (1) The total pounds of active ingredient (AI) used 1990-2000 was calculated using the estimated quantity of AI used in each state in 1992 and 1997. The quantities for the other years was estimated by assuming the change (either increase or decrease) between 1992 and 1997 was the constant across the decade.
(2) The total pounds of AI used 1960-2000 was calculated assuming that the amount used in the 1990s was the same as the amount used in the other decades in