

# MANAGING HOUSEHOLD HAZARDOUS WASTE

or

*Making a Choice to Do Something without Going Broke*

**STATE PLANNING OFFICE  
STATE OF MAINE  
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**AUGUST 1995**

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**or**

*Making a Choice to Do Something without Going Broke*

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Effective July 1, 1995, Public Law 465 abolishes the Maine Waste Management Agency and reorganizes its responsibilities under the State Planning Office. The responsibility for administering the household hazardous waste requirements in statute have been transferred to the State Planning Office, including administering the EPA grant that funds this pilot project and assisting municipalities with managing household hazardous waste. References in this manual to the agency are assumed to mean "State Planning Office" in the future.

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## COMMON ABBREVIATIONS USED IN THIS MANUAL

agency	-	former Maine Waste Management Agency
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act or "Superfund"
CESQG	-	Conditionally-Exempt Small Quantity Generators (of hazardous waste) (federal regulation)
DEP	-	Department of Environmental Protection
HHW	-	household hazardous waste
LD	-	legislative document
MSDS	-	material safety data sheet
MRSA	-	Maine Revised Statute Annotated
MSW	-	municipal solid waste
OPP	-	Office of Pollution Prevention (Me DEP)
RCRA	-	Resource Conservation and Recovery Act
SPO	-	State Planning Office
SQG	-	small quantity generator (of hazardous waste) (state regulation)

## INTRODUCTION

The advisory committee for the Maine Waste Management Agency's pilot project for household hazardous (HHW) and small quantity generator (SQG) waste has spent the last several months gathering information on HHW. The committee has talked with:

- personnel from collection programs around Maine and the country;
- federal and state officials that regulate hazardous waste; and
- companies that provide collection and disposal services.

The collected knowledge has been assembled into this handbook for which a subtitle might be "Making the Choice to do Something about HHW Without Going Broke." A companion to the handbook is Household Hazardous Waste Collection Programs: An Organization's Guide to Planning, Orchestrating, and Surviving a Household Hazardous Waste Collection Day. Developed by the Center for Hazardous Materials Research at the University of Pittsburgh, this guide is a detailed, step-by-step look at every aspect of implementing an HHW collection program.

A goal of the pilot and the handbook has been to overcome fears of the prohibitive costs of HHW programs. The hope is that communities will use this knowledge to carry their plans forward; leaving it to the community to decide what the scale of those plans will be.

### PART I. A HISTORY OF HOUSEHOLD HAZARDOUS WASTE IN MAINE

*One of the first and most common questions asked by municipal officials and others considering household hazardous waste (HHW) collection is, "who has done it? what was their experience? what has gone on before?"*

#### A. HOUSEHOLD HAZARDOUS WASTE: MAINE STATE EFFORTS

##### 1989 Me DEP Report

For the purposes of this guidebook, "*before*" begins with a report issued by the Me DEP in April, 1989. That report, titled, "A Program Plan to assist Persons who Generate up to 1,000 Kilograms of Hazardous Wastes per Calendar Month *and* A Plan to Minimize and Dispose of Household Hazardous Waste," was developed for and presented to the Joint Standing Committee on Energy and Natural Resources.

The section on HHW collection outlined:

- the federal exemption from regulation for household hazardous waste as defined in CFR 41 Section 2614
- the reasons for concern over HHW

- the characteristics of HHW and a list of consumer products normally associated or considered to be sources of HHW
- an outline of different types of collection programs, their costs and participation rates
- liability issues with HHW
- past HHW collections in Maine
- management options for HHW in Maine including; local communities assume all responsibility for HHW programs, local programs with state financial and technical assistance, complete state responsibility for statewide system of local collection events, and lastly, state-run, permanent HHW collection facilities
- recommendations for the creation of permanent regional collection facilities utilizing existing solid waste transfer stations and personnel with shared local and state financial responsibility

#### Statutory Charge to the Maine Waste Management Agency

Acting on DEP's recommendations, the legislature adopted the 1989 Solid Waste Management Law which created the Maine Waste Management Agency. It also included the following charge:

*"The agency shall develop and implement by July 1, 1991<sup>1</sup>, a statewide system for the collection and disposal of hazardous waste generated by households, public and private nonprofit institutions and small quantity generators."*

In reply, the agency developed and proposed a bill to accomplish this task. The bill, LD 1904:

- set a deposit fee on household hazardous consumer products where the fee would pay for collection and disposal of HHW; and
- gave the agency authority to establish a list of such products.

LD 1904 was defeated in the 1991 legislative session and no bills were offered in the subsequent years to fund HHW collection and disposal at the state level, nor have any local/state cost sharing proposals been brought forth. The on-going state budget crisis since 1991, the extreme pressure on the general fund, and the reluctance of the Legislature and the Executive Department to propose new fees or taxes as possible revenue sources has meant no state funding for HHW/SQG collection.

Still pursuing its obligation under the statute, the agency targeted three materials; waste oil, waste paint, and batteries. To improve the management of these materials, the agency pursued a variety of strategies; statutory definition changes, mandatory toxics reduction and recycling, and technical assistance.

<sup>1</sup> This date was subsequently advanced to 1993; then 1995; then repealed in 1995.



### *Waste Oil*

The agency recommends recycling waste oil through refinement and reuse. Several companies offer services that pick up waste oil for a fee and return filtered, tested, and refined oil through haul-back programs (see appendix A). Most communities are routinely collecting waste oil and burning it in waste oil furnaces. Proper handling, collection, and disposal reduces regulatory exposure and liability. The Portland Harbor Marine Debris Council and a working group of interested parties have been working to change the definition of "waste oil" to "used oil." This change would allow for the expansion of the collection effort now underway in most towns in Maine. Used oil would be considered a recyclable product instead of a hazardous waste. The intent is to capture all of the oil produced by "do-it-yourselfers" and to encourage more private businesses to get involved by increasing the ease of proper disposal.

### *Batteries*

Pushing for a reduction in the hazardous properties of batteries and for collection programs for batteries that could be recycled, the Maine Legislature enacted 38 MRSA §2165 and 2166. This law bans mercury-containing batteries and mandates recycling of certain batteries by some employers (see appendix B) In November 1993, the agency issued The Used Dry Cell Battery Management Plan, as part of its duties under the new law. The report outlines what can be done with household generated nickel-cadmium and small, sealed, lead-acid batteries. Briefly, municipal recycling or solid waste programs can collect and ship nickel-cadmium batteries to a battery processor and pay only for the shipping (see appendix A).

### *Paint*

The agency also issued The Waste Paint Management Report in 1994. Waste paint was chosen because it makes up the largest percentage in HHW collection programs. Processors are beginning to emerge that will take waste paint for recycling (see appendix A). The report outlines several short and long term strategies that could be employed to collect and manage waste paint depending upon the source and level of funding and the nature and number of participants.

### Other State Programs for HHW/SQG

Despite the lack of funding for any HHW collection and disposal, state agencies have moved forward in other areas (see appendix C for a list of state contacts).

### *Technical Assistance*

Technical assistance for the proper identification, management, and disposal options of HHW is available to all Maine citizens through the staff at the Maine Department of Environmental Protection, Bureau of Solid Waste and Hazardous Materials Control. This assistance is accessible over the telephone and in printed handouts dealing with different products and substances. Information is also available on alternatives to hazardous products as well as ways to reduce and or eliminate the generation of HHW. The ME DEP has a staff chemist to aid in the identification of materials.

DEP has also issued a set of guidelines to assist towns with holding collection events. The guidelines offer suggestions for collecting HHW while offering the greatest protection to the environment, personnel, and citizens (see appendix D). The State Planning Office (SPO) (former Maine Waste Management Agency) also assists towns with setting up HHW collection events and education programs.

The SPO houses a selection of reports from around the country detailing HHW collection programs done at municipal, county, and state levels. Although the cost data may weaken over time, the information on the education, promotion, operations, types and amounts of waste, and participation rates are still very useful for any group considering doing HHW collection (see bibliography).

Through its pollution prevention office (OPP), the ME DEP has created a technical assistance program for small quantity generators of hazardous waste. OPP helps those businesses reduce or eliminate their hazardous wastes through performing waste audits. The audits assist businesses with improving their operational efficiency and with identifying nonhazardous substitute products that can be used in their operations.

#### *Banned Pesticides*

The Maine Department of Agriculture has committed money and personnel to periodic collections of banned pesticides (DDT and Chlordane for example). Such materials often turn up when rural properties change hands. Up to now the collections have been dependent upon program funding levels in any given budget year. If citizens have what they suspect or know to be a banned or discontinued pesticide, they should call the Pesticide Control Board at the Department of Agriculture for positive identification. The Board thus maintains a list of reported locations of banned pesticides and will pick up the items as funding permits.

#### *Emergency Response*

Some hazardous materials, if released, can cause an immediate threat to the environment, individual safety, and public health. If such a situation occurs or is discovered, the Maine DEP maintains emergency response units in Portland, Augusta, Bangor, and Presque Isle.

#### *Grants*

Public Law 465, enacted in June 1995, contains the following language:

38 MRSA §2133, sub-§2-B is enacted to read:

*2-B. Household hazardous waste collection. The (state planning) office may, within available resources, award grants to eligible municipalities, regional associations, sanitary districts and sewer districts for household hazardous waste collection and disposal programs. In implementing this program, the office must seek to:*

- A. coordinate the household hazardous waste collection programs with overall recycling and waste management;*
- B. encourage regional economies of scale;*
- C. coordinate between private and public institutions; and*

*D. maximize opportunities for federal grants and pilot programs.*

There is currently no funding for this program.

*Pilots*

The former Maine Waste Management Agency recognized that piloting HHW collection programs would be the best way to develop information about costs and effectiveness and to develop recommendations for implementing collection programs.

Mid-Coast Solid Waste Cooperative (MCSWC) Used Paint Collection - On June 11, 1994, a collection day was held at the solid waste facility in Rockport for Knox County citizens. At the event, waste paint and related products and flammable liquids were accepted. The event was co-sponsored by MCSWC and Eastern Maine Development Corporation (EMDC) with a grant from the Farmer's Home Administration. The agency contributed \$5000 toward the program with the goal of developing a model for other communities interested in holding collection days.

The event ran four and one half hours at a cost of approximately \$20,000. Some 258 households participated from Camden, Rockport, Lincolnville, and Hope. A full report on the event, including the results of a participant survey conducted during the event, is available from EMDC.

HHW/SQG Minimization and Collection - In October 1993, the former Maine Waste Management Agency received an EPA grant to address hazardous waste. The project originated in October 1992 at a "consensus meeting" held at the Waste Watch Center in Andover Massachusetts. The goals of this meeting were:

- to review the current federal and state regulations as they applied to Household Hazardous Waste (HHW) collection and the collection and disposal of hazardous waste from Conditionally-Exempt Small Quantity Generators (CESQGs); and
- to develop ways to increase the efficiency of HHW collections and improve both the rate and the manner of compliance with those regulations by the CESQGs.

As a result of the meeting, the U.S. Environmental Protection Agency (EPA) Region 1 awarded grants to states to address the issues raised at the October meeting. The federal grants were to be matched with state funds.

Successful in its bid for a grant, the agency (see appendix E for pilot narrative) is to develop a collection program for household hazardous and small quantity-generated wastes. The goal is to assess the needs of towns and SQGs in managing hazardous wastes; develop guidelines for pollution prevention assistance to SQGs as well as a "how to" guide for municipal HHW collection programs; pilot the collection of HHW and SQG waste; and recommend cost-effective collection and management options (see appendix F for pilot progress report).

## **B. HOUSEHOLD HAZARDOUS WASTE: MUNICIPAL EFFORTS**

Municipalities have taken their own initiative on used motor oil; a significant part of the HHW stream and a potential serious source of groundwater pollution. Due to public concern and demand, used oil collection programs are now common in Maine either at town public works garages, solid waste transfer stations, or recycling centers. Much of the material is collected for use in waste oil furnaces in town buildings. Other programs utilize used oil collection companies who refine and recycle the waste oil.

Similar programs have not as yet been developed for other parts of the household hazardous waste stream. Although a small number of Maine towns have held HHW collection events over the last decade. The following is a listing of those programs that have been reported to state agencies (see appendix G for list of municipal contacts).

### Sanford

In September 1990, the town of Sanford held a general collection event that was co-sponsored and paid for by CYRO Industries, a local business. The contractor was Clean Harbors, Inc. of South Portland. The event lasted four hours with a budget of \$20,000.

### Brunswick

In April 1989, The Brunswick Area League of Women Voters sponsored a general HHW collection event. As a co-sponsor, the Me DEP presented the League with a \$10,000 grant for the event (this was a single, one-time grant that was never done before nor since). The contractor was Clean Harbors of South Portland. The event lasted two and a half hours at a cost of \$19,500. A full report of the event detailing all aspects is available from the ME DEP.

### Kittery

The town of Kittery has held HHW collection events since 1990. The first event was co-sponsored by the Kittery Navy Yard.

In 1991 and 1992, the town held their own waste paint collection weeks using their own personnel and pre-registering participants. The town received guidance for the event from the Me DEP. The contractor was Total Waste Management of Newington, NH. Program costs were estimated at \$3,000 per week. The per-participant cost range was \$110-115 dollars.

In 1993 and 1994, the general collection events have been hosted with program costs born in full or in part by the Kittery Sewer Department. Triumvirate Inc. has been the contractor. Event costs have been held to just below \$10,000 dollars per event.

Kittery is planning a collection day in 1995 with the costs shared 50/50 between the Sewer Department and the Public Works Department.

### Eliot

In September 1990, the town of Eliot held a HHW collection day. The contractor was Clean Harbors of Kingston, NH. The event was for five hours with a proposed budget of \$20,000.

### Berwick

In June 1991, the town of Berwick, in conjunction with the city of Somersworth, NH, held a collection event for paint and related products. The event attracted 11 residents of Berwick. The contractor was Total Waste Management of Newington, NH. The set up cost was \$750 dollars. The disposal cost was \$200 dollars per barrel.

### South Portland

The city of South Portland has held annual HHW collection events for the past seven years. The events has been co-sponsored by the City, through the auspices of the fire department; W.H. Shurtleff Co., a chemical products distribution company located there; and Clean Harbors, Inc., which is based and has its hazardous waste transfer facility in South Portland. The events have been general collections. Program costs began in the \$14,000 to \$16,000 range but have decreased somewhat over the years. The events which are held at the central fire station, have been well-advertised and well-received in South Portland.

## **C. HOUSEHOLD HAZARDOUS WASTE AND SMALL QUANTITY GENERATOR WASTES: STATE AND FEDERAL REGULATIONS**

### **1. What laws and regulations are HHW collection programs subject to?**

The State of Maine 06-096 CMR Hazardous Waste Management Rules, March 1994, adopted by the Me DEP contain the following statement under Chapter 850:

#### Identification of Hazardous Waste, Section (4), Exclusions

**(a) Substances which are not hazardous wastes. The following materials are not hazardous wastes for the purpose of this rule:**

**(vii) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse derived fuel) or reused. "Household waste" means any waste material (including garbage, trash, and sanitary waste from septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, picnic grounds, and day use recreation areas.)**

What does this mean?

**The key factor in any consideration of what regulations apply to household hazardous waste is that point of generation determines regulation.** That is to say a product that is purchased, used and discarded by a household is regulated differently than the same product purchased, used and then discarded by a small business, private or public institution.

This distinction or disparity has its source in federal law:

**RCRA**

*"All household wastes are exempt by definition from the Federal hazardous waste regulation promulgated under Subtitle C of The Resource Conservation and Recovery Act (RCRA). Section 261.4(b) (1) unconditionally exempts household wastes, including household hazardous waste, from the Subtitle C regulations even when accumulated in large quantities. This exemption also applies to HHW collected during an HHW collection program" (statement of clarification etc., US EPA, 11/1/88).*

The most basic statement that can be made about RCRA is that everything that is thrown away is subject to RCRA. "Subtitle C" is the part of RCRA which spells out all the federal standards and requirements for the identification and management of hazardous waste from cradle to grave.

In the Legislative history of RCRA, it is clear that it was the intent of Congress to not have the EPA treat household hazardous waste as a Subtitle C waste. EPA responded by declaring HHW a solid waste but not a hazardous waste, and for that reason it is exempt from RCRA subtitle C. Thus congressional purpose to keep RCRA out of the household (and out of consumer products) overruled the facts that HHW is both "hazardous" and a "waste."

*"This exemption remains in effect even through the transport and disposal of such wastes and any handlers of such wastes are not potentially liable under Subtitle C" (Me DEP 1989 Report).*

Along with the exemption, the EPA did however issue guidance on HHW to point programs in the direction the EPA wanted them to go.

*"Although HHW is exempt from the Federal RCRA Subtitle C hazardous waste regulations, EPA recommends that sponsors of HHW collection programs manage the collected HHW as a hazardous waste...In selecting a management option, the EPA recommends that program sponsors follow the waste management hierarchy of :*

- (1) reusing and recycling as much waste as possible;*
- (2) treating waste in a hazardous waste treatment facility; and, finally,*
- (3) disposing of remaining waste in a hazardous waste landfill.*

*...Although sponsors are not required to manage HHW as a hazardous waste, it is clear from seeing most programs in action, that, in fact, sponsors usually contract with hazardous waste management professionals to run the programs."*

In Maine's case the "sponsors" would most likely be municipal governments, solid waste districts, recycling programs, and waste water treatment plants or water pollution control authorities.

Maine's law mirrors the federal statute concerning HHW. In a letter requested by the agency's HHW Advisory Board dated 7/12/94, the ME DEP Hazardous Materials Bureau stated,"

*Pursuant to 06-096 CMR Maine Hazardous Waste Management Rules Chapter 850 (3) (A) (4) (a) (vii)...this exclusion (for HHW) applies regardless of the volume of waste, the characteristics of the waste, or the length of time the waste is held."*

There is, however, a federal law that does apply to HHW, which explains at least some of the confusion surrounding the rules for HHW collection. That federal law is:

### CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act, much better known by its pseudonym, "Superfund," has no exemption for HHW in its pursuit of parties liable to its enforcement actions. The basic facts about CERCLA are: If the EPA has to go in and clean up a site, they can seek to recover the cost of that clean up from absolutely everyone involved in the transporting of the waste to that site; and, even if a thousand parties contributed to creating a superfund site, if only one can be located, that one is liable for the entire clean up costs.

In reality, there are two ways a sponsor of an HHW collection event could find themselves liable under CERCLA:

- 1) if there was a spill or accidental release during the transport of the collected materials. In all likelihood, the spill would be contained, there would be minimal impact to the environment of either land or water, and the EPA would go after the transporters, who are required to carry liability insurance, as well as the sponsors.
- 2) if the hazardous waste disposal site to which they ship their HHW is declared a superfund site. As a practical matter, a sponsor's chances of sharing in the liability would be extremely small. The owners and operators of these facilities are well known and have to present the EPA with large financial assurances to be permitted and the contributors are well documented through required manifests.

There is one other way CERCLA can be applied to a municipality --if its own landfill was found to be superfund. Across the country, limiting the potential liability under CERCLA has been one of the best financial arguments for doing HHW collection; to prove that the operators of municipal solid waste (MSW) landfills are doing everything in their power to remove the hazardous constituents from their waste stream and so reduce the chance of serious contamination.

*(Editor's Note: In Maine, the issue of superfund liability for MSW landfills has been diminished with the advent of four large regional MSW incinerators. Only a handful of communities use landfilling for all their MSW disposal. Maine's high recycling rate (33%)*

*and the large percentage of waste going to incinerators (47%) means only 20% of MSW is being landfilled. Bulky waste makes up the largest portion of that figure.*

*However, a recent Supreme Court ruling on the disposal of ash from MSW incinerators finds they are subject to RCRA standards. Until the ruling last year, incinerators were disposing of their ash in regular Subtitle D MSW landfills, assuming that the exemption from RCRA's hazardous waste rules for household waste also applied to the ash from the burning of that waste. The Supreme Court said that RCRA hazardous waste rules do apply. The ash must be tested for its hazardous constituents and, if found to be hazardous, is subject to the full range of the law. In Maine, the Me DEP has always required that the ash from the state's MSW incinerators be tested for hazardous wastes and be disposed of the special waste landfills. This system has reported no serious problems to date).*

In summary, although HHW is indeed exempt from the management requirements imposed by RCRA and the complimentary state laws, the sponsors of HHW collections are not exempt from the liability under CERCLA. And in reality, the clear warning of liability under CERCLA strongly asserts a de facto regulation on the management of household hazardous waste. By complying with some or all of RCRA standards even though not required to do so, a HHW collection program sponsor has taken every reasonable precaution to limit their responsibility in the event of an accident, release or mismanagement by other parties.

In point of fact every HHW program contracts with a hazardous waste disposal company to handle at least the actual transport and disposal of the material. Their involvement in any part of the process guarantees the implementation of most if not all of the RCRA standards.

*(Editor's Note: the revised State of Maine Solid Waste Management Regulations, currently being drafted by the ME DEP Solid Waste Management Division, will address certain specific aspects of HHW collection. DEP is currently proposing that the collection of waste paint, used oil, and periodic HHW collection days at solid waste facilities be regulated. These changes to the regulations will take the form of clarifications, reduced procedures and exemptions in order to give operators guidelines for the management of these materials. Periodic one-day collection events will likely receive an exemption from regulation).*

## **2. What laws govern businesses that are generators of small quantities of hazardous waste?**

The federal RCRA statute allows for three classifications of generators of hazardous waste based upon the amount of hazardous waste they produce in one month's time: 0-100 kilograms, 100-1000 kilograms, and over 1000 kilograms, with correspondingly greater management requirements as the amounts go up.

Maine state law, 06-096 CMR Maine Hazardous Waste Management Rules (March 1994), has a stricter standard, recognizing only two classifications, 0-100, and above 100 kilograms. In Maine, those who produce 100 kilograms or less of hazardous waste in a month's time are referred to as "small quantity generators" (SQG). (This is what is meant by "regulating down



to zero). Under federal law these same generators would be considered as "very small or conditionally exempt small quantity generators" (CESQG).

**For the objectives of this report, the critical difference between the federal and Maine state law is the federal standard allows for the combining of waste from CESQGs and household hazardous waste collections. The mixture still retains the HHW exemption from RCRA regulation. EPA's clarification of this section of RCRA is meant to increase the CESQG's compliance with the regulations by increasing the collection efficiency; decreasing costs to the generators and increasing their opportunity to dispose of their waste in a managed program.**

Maine law expressly forbids this combining. In a memo to the Pilot Project Advisory Board, the ME DEP stated:

*"The collection program must be limited to household generators only. No small quantity generators will be participating. Household generators are specifically exempt under RCRA federal and state regulation. Small quantity generators are not exempt. Collection of waste from small quantity generators would constitute a commercial hazardous waste facility which would require a hazardous waste facility license from the DEP."*

Maine law requires all hazardous waste generated by a business or an institution, no matter how small the entity, to be managed according to procedures outlined in the Hazardous Waste Management Rules. Briefly, as set forth in Chapter 850 (5) (d) of the rules, a small quantity generator (Maine definition) must:

- **determine if the waste is hazardous**
- **store the waste in a container no greater than 55 gallons in size, label and package the waste in accordance with regulation and place the date on the container when the container becomes full**
- **manifest the hazardous waste in accordance with regulation**
- **use a licensed hazardous waste transporter. The generator may not self transport the waste**
- **send the waste only to an applicable state and/or federally licensed hazardous waste disposal facility**
- **ship the waste off site within 180 days of the container becoming full**
- **if more than 55 gallons of waste is stored on site, the generator must apply for a generator license number from the U.S. EPA and comply with additional regulations.**

Mixing the hazardous waste with nonhazardous waste does not alter the requirements. In fact all the resulting mixture becomes subject to these management rules. It even may push the generator into the next level of increased regulation. Mixing hazardous and nonhazardous waste requires a special license from the DEP.

Maine hazardous rules have special requirements for hazardous waste which is beneficially used, reused, recycled, or reclaimed. There are also provisions for the disposal of empty containers that held residues considered to be hazardous waste. This policy allows the containers to be disposed of as solid waste or recycled if they are triple rinsed or as free of residue as possible.

*(Editor's Note: This information is presented here as guidelines. It is a very condensed summary of the Me DEP rules governing hazardous waste management. It is not verbatim. All persons with an interest in the complete rules for hazardous waste generators are urged to contact the Me DEP Hazardous Materials Bureau at 207-287-2651.)*

The key point to remember, in Maine, household hazardous waste and small quantity generator waste don't mix. In theory, the Maine law is written to ensure the proper management of all hazardous waste. In practice, with over ten thousand businesses qualifying as small quantity generators and only six inspectors available statewide, there is likely widespread lack of compliance.

While Maine law eliminates the opportunity for businesses that produce very small amounts of hazardous waste to comply with regulations through HHW collection programs, efforts should be made to include businesses in the education segment of a HHW plan. Technical assistance that can reduce or eliminate hazardous waste all together is available to all businesses in the state through ME DEP's regional and state pollution prevention programs. This assistance focuses on bringing information out to the businesses with non-enforcement site visits.

## **PART II. THE HOW-TO GUIDE FOR TOWNS**

### **A. WHAT IS HOUSEHOLD HAZARDOUS WASTE?**

Examples of hazardous materials generated in the home include pesticides, polishes, lye (used for drain opening), acids, solvents, solvent based paints, old gasoline or other fuels, weed killers, pool chemicals, adhesives, resins, fluorescent tubes, old photographic chemicals, thermometers, thermostats, and many other mercury containing devices. HHW include:

- products that contain caustic, flammable, toxic or reactive ingredients.
- products that have been discontinued by manufacturers because they contain caustic, flammable, toxic or reactive ingredients or create a safety or health problem for consumers.
- products that are no longer wanted and might cause safety or health problems for a resident if they remain in the home.

### **B. WHY SHOULD HOUSEHOLD HAZARDOUS WASTE BE COLLECTED?**

Citizens and municipal officials are increasingly becoming concerned about household hazardous wastes. Communities with aggressive recycling programs have become more aware of and more concerned about what's being generated. These concerns include:

#### Toxic Releases

When people dispose of a hazardous material, it ends up in incinerators or landfills and in sewage treatment plants. However, the problem doesn't necessarily end there. Although incinerators have methods to remove contaminants from air emissions, there are certain toxins which escape through the stack such as heavy metals. The metals that are of greatest concern are mercury and lead. These metals enter human bodies and animals in several different ways and can cause illness, birth defects or death.

#### Landfill Problems

HHW hazards can be found in landfills also. They slowly seep through the trash and can enter the groundwater we drink if they are not contained. Many landfills collect the leachate that seeps out of trash, but once collected, that leachate must be treated and disposed of. Collecting hazardous waste before it is landfilled can make that process cheaper, easier and safer. Towns sending waste to a landfill will want to divert those materials that are corrosive to the landfill liner such as strong acids and alkalis and benzene which attacks clay liners.

#### Wastewater Problems

Wastewater treatment plants may also find contaminants such as copper, mercury and silver. Other toxins can kill the bacteria population which is so important to the functioning of the treatment plant. When residents and businesses pour hazardous materials down the drain they are difficult to remove at the facility and end up in the sludge or nearby water bodies.

#### Groundwater Contamination

When improperly managed, hazardous materials may show up in soil, lakes and streams, and

wells. Illegal dumping, accidental spills, and normal septage spreading are some ways that this happens. Municipalities with Combined Sewer Overflows (CSO's) are at risk of having household hazardous waste that was disposed of in the drains end up directly in lakes and streams without any treatment. This happens during rainstorms when sewers are full of water and household sewage is flowing into the overloaded sewage system; CSO's allow the extra volume of water to by-pass the treatment plant, carrying hazardous waste with it. Proper disposal opportunities for residents may alleviate much of this.

#### Public Safety

Residents who store hazardous materials in their homes are at risk of indoor pollution, airborne gasses of volatile materials. The risk of contamination from spills and leaking containers also exists. If their homes catch fire, there are a number of related problems. Stored materials could become airborne in the smoke or can be dissolved in the water from the firefighting equipment. The runoff from fire hoses can wash directly into wells or surface water bodies, affecting large numbers of people. Smoke and airborne hazards can be a safety issue for those who are still inside the burning structure and for firefighters. The materials that permeate the air around a burning structure will settle into water bodies, soil and food sources after a fire.

#### Accidents

There are also risks to waste removal personnel. There have been incidents of explosions and fire in refuse trucks when materials were disposed of in the regular trash. This can affect waste collection personnel, nearby residents, commuters, and public safety officials. In addition to the risk that is posed to personnel and the general public by such accidents, there is a tremendous cost associated with dispatching police, fire departments, and hazmat response teams.

### **C. WON'T IT BE TOO EXPENSIVE TO COLLECT ALL HAZARDOUS PRODUCTS?**

Yes, it would be too expensive to collect them all. Most communities will want to collect at least heavy metals, old pesticides (this term includes herbicides, fungicides, etc.), solvents (often found among paint related products and hobby/craft supplies), automotive fluids, strong acids and bases. These items are all dangerous to the environment, pose public safety problems, and are either the most voluminous or most toxic hazardous material in the waste stream.

It is helpful to start small; selecting one or two items for collection and budgeting small amounts of funds each year. Recycling revenues or savings may offset the costs of HHW collection. In some cases, a large generator may be willing to help fund a program (see the suggestions in section G for additional ideas to reduce the costs of collecting HHW).

Costs of HHW collection are coming down. In 1991, one Maine HHW collection program cost \$110-115 per participant. Today, in the EPA grant-funded pilot being conducted by SPO, it is expected that the costs will be approximately \$45 per participant; and even that is down from \$55-75 a year ago. As we begin to better understand the risks; as more communities become more experienced with HHW management; and as new contractors begin offering services, costs may lower still. In addition, as HHW collections become more frequent, materials that have accumulated in basements and barns from many years will be cleaned out; eventually lower volumes and thereby reducing costs.

#### D. WHERE SHOULD TOWNS START?

Begin by considering why you want to collect HHW. Use the answers to these questions to set program goals. Some potential goals may be:

- \_\_\_ collect unwanted hazards from every household on an ongoing basis
- \_\_\_ collect from the largest number of households possible within budget
- \_\_\_ collect the most toxic materials
- \_\_\_ collect largest category (e.g. paint) even though it is not very toxic
- \_\_\_ target specific generators (e.g. people who are moving or who have waste pesticides)
- \_\_\_ protect groundwater
- \_\_\_ protect wastewater discharge stream
- \_\_\_ protect landfill liner
- \_\_\_ stop illegal dumping of toxics
- \_\_\_ make an educational statement by holding a one-day collection
- \_\_\_ educate the small quantity generators among the business sector

Goals should be jointly set by the collection organizers, municipal officials, solid waste personnel, and any interested community leaders.

Use your goals to determine the scope of your program. For example, if your goal is to collect the most toxic materials in the HHW waste stream, you would eliminate latex paint from the collection. Latex paint is less toxic than some other materials and can be recycled or disposed of with household trash.

What are the most likely risks to your town or region? Your HHW collection program may be different if your community disposes of waste in a landfill or at an incinerator.

Using a landfill, you will want to be particularly careful about caustic wastes that may burn through the liner. You will also need to consider the impact on leachate that will have to be treated. Is it more expensive to treat that leachate or collect products in advance? If your community sends its waste to an incinerator there is less risk of environmental pollution, but there is still a question about how much mercury volatilizes in the transportation and pre-combustion process. You may want to focus on mercury-containing products.

Is there a risk to residents or collection personnel? Problems arise when certain chemicals combine in the trash. Maine has had several incidents of such events in the last five years, which necessitated emergency measures. An example of high risk chemical combination is pool chlorine and ordinary soft drink which react violently and emit toxic gas. Pool chlorine also reacts violently with brake fluid, causing a fiery explosion. Two common household cleaners, bleach and ammonia, should never be mixed; the result is potentially fatal fumes. Good citizen education may be the goal in this case.

Do most of your residents have septic systems? If the answer is yes, you should be concerned about groundwater contamination. In this case, target a greater range of materials. Include antifreeze as that will not break down in the anaerobic conditions of the septic tank before being discharged through the leachfield. If your community does have a wastewater treatment facility, ask what are its processing capabilities. What class stream does it discharge into?

Another way to determine which hazards to collect is to ask your residents! Find out what kinds of materials they have questions about. You may already have received phone calls from residents asking about specific items they have in their homes. Their questions will reveal where program planners need to focus attention.

Consider what other disposal options residents have. Is there a place where they can bring leftover latex paint? Used motor oil? How about old antifreeze from the do-it-yourselfer? Is there a reputable dealer in the area who will take used auto batteries? If your community already has good disposal options for hazards, it may be enough to simply raise awareness among residents through a good education program. Is there a well-informed person on your solid waste staff or at the town office who can direct people on how to handle hazards and use the existing recycling or disposal options?

## **E. HOW IS HHW COLLECTED?**

There are three basic methods to use in collecting household hazardous waste.

### **1. ONE DAY EVENTS**

One day events are typically run by a contracted company which specializes in household hazardous waste collections (see appendix A for a list of contractors). The municipality requests proposals from a pool of contractors and selects one on the basis of price and service. The events are usually held in a central location that is easily reached by the majority of people in the targeted area, such as a school parking lot. The contractor brings all the equipment and trained staff that will be needed and sets up at the municipal site. When the residents arrive at the site the contracted personnel unload the hazardous material, classify it and pack it appropriately for shipping. The contractor assumes responsibility for accidents and carries the insurance liability. They will also be responsible for transporting the materials and disposing of them. It is important that contractors be chosen with care as the price for all this service can vary widely.

Site requirements for one day events are flexible. An event can take place anywhere in a municipality, although some factors are usually taken into consideration. A central location is favored, as it makes the target population more likely to participate. Having separate entry and exit points allows traffic to flow easily; cars can enter at one point, off-load in a central area and move on to the exit without blocking new arrivals. Contractors provide tables for collecting materials and plastic liner to protect the ground from accidental spills. Thus, any municipal property can be adapted for one day events.

One-day collections have a certain amount of educational value in and of themselves. One day events imply that getting rid of stored up materials is a special event. It sends a message that disposal is not so readily available and that it would be better not to buy hazardous material in the first place. This is one way to send the source reduction message.

However, a one-day event also increases awareness among citizens about the dangers of materials in the home. Towns with one-day events that are not held periodically may see an increase of HHW materials in the MSW stream as residents try getting it out of their homes. It is a good idea to schedule another collection and let residents know in advance.

Most one-day event organizers will use the opportunity to educate residents (with additional

handouts or even conversation if there is time) about proper disposal, buying alternative products and waste reduction.

## 2. PERMANENT FACILITIES

Permanent facilities differ widely, even among one another. In some cases, permanent collection is no more than a small designated area at an existing facility like a transfer station, a public works area or a wastewater treatment facility. The attendant is trained in safety measures and, in limited programs, is authorized to handle certain items. Those items that are collected are stored for a designated time and then shipped to appropriate destinations. In more extensive programs, permanent collection facilities can be more elaborate and can contain storage and safety equipment designed to manage any hazardous materials. An example of such a program is in Burlington Vermont which accepts the full spectrum of materials on a daily basis. Attendants there have training in identifying and handling hazardous materials and they use all necessary personal protective equipment for carrying out their job (see appendix H for job descriptions of staff at permanent facilities).

A permanent collection site must meet DEP requirements for construction and operation. However, many municipalities have found that it is more cost-effective to operate permanent facilities in the long run because of the opportunities presented by economies of scale and combining existing staff and capital resources. Existing facilities and equipment, permanently trained staff, and on-going educational brochures can all be used to their full potential. In addition, new separations can be made in the stream of materials received and, because the staff have more time than in a one day event, they can market these materials more effectively. For example, in Burlington Vermont, staff consolidate waste oil filters. They are shredded and drained to recover about 4% oil by weight. The scrap metal is then sent to a dealer and the oil is put into the waste oil container. This method reduces the enormous cost of handling spent oil filters as hazardous waste.

The educational value of having a permanent facility is largely because the staff have more time to spend with residents; explaining separation methods and alternatives to hazardous materials in the homes. Creating a permanent facility that is part of the ordinary recycling program can send people the idea that all household waste is still an important commodity and must be treated carefully. The value of this approach is supported by Michael Dennis' article on behavioral research which he presented at the eighth national EPA conference on HHW. He says that it is easier to ask someone to refine a current belief or behavior than to change it or adopt a radically different approach. Thus, the most productive use of program funds is to present the hazardous waste sorting task as just another part of recycling, rather than as a new behavior to be learned.

## 3. MOBILE COLLECTION

Mobile collection units are vehicles with complete facilities for collecting and packing hazardous waste. A good example of this is in Chittenden County in western Vermont where the mobile unit serves the outlying municipalities in the county. This unit is a set of trailers and containers which collect, lab-pak and bulk the materials at a temporary site. The "Rover" unit stays at the site for up to a month, and provides all the collection services that a permanent site does. At the end of the month, a hauling contractor arrives at the Rover, picks up the prepared containers and takes them away.

The advantages of this facility are that it can serve larger numbers of people than a one-day event. A mobile unit can stay as long as is needed to serve the population and siting is as easy as one-day events. While the permitting and capital expenditure may be as extensive as a permanent site, the great advantage is that multiple communities can take advantage of a single facility. This option is usually chosen for regional programs.

The educational value of a mobile unit is similar to a one-day event, as a moderate amount of excitement is raised by the limited opportunity to dispose of hazards. There is the added benefit of a slow pace, similar to a permanent facility, which allows enough time to educate residents about future toxic reduction.

**F. HOW MUCH WILL IT COST?**

Costs for one-day collection events are entirely dependant on the terms agreed to in the service contract. This will be determined by the skill with which the specifications are written in the RFP. An sample is provided in Appendix I. Equipment, insurance liability and labor costs will be included in the service contract as the contractor provides all this. They employ trained technicians who unload resident's cars, then sort, pack and ship the materials.

A very rough estimate for a full-scale collection can be calculated with a cost formula adapted from the EPA in their manual, "Household Hazardous Waste Management; A Manual for One-Day Community Collection Programs."<sup>2</sup>

$$\frac{.01H(\text{low participation})}{8 (\text{consolidation})} \times \$165 + \$1,000 = \underline{\hspace{2cm}} (\text{low estimate})$$

$$\frac{.03H(\text{high participation})}{4 (\text{no consolidation})} \times \$265 + \$1,000 = \underline{\hspace{2cm}} (\text{high estimate})$$

- H is the number of households in the target area
- The formula produces a range, reflecting a participation rate from one to three percent of the targeted households.
- If oil and paint are to be consolidated into respective drums, divide the number of expected participants by eight, as shown in the equation, to calculate the number of 55-gallon drums. (It generally takes seven or eight households to fill a 55-gallon drum of waste.) If no wastes are consolidated, divide by four, as shown in the equation.
- \$265 is the average cost of treatment/disposal per 55-gallon drum.
- Add \$1,000 for set-up and personnel costs.

<sup>2</sup>EPA 530-R-92-026



Another way to estimate cost is to base your projections on the cost per participant. Several programs have recently received bids of \$45-\$75 per participating household. Each household is allowed to bring up to 10 gallons of waste. Experience at the regional program in New Haven, CT has shown that 88% of the program users are single family homes. The percent of those households participating in the collection can be multiplied by your contractor's proposed household cost to obtain the total cost.

The following formula is used by on hazardous waste contractor with a fairly high level of accuracy.

$$(\text{Households} \times .02) \times \$60 = \text{estimated collection cost}$$

## **G. HOW CAN TOWNS SAVE MONEY?**

### Go regional!

Economies of scale are very important in HHW collection; staffing, site set-up and transportation of the materials are just three areas of cost which can be shared very effectively. If several towns use one site, the cost per household can be greatly reduced.

### Pre-register residents for collection!

By having residents commit themselves to showing up and by giving them a specific time slot, program managers can estimate the costs of the event. They can also contain the costs to a specific budget amount. An advantage to this is spreading out the traffic so that the staff can work at an even pace and residents don't find themselves waiting in long lines. One of the most frustrating occurrences in past collections has been residents who waited for an hour or more, only to be told that the budgeted amount had been reached and the program couldn't accept any more materials. Pre-registration avoids this public relations disaster, even though it does mean more administrative work in preparation for the event.

### Price your collection on a per-participant approach!

The per participant or per household approach is gaining popularity. It allows program planners to plan their budget more exactly and contractors are able to anticipate what kinds of wastes they will receive based on national experience. Ask your contractor to allow price breaks for households that bring in small amounts of waste. A typical quantity that a household may bring in is ten gallons. Households bringing five or less gallons can be billed as 1/2 car increments.

### Decide which materials to exclude; inform your public!

Since disposal costs are the largest part of collection cost, it pays to set aside any materials which are not truly hazardous. Materials that should be collected at a one day event should be decided on in advance. The public should be notified of what to bring and what to leave at home. This is very important, as residents often are confused about the definition of hazardous materials. They may bring in benign household products that will cost a lot to ship as hazardous materials, but will be disposed of by the contractor in ordinary landfills or incinerators anyway. The municipality may have a contact person who works with the contractor at the collection event to set aside any of these benign materials. Appendix J lists which materials should be brought to a collection and which ones should be left at home.

Be prepared for excluded wastes!

Homes often have surprising items hidden in them. Collection programs have received ammunition, explosives, medical waste, radioactive material, compressed gases, and highly toxic materials such as dioxin or PCBs. Sometimes these items are left at the collection event in an inconspicuous place and they are only found at the end of the day. If this happens and you are unable or unwilling to have the owner take it away with them, be sure to have contingency plans. You may be able to arrange with the police to take ammunition. Similarly, emergency response teams and/or bomb squads may be available to deal with explosive materials if necessary, as well as infectious wastes. It is also a good idea to have MSDS (material safety data sheets) on hand, or to know where to obtain that information. It may be necessary to refer to such information to identify the hazards in a certain material.

Avoid lab-packing!

Lab-packing is a technique of putting hazardous items which are in their original containers into a drum. Each little container is carefully surrounded with shock absorbing material to insure that it does not come in contact with any other container. This is useful with certain of the more dangerous materials, but it is unnecessary for those items that can be safely bulked. Bulking such things as old gasoline, solvents, paints, or oil is obviously much cheaper if you are paying disposal costs by the drum. Allow for as much bulking as possible. When lab-packing must be done, be sure to specify that lightweight packing filler be used if you are paying disposal costs by weight.

NOTE: Bulking is when like materials are poured together into a drum. Consolidation however, is when chemicals are kept in their original containers and put into a larger drum or container. This differs from lab-packing because there is less packing material surrounding the smaller packages.

\*\*\* NOTE: It is very important that residents do not mix, or consolidate their wastes. This is for the contractor to do. Contractors need to see the label to identify what material is being brought in. Materials have to be classified by category. Dangerous combinations of materials could result from improper mixing. The result could be high costs, increased liability, and possibly serious injury. Town can allow bulking by their employees at permanent facilities, but this will require a level of training appropriate for that type of material.

Discuss cost reduction with your contractor or potential contractors!

They know a lot and can often suggest ways of reducing cost (see appendix A for a list of contractors). For example, one community found that changing the date by two weeks changed the price significantly because it was no longer in peak season. If your contractor charges a disposal fee (assuming you cannot base costs on a per participant approach) request a per pound system instead of a per drum system. This will allow the contractor to make more efficient decisions in packing or bulking. You will be paying for the actual weight of material collected, not for half-empty drums. It becomes especially important to specify light-weight packing material in this case.

Have a dumpster ready for disposal of non-hazardous materials.

Residents will sometimes bring in empty containers which used to hold hazardous materials. Often those are no longer dangerous and can be thrown in the MSW stream. It is much less costly to dispose of them yourself than to have a contractor dispose of them for you. Also

have a corrugated cardboard recycling container on hand. There will be a lot of clean cardboard that can be recycled.

#### Look for reuse and recycling options!

Finding these alternatives can be well worth the effort. The following wastes can be recycled: latex paint, used motor oil, antifreeze, car batteries, nickel-cadmium (rechargeable) batteries, and fluorescent bulbs (see appendix A for a list of recyclers). After obtaining a contractor's price, compare disposal prices for these items if they are handled separately. For example, used paint can go to a bargain barn or swap shop or donated to a local theater group. The rest may be stored (up to 180 days) and recycled or shipped at a lower price. Oil can be shipped for fuel blending or re-processing and batteries can be recycled. In one New England program, oil collection service was donated by a local company. Antifreeze at this same program was reprocessed for \$.35 per gallon.

Many hazardous items can be safely reused up by experienced tradespeople. Clean, containerized chemicals, for example, that is a waste to one company may be a resource to another company. Check with local business and industry to see what they generate, how its used, and whether it is suitable for reuse by another company. The Maine Chamber of Commerce and Industry is exploring ways to develop a materials exchange program which will help in match generators with users of surplus HHW materials.

#### Get sponsors!

Local businesses and civic groups may be interested in sponsoring an event. They may be able to donate money, volunteers, publicity, or expertise. Many businesses are experienced in handling their own hazardous waste and are familiar with storage, packing, shipping and disposal regulations.

#### Staff your collection with as many volunteers as possible!

Volunteers can do much of the work at a collection event such as greeting residents, directing traffic, listing types of materials they are bringing, educating residents about toxic reduction in the future, and moving safe reusable materials to a swap table. Training for municipal staff is not necessary, as contractors provide all the trained personnel needed. However, if a municipality wishes to participate in the collection and can work out an arrangement with the contractor to do a part of it themselves, staff will need to get some training in hazardous materials recognition and handling. See Appendix K for a list of training resources.

### **H. WHAT ARE THE ROLES OF CONTRACTORS, SPONSORS, AND VOLUNTEERS?**

When you contract with an HHW service provider, they are fully insured and assume generator-status of the HHW material collected. A contractor can minimize the liability for towns by providing experienced, trained staff and fully-licensed transportation and disposal. Contractors have very distinct roles in a local collection program.

#### Contractors

- carry insurance and pollution liability
- provide necessary materials and equipment

- provide trained staff to handle HHW
- work with sponsor to provide desired amount of service
- design site set-up and service
- handle material from its arrival to final shipping, record amounts
- site break-down
- comply with all regulations: DOT, federal, state, local
- submit post-collection reports and data

#### Sponsors/Community

- secure funding for the event
- manage bidding process and select contractor
- coordinate the publicity for the event
- organize emergency personnel to be on hand; work with them to plan for emergencies
- plan for non-hazardous waste removal
- oversee proper site set-up and management, including clean-up
- work with contractor to determine which wastes will be accepted as participants arrive
- recruit and train volunteers
- develop waste reuse and recycling opportunities
- itemize and inventory all wastes received at the event
- obtain all records and manifests after the event

#### Volunteers

- distribute literature in advance
- verify and organize registration of participants at the collection
- set up traffic lanes, barriers, tables, chairs, etc.
- provide traffic control
- act as go-for's
- distribute surveys and questionnaires
- clean up non-hazardous trash generated by the collection process
- be available to help the collection process run smoothly throughout the day
- provide refreshments

### **I. HOW CAN TOWNS GET RESIDENTS TO PARTICIPATE IN HHW COLLECTION PROGRAMS?**

Publicity and education are critical to the success of any collection program (see appendix L for a list educational resources).

Publicity should be community- or region-wide for 4-6 weeks prior to the collection event. It should include newspaper notices, television community bulletin boards, local cable stations, notices in the local town newsletter, notices to local civic groups, handouts/posters in town hall.

Publicity should include the following information:

- the date/time/location of the event

- how to pre-register
- materials to be collected/not to be collected
- cost to participate

At the time participants pre-register, verbally explain to residents the collection process, how to prepare materials (i.e. no mixing, original labels if possible), and what materials to bring. You should also provide them with a few tips for proper disposal of materials that are not accepted at the collection event and ways to reduce future use of HHW.

At the collection event, residents should be given take-home educational materials. Education literature should always include some basic cautionary information, as well as local resources for residents to use (i.e. bargain barns, private sector resources). Include proper handling and disposal information; safe substitutes for some of the more toxic household chemicals; and methods for reducing generation of hazardous substances.

For example, tell residents what not to do:

**NEVER, NEVER, NEVER:**

- \* pour hazardous materials down the drain!
- \* mix chemicals!
- \* put chemicals into other containers!

Give residents positive guidelines:

**ALWAYS:**

- \* know what you are using
- \* ask if there is a safer product
- \* buy just the right amount for the job
- \* dispose of the container properly

On-going education is equally important to reinforce good behavior and to reach residents who did not participate in your collection event. Include product substitution and waste reduction tips in your recycling program literature. Sponsor regular public service announcements and provide periodic information about HHW collection events.

## **CONCLUSION**

The proper on-going management of household hazardous waste can be done on a budget. However, it requires a solid initial planning process, an experienced contractor, and an effective communications strategy with residents/participants. In addition, programs can be tailored to meet the needs of the individual community.

# APPENDICES

**APPENDIX A**  
**HHW COLLECTION PROGRAM CONTRACTORS/RECYCLING COMPANIES**

**Antifreeze**

**Advanced Recycling Inc**, Spencer Bennett, 25 Sandquist St, Concord NH 03301 (800) 227-3911 or (603) 225-CANS. Recycles used oil filters.

**Clean Harbors**, Matt Quinn, 17 Main St, S Portland ME 04106 (207) 799-8111

**C.M. Laboratories Inc**, Eugene McGurl, PO Box 8002, Portland ME 04101 (207) 883-8395

**Laidlaw Environmental Services**, 221 Sutton St, N Andover MA 01845 (508) 683-1002

**Maine Lubrication Service Inc**, Jim McMillion, PO Box 732, Portland ME 04104, Physical Address: 605 County Rd, Westbrook ME 04092 (207) 772-6513. Recycles industrial lubricating oil for reuse. Pick-up and return service for small volumes.

**Total Waste Management**, 142 River Rd, Newington NH 03801 (800) 345-4525

**Battery Processors**

**BUTTON CELL BATTERIES**  
**(Mercury and Silver-Oxide)**  
**and**

**RECHARGEABLE**  
**(Lithium, Nickel-Cadmium, Nickel-Iron, Nickel-Metal Hydride)**

**Advanced Environmental Recycling Corp**, Jane Buzzard, 2591 Mitchell Ave, Allentown PA 18103 (215) 797-7608/Fax (215) 797-7696. Collects batteries containing mercury.

**International Metal Reclamation Co Inc (INMETCO)**, 245 Portersville Rd, Ellwood City PA 16118 (412) 758-5515.

**Mercury Refining Co Inc**, 1218 Central Ave, Albany NY 12205 (518) 459-0820 or (800) 833-3505/Fax (518) 459-2334. Provides recycling/disposal of nickel-cadmium batteries. Offers *Assault on Battery Pollution Program* to state, county, and local governments or other organized groups.

**Portable Rechargeable Battery Assoc (PRBA)**, 1000 Parkwood Circle, Suite 430, Atlanta GA 30339 (404) 612-8826. An industry association whose membership consists of nickel-cadmium battery manufacturers and tool and appliance manufacturers whose products are powered by ni-cads. Has information about tool and appliance manufacturers that offer battery take-back programs.

**Rechargeable Battery Recycling Corp. (RBRA)** David Thompson, 345 Route 17, Suite 44, Upper Saddle River, NJ 07458 (201) 934-4202. A non-profit organization that oversees the implementation of the PRBA's ni-cad battery collection program.

**Recovery & Reclamation**, PO Box 571, Pecos TX 79772 (915) 447-3272 or (800) 999-9549.

*NOTE: A program originally set up to aid businesses in Maine that are required by law to recycle ni-cad batteries is now available to municipal recycling managers who wish to begin ni-cad collection programs. The RBRC has established a licensing agreement with INMETCO in Pennsylvania. The RBRC pays for processing and the recycling facility as generator would pay for shipping. If you are interested in shipping ni-cads to INMETCO, please contact David Thompson at the Rechargeable Battery Recycling Corp. 345 Route 17, Suite 44, Upper Saddle River, NJ 07458 (201) 934-4202 prior to making shipments. He will forward to you the necessary shipping information and a description of the agreement between RBRC and INMETCO.*

### Fluorescent Lamps

**(Fluorescent, Mercury Vapor, Halide,  
High-Pressure Sodium)  
(Waste Ballasts)**

**Advanced Recycling**, PO Box 2410, Concord, NH 03302, 1-800 227-3911

**American Lamp Recycling, Ltd.**, 22 Stage Door Rd., Fishkill, NY, 12524, 1-800 315-6262

**Eastern Environmental Technologies**, 47 Purdy Ave., Port Chester, NY, 10573, (203) 856-2014

**Lighting Resources**, 522 E. Victory St, Phoenix, AZ 85040, 1-800 572-9253

**Salesco Systems**, 40 Messina Dr., Braintree, MA 02184, 1-800-368-8878

**AERC/MTI**, 2591 Mitchell Ave., Allentown, PA 18103, 1-800-554-AERC

**Aptus National Electric Inc.**, 21750 Cedar Ave., Lakeville, MN 55044 (612) 469-3475

**Global Recycling Technology**, PO Box 651, Randolph, MA 02368, (617)341-6080

**Mercury Refining**, 1281 Central Ave., Albany, NY 12205, 1-800-833-3505

**SD Meyers**, 80 South Ave., Tallmadge, Ohio 44278, (216) 633-2666

**Alta Resources Mgt, Inc.**, 88B Industry Ave., Springfield, MA, (413) 734-3399



**Dynex**, 4751 Mustang Circle, St. Paul, MN 55112, 1-800-733-9639

**Lighting Recycling Inc.** , 15 Buckminster Rd., Brookline, MA 02146 (617) 734-1047

**Recyclights**, 401 W. 86th St., Bloomington, MN 55420, 1-800-831-2852

**USA Lights**, 1700 W. Highway 36, St. Paul, MN 55113, (612) 631-0727

#### HHW Contractors

**Advanced Environmental Tech Corp.** Metro Park West, 398 Cedar Hill Road St, Marlboro, MA 01752 (508) 460-9960

**C.M. Laboratories**, PO Box 8002, Portland ME 04101 (207) 883-8395

**Chemical Consolidated**, 55 Crown Street, Nashua, NH 03060 (603) 883-0553

**Chemical Waste Management**, 4185 Doremus Ave, Newark, NJ 07105 (201) 465-6848

**Clean Venture/Cycle Chem**, 378 Page Street, Unit 6, Stoughton, MA 02072 (617) 344-8880

**Clean Harbors**, 17 Main St, S Portland ME 04106 (207) 799-8111

**Clean Harbors**, 1200 Crown Drive, Quincy, MA 02269 (617) 849-1800

**Franklin Pumping Service**, Industrial Park, Wrentham, MA 02093 (617) 384-6151

**General Chemical**, 133 Leland Street, Framingham, MA 01701 (508) 872-5000

**The Green Paint Co**, 9 Main St, PO Box 430, Manchaug MA 01526 (800) 527-8866 or (508)476-1992/Fax (508) 476-1201. Carry: 90% post-consumer recycled paint products. Will hold one-day paint collection events for towns.

**Laidlaw Environmental Services**, 221 Sutton St, N Andover MA 01845 (508) 683-1002

**Grimmel Industries**, 50 River Rd, Lewiston ME 04240 (207) 784-6754. Removal and/or disposal of underground storage tanks.

**New England Industrial Maintenance**, 76 Ethan Allen Drive, South Burlington, VT 05403 (802) 863-8714

**Pollution Solution**, 2 Avenue D, Willston, VT 05495 (802) 860-1200

**Safety Kleen Corp**, Rte 202, N Leeds ME 04263 (207) 933-4496

**Total Waste Management**, 142 River Rd, Newington NH 03801 (800) 345-4525

**Triumvirate**, PO Box 136, Somerville, MA 02143 (800) 966-9282

### **Paint Processors**

**The Green Paint Co**, Steven Greenburg, 9 Main St, PO Box 430, Manchaug MA 01526 (800) 527-8866 or (508)476-1992/Fax (508) 476-1201. Carry: 90% post-consumer recycled paint products. Will hold one-day paint collection events for towns.

**Laidlaw Environmental Services**, 221 Sutton St, N Andover MA 01845 (508) 683-1002.

*NOTE: Paint recycling technology is primarily targeted to latex paints.*

### **Waste Oil Service Providers**

**Advanced Recycling Inc**, Spencer Bennett, 25 Sandquist St, Concord NH 03301 (800) 227-3911 or (603) 225-CANS. Recycles used oil filters.

**Clean Harbors**, Matt Quinn, 17 Main St, S Portland ME 04106 (207) 799-8111

**C.M. Laboratories Inc**, Eugene McGurl, PO Box 8002, Portland ME 04101 (207) 883-8395

**Laidlaw Environmental Services**, 221 Sutton St, N Andover MA 01845 (508) 683-1002

**Maine Lubrication Service Inc**, Jim McMillion, PO Box 732, Portland ME 04104, Physical Address: 605 County Rd, Westbrook ME 04092 (207) 772-6513. Recycles industrial lubricating oil for reuse. Pick-up and return service for small volumes.

**Total Waste Management**, 142 River Rd, Newington NH 03801 (800) 345-4525

**APPENDIX B**  
**38 MRSA §2165 AND 2166**  
**REGULATION OF CERTAIN DRY CELL BATTERIES**

STATE OF MAINE

—  
IN THE YEAR OF OUR LORD  
NINETEEN HUNDRED AND NINETY-TWO

—  
H.P. 1632 - L.D. 2296

An Act to Ensure the Safe Collection and Management of  
Certain Household Hazardous Wastes

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §2164, as amended by PL 1991, c. 517, Pt. 3, §13, is further amended to read:

§2164. Household and small generator hazardous waste

The office shall develop and implement by July 1, ~~1993~~ 1995, a statewide system for the collection and disposal of hazardous waste generated by households, public and private nonprofit institutions and small quantity generators.

Sec. 2. 38 MRSA §2165 and 2166 are enacted to read:

§2165. Regulation of certain dry cell batteries

1. Definitions. As used in this section and section 2166, the following terms have the following meanings.

A. "Industrial, communications or medical facility" means a structure or site where 15 or more people are employed and:

(1) Where articles are assembled, manufactured or fabricated;

(2) Are included in major group 48 of the federal Office of Management and Budget, Standard Industrial Codes: or

(3) Where medical services are provided.

B. "Rechargeable battery" means any nickel-cadmium or sealed lead-acid battery that is designed for reuse and is capable of being recharged after repeated use.

2. Disposal ban. A person employed directly or indirectly by a government agency, or an industrial, communications or medical facility may not knowingly dispose of a dry cell mercuric oxide battery or a rechargeable battery in a manner that is not part of a collection system established under subsection 4.

3. User responsibility. A government agency or industrial, communications or medical facility shall collect and segregate, by chemical type, the batteries that are subject to the disposal prohibition under subsection 2 and return each segregated collection either to the supplier that provided the facility with that type of battery or to a collection facility designated by the manufacturer of that battery or battery-powered product.

4. Manufacturer responsibility. A manufacturer of dry cell mercuric oxide or rechargeable batteries that are subject to subsection 1 shall:

A. Establish and maintain a system for the proper collection, transportation and processing of waste dry cell mercuric oxide and rechargeable batteries for purchasers in this State;

B. Clearly inform each purchaser that intends to use these batteries of the prohibition on disposal of dry cell mercuric oxide and rechargeable batteries and of the available systems for proper collection, transportation and processing of these batteries;

C. Identify a collection system through which mercuric oxide and rechargeable batteries must be returned to the manufacturer or to a manufacturer-designated collection site; and

D. Include the cost of proper collection, transportation and processing of the waste batteries in the sales transaction or agreement between the manufacturer and any purchaser.

5. Supplier responsibility. A final supplier of mercuric oxide and rechargeable batteries or battery-operated products is responsible for informing the purchasers that intend to use these batteries of the purchaser's responsibilities under this section.

6. Mercury content. A person may not sell, distribute or offer for sale in this State the following batteries:

A. An alkaline manganese battery that contains more than .025% mercury except that any alkaline manganese battery resembling a button or coin in size and shape may contain no more than 25 milligrams of mercury;

B. Effective January 1, 1993, a consumer mercuric oxide button cell;

C. A zinc carbon battery manufactured on or after January 1, 1993 that contains any added mercury; or

D. An alkaline manganese battery manufactured on or after January 1, 1996 that contains any added mercury except that any alkaline manganese battery resembling a button or coin in size and shape, may contain no more than 25 milligrams of mercury.

7. Effective date. Except as otherwise indicated, this section takes effect January 1, 1994.

8. Penalty. A violation of subsection 2 is a civil violation for which a forfeiture of not more than \$100 per battery disposed of improperly may be adjudged. A violation of subsection 4 is a civil violation for which a forfeiture of not more than \$100 may be adjudged. A violation of subsection 6 is a civil violation for which a forfeiture of not more than \$100 per battery sold, distributed or offered for sale may be adjudged. Each day that a violation continues or exists constitutes a separate offense.

9. Battery management plan. By October 1, 1993, the agency, in cooperation with manufacturers and wholesalers of batteries sold in the State, battery retailers and others shall develop a battery management plan. The plan must describe a comprehensive system for the collection, recovery, recycling, reuse, treatment or disposal of all mercuric oxide and rechargeable batteries subject to this section. The plan must address alternate battery collection systems including, without limitation, municipal collection, retail collection, returnable battery deposits and collection through the mail. The plan must describe the responsibilities of manufacturers and wholesalers and ensure that these batteries are properly managed no later than January 1, 1994. Any collection system developed under this section must include educational and publicity components that seek to maximize consumer participation in the system.

\$2166. Rechargeable consumer products

1. Nonremoveable battery requirements. A person may not sell, distribute or offer for sale in this State any product powered by a rechargeable battery primarily used or purchased to be used for personal, family or household purposes unless:

A. The battery may be easily removed by the consumer or is contained in a battery pack that is separate from the product and may be easily removed; and

B. The product, the battery itself and the package containing the product are all labeled, in a manner that is clearly visible to the consumer, indicating that the battery must be recycled or disposed of properly and that the type of electrode used in the battery is clearly identifiable.

2. Exemption. The executive director may exempt products from the provisions of this section upon application from the manufacturer if, in the executive director's judgment, the product can not reasonably be redesigned and manufactured to comply with this section or, if redesigned, results in significant danger to public health and safety.

3. Effective date. Except as otherwise indicated, this section takes effect January 1, 1994.

4. Penalty. A violation of this section is a civil violation for which a forfeiture of not more than \$100 per battery sold, distributed or offered for sale may be adjudged. Each day that a violation continues or exists constitutes a separate offense.

Sec. 3. Waste paint report. By July 1, 1993, the agency, in cooperation with manufacturers and wholesalers of paint and coating sold within the State shall develop a plan for a comprehensive system for the collection, recovery, recycling, reuse, treatment or disposal of unused paint and coatings and their containers sold at retail within the State. The plan must describe the responsibilities of those manufacturers and wholesalers. Any system developed must include an educational and publicity component that seeks to maximize consumer participation in the system.

Sec. 4. Costs not funded. Notwithstanding the Maine Revised Statutes, Title 30-A, section 5684, any requirements of this Act that result in additional costs to local or county government are not state mandates subject to that section and the State is not required to fund those costs.

**APPENDIX C  
STATE AGENCIES CONTACTS**

Maine DEP, Bureau of Solid Waste and Hazardous Materials Control  
State House Station 17  
Augusta, ME 04333  
(800) 452-1942

State Planning Office (former Maine Waste Management Agency)  
State House Station 38  
Augusta, ME 04333  
(207) 287-5300

Pesticide Control Board  
Maine Department of Agriculture  
State House Station 28  
Augusta, ME 04333  
(207) 287-2731

Emergency Response - To report Oil & Hazardous Material Spills  
(800) 482-0777



APPENDIX D  
DEP HHW COLLECTION GUIDELINES

**PROCEDURES FOR THE CONTRACTED ONE-TIME COLLECTIONS OF HOUSEHOLD  
HAZARDOUS WASTES**

One day or two day household hazardous waste collection events may be held at a licensed solid waste facility up to 12 times in a calendar year without a modification to the solid waste facility's license provided that all of the following conditions are met:

- The solid waste facility only receives household hazardous waste that is contained with the material's original labeled container. These waste may be household insecticides, pesticides, and herbicides; paints, varnishes, sealers, and other surface coatings; waste solvents; waste degreasers and cleaners.
- Each household hazardous waste collection event is not more than 48 hours in duration.
- Each collection event is conducted by a company qualified to collect and sort hazardous wastes and licensed to transport hazardous wastes under the Department's Hazardous Waste Management Rules, Chapters 850-8.
- The collection and 24 or 48 hour storage of household hazardous wastes at the solid waste facility shall be upon a base which is a firm work surface, such as asphalt or concrete, which is impervious and which is kept entire and which is constructed to a minimum thickness of four (4) inches.
- Materials and personnel shall be on hand to immediately contain, absorb, containerize, and cleanup all spills of household hazardous waste before the waste leaves the impervious asphalt or concrete surface or comes in physical contact with unauthorized persons.
- The household hazardous waste is managed to prevent or minimize risk to the environment.
- The solid waste facility notifies the Division of Solid Waste Facility Regulation at least one week prior to each household hazardous waste collection event.

**APPENDIX E**  
**EPA PILOT GRANT NARRATIVE**

**EPA GRANT APPLICATION  
MAINE WASTE MANAGEMENT AGENCY**

**HOUSEHOLD HAZARDOUS WASTE MINIMIZATION AND COLLECTION**

The proposal addresses the reduction of hazardous wastes generated by households and small quantity generators, and the collection and management of those hazardous materials that can be diverted from solid waste disposal and wastewater treatment programs. A key element is the partnership between public programs for households and private efforts by businesses that are small quantity generators.

**Area:** Androscoggin area including several small towns with transfer stations and a POTW facility. Lewiston is an excellent selection because DEP has conditioned their landfill permit to include a household hazardous waste collection requirement. Neighboring communities participate in a regional solid waste program including recycling and waste-to-energy and a regional POTW facility.

**Participants:** Town officials and small quantity generators (businesses) within the target area; regional officials from POTW facility and Council of Governments that is the recipient of a Farmers Home Administration solid waste technical assistance grant, cooperative extension, chamber(s) of commerce; trade associations; and state officials from the Waste Management Agency and the Maine Department of Environmental Protection.

The Department of Environmental Protection is conducting a major pollution prevention program in this region that addresses hazardous waste reduction by large quantity generators. This pilot will supplement this program.

**Project Description:** To establish a regional collection system for households and small quantity generators that includes:

- a strong education component for generators;
- a training component for waste handlers (local and businesses);
- a survey of hazardous wastes generated;
- a collection system using local transfer stations for household hazardous waste combined with collection at the place of business for small quantity generators;
- a cooperative agreement and schedule for the collection and transfer of hazardous waste using a licensed hazardous waste hauler (milk runs);
- an assessment of municipal capital investment needs;
- a cost sharing proposal for participants in the pilot;
- a program for handling stored household hazardous wastes (clean sweeps);
- an assessment method to evaluate the costs, benefits and recommended improvements in the pilot program; and
- an evaluation of reductions in toxicity in POTW sludges and incinerator ash.

**Duration:** 18 months;

Months 1 - 6 will be spent outlining the project; getting the participants together; developing the educational materials; assessing collection facility needs; developing cooperative program and bid specifications, soliciting vendors.

Months 7 - 18 will be one year of program operation with quarterly progress reports and assessments.

Waste Watch Center will be used to help in initial data collection; educational materials development; training development; and program assessment.

The Maine Marketing Cooperative will provide services in developing and implementing the cooperative bid process.

**Budget:** \$30,000

EPA: \$20,000

Waste Management Agency: \$10,000

**Budget Description:**

Funds will support a part-time coordinator for the project; development and distribution costs of educational materials; development and delivery of training programs; and the preparation of the project assessment and recommendations.

The Waste Management Agency will provide \$10,000 to support this project in direct match and will provide indirect support for the project including overall project management, incidental costs of printing, training and assessment.

Project Administration:	\$15,000
Educational Materials	5,000
Training	5,000
Evaluation	5,000
<b>Total</b>	<b>30,000</b>

**APPENDIX F**  
**EPA PILOT GRANT PROGRESS REPORT**

**STATUS REPORT  
HHW MINIMIZATION AND PILOT COLLECTION  
PERIOD ENDING 6/30/95**

**BACKGROUND**

In October 1993, the Maine Waste Management Agency began to develop a program for piloting the collection of household and small quantity-generated hazardous waste.

The agency established an advisory committee, collected data, and examined the alternatives of methods of collecting household hazardous waste. Interested towns have been recruited and costs for participating in the pilot identified. A needs assessment and handbook for towns are nearing completion. The remaining elements of the project include:

Designing Pilot	July 1995
Finishing Needs Assessment	August 1995
Soliciting RFPs	August 1995
Selecting Contractor	Sept 1995
Training Operators	Sept/Oct 1995
Developing Education Materials	August/Sept 1995
Pre-Registering Participants	Sept/Oct 1995
Holding Collection Event	October/November 1995
Evaluating Pilot	November 1995
Writing Final Report	December 1995

**TRANSITION**

In June 1995, the Maine Legislature enacted legislation to abolish the Maine Waste Management Agency and to transfer its essential functions to the State Planning Office. During his budget address, Governor King stated that the agency had met its goals and a reduced state role in waste management was called for.

Six staff, including the HHW pilot project manager, will continue the agency's waste management planning functions and municipal technical assistance programs. In addition, a new HHW program was added to the legislated functions of the former agency (now State Planning Office) which provides for grants to municipalities to implement HHW programs (within available resources). Lastly, the state's mandate to establish a state-wide system to collect and dispose of HHW was repealed.

In June, following the final enactment of the LD 229, the bill that dismantled the agency, a request was made to EPA to transfer the HHW pilot grant to the State Planning Office and to extend the grant termination date to December 31, 1995. We are awaiting EPA approval of these changes.

**ADVISORY COMMITTEE**

The agency put together an advisory committee to assist with developing and implementing the

pilot. Members of the advisory committee consist of state and local officials including representatives from:

City of Lewiston  
City of Auburn  
Mid-Maine Waste Action Corp  
Lewiston-Auburn Water Pollution Control Authority  
Androscoggin Valley Council of Governments  
Town of Jay  
Town of Bowdoinham  
Maine DEP  
General Electric Corp.

The meetings are open to the public and other municipalities have expressed an interest and have attended meetings on a less regular basis. These municipalities include: Bethel, Northern Oxford Region, Lisbon, Falmouth, Wilton, and Rangeley.

The first meeting of the pilot advisory committee was convened in March 1994. The group has met more or less monthly since that time. The following is a brief summary of each meeting:

#### **March 30, 1994**

- reviewed EPA pilot project description, other agency programs that HHW and agency statutory charge to collect HHW
- reviewed state HHW regulations; it appears all HHW is exempt from regulation
- identified key issue: how to develop a plan for partnership between municipal collection and small businesses in a state where the SQGs are regulated down to zero?
- identified major roadblock of funding of municipal collection and disposal of HHW
- brainstormed list of potential participating towns
- identified Lewiston landfill, LAWPCA, and MMWAC as potential beneficiaries of removing HHW from the waste stream
- brainstormed members for advisory committee
- discussed having a part time staff person in service area; decided it would be necessary to have such a person

#### **April 29, 1994**

- received clarification from DEP HW bureau that HHW is not regulated. Collection, storage, disposal, and transportation of HHW is exempt from regulation. Committee asked for written opinion.
- advised that the site for HHW pilot may require a site review by DEP if located at a solid waste facility
- conflicts with DEP regulation of SQGs remains. Discussion of how to include them in project: education, source reduction, collection efficiencies through milk runs, competitive bidding for collection services (recognize that collection and disposal would be regulated as hazardous waste)
- overview of South Portland ongoing HHW collection program. Cost of event is shared by city

and Clean Harbors

- stressed education component as equal to the collection effort

#### **May 20, 1994**

- overview of HHW generation, amounts and composition in Maine. Also a description of battery and paint management plans.
- updated on project staffing; agency is moving forward with contracting with individual to provide on-site project staffing.
- discussed at length SQG issue with DEP staff present. DEP's view is that there is an inherent conflict between a pilot project that collects SQG waste and the state's regulations.
- DEP confirmed that HHW is not regulated
- discussed limiting the list of HHW materials to be collected vs. collecting all materials
- identified potential towns to include in the project
- decided to develop a program outline with cost estimated to provide to potential towns
- decided to include 2-3 of potential participating towns on advisory committee in order to better meet towns' needs.

#### **June 21, 1994**

- decided to write letter to DEP with our understanding of the exemption for HHW and ask for confirmation
- identified following areas for data collection: what toxics are showing up in landfill leachate, incinerator ash, and treatment plant sludge and what HHW materials may be causing problems? what businesses generate these kinds of materials? what items can a facility safely take in and what should be removed? what HHW materials can MMWAC accept and in what quantities?
- discussed having the pilot piggyback on DEP's pollution prevention technical assistance program. Would providing TA to SQGs satisfy EPA grant obligation?
- referring to SQGs - discussed assisting SQGs with permitting; inventorying current toxic materials used; identifying product substitutions; gathering information on what LGQs are doing and seeing if efforts can be applied to SQGs.
- AVCOG offered assistance to rural communities in pilot area through FmHA grant.

#### **July 20, 1994**

- discussed possible materials to target for a collection program including: looking at list of HHW products and rating them in terms of cost and ease of collection/disposal; starting with the 6 materials in the proposed universal waste rule; and working back to products from toxics identified in leachate from the Lewiston landfill, MMWAC ash, and LAWPCA sludge.
- decided to survey towns to find out what and how much HHW is out there
- discussed required training of municipal personnel to handle HHW

#### **Sept 15, 1994**

- overview of HHW facilities in Chittenden, VT
- discussed training needed
- discussed possible changes in the HHW regulation proposed by DEP. The committee observed that the more the material is regulated, the less likely it is to be collected through separated



program. Any new regulation should encourage collection.

- decided to invite representatives of several HHW contractors to speak to the group.

#### **October 27, 1994**

- overview of four program options/costs for collecting HHW: permanent/limited collection, permanent/full collection, mobile collection and periodic collection.
- Brenda Murphy of Laidlaw Environmental, Inc. provided an overview of the programs they run in VT, MA, CT, and NY. each site is run differently according to the needs and budget.
- Brenda offered advice on what materials to collect, education, program staffing, training needs, equipment needs, participation expectations, and costs.
- Examples of costs: aerosol cans @ \$275/barrel, pesticides @ \$300/barrel, waste oil @ \$80/barrel

#### **Nov 23, 1994**

- Bob Bernier from Safety Kleen, Inc, a Leeds, ME company described their services. Bob suggested items to consider when developing an RFP.

#### **Dec 1, 1994**

- Karl Schmidt of Clean Harbors, South Portland provided an overview of the company. Karl suggested items to consider when developing an RFP.

#### **December 15, 1994**

- Lynn Rubinstein who consults for HHW programs in western Massachusetts and manages several programs met with the committee.
- Lynn suggested 1-day or a series of 1-day events, because in her experience, fixed/permanent facilities and mobile collection program are more expensive, less convenient, and less effective.
- Lynn offered advise on selecting a site, the need for education, what materials to take, and how to develop an RFP.

#### **Jan 25, 1995**

- Robert Delhome and Kristen Madel of Triumvirate of Boston provided an overview of their company service and offered recommendations for holding a collection event.

#### **Feb 7, 1995**

- Dr. John Owens, Johnson Wax, Inc. discussed household pesticides and HHW collection.
- valuable HHW collection dollars should not be spent on collecting indoor, "ready-to-use" household pesticides. They can be disposed of through the MSW systems without danger to the environment or public health.

#### **Feb 16, 1995**

- Dale MacKenzie of Prestone Products Corp spoke about environmental effects of anti-freeze.
- antifreeze should not be poured down the drain or disposed in septic tanks due to the potential for ground water pollution. He stated that antifreeze will be less of a problem in the future due to changes in car manufacturing.

## **July 10, 1995**

- began planning for a collection event in Oct/Nov 1995
- identified towns that will be participating
- identified sites in Auburn and Lewiston
- discussed what materials to collect
- discussed costs and logistics
- identified elements to include in an RFP

## **ON-SITE MANAGEMENT**

Following the advisory committee's decision that an on-site coordinator was essential, the agency contracted with the Androscoggin Valley Council of Governments to manage the project in the Lewiston/Auburn area. AVCOG's Karin Draper had been providing municipal technical assistance with bulky waste, HHW, and other hard to manage waste materials to the towns in the AVCOG region (Androscoggin, Oxford, Franklin counties) and was assigned to be the on-site project coordinator. Under the contract, AVCOG's commitments include:

- providing on-site coordination of the collection pilot (750 hours)
- providing technical assistance to operators and the development of hazardous waste management systems for rural areas under its FmHA grant
- providing technical assistance to operators and the development of hazardous waste management systems for urban areas under the agency's grant
- collecting data
- developing needs assessment including recommendations for education, operator training, infrastructure and equipment, pilot design, and pilot implementation
- developing contractor RFPs
- providing assistance to interested SQGs to identify waste reduction, reuse, and product substitution opportunities and coordinating this work with DEP's pollution prevention program
- assisting with producing reports
- evaluating the pilot

The project coordinator works in conjunction with the agency's project manager who has the final responsibility for all pilot project operations and products.

## **DATA COLLECTION**

The data collection phase of the project lasted several months (longer than anticipated) and included meetings with contractors and meetings/conversations with towns as well as gathering information from Maine DEP, LAWPCA, Lewiston Landfill, and MMWAC.

The data collected includes: amounts and types of HHW generated, sources of HHW, Maine's HHW regulations, types and location of existing municipal HHW collection programs, characteristics of landfill leachate, incinerator ash residue, and waste treatment plant sludge that may be attributed to HHW, citizen concerns about HHW, cost/logistics of other HHW programs across the country, and municipal and SQG needs in terms of staff training, infrastructure, funding, and education.

## **NEEDS ASSESSMENT**

A needs assessment is currently being written based on the data collected above that will provide recommendations for promoting the pilot program, training operators, developing infrastructure, educating residents, designing a pilot for municipal HHW collection, and collecting SQG hazardous materials.

## **EDUCATION**

From March through June 1995, the on-site pilot coordinator and the agency's project manager attended local meetings to discuss HHW collection needs and to educate them about the collection options.

### **Individual town meetings**

Municipal officials and citizens from the towns of Mechanic Falls, Rangeley, and Lisbon were presented an overview of HHW and the collection options to assist them with identifying program needs for their communities. AVCOG and the agency also presented the materials to the Androscoggin Solid Waste Operators at one of their monthly meetings. An estimated 30 people were reached at these meetings.

### **Workshop**

In May 1995, in Bangor, ME, a training workshop for approximately 25 municipal officials was conducted to assist them with implementing HHW collection programs. The presentation included an overview of HHW, its collection regulations and liability, and costs, and methods for reducing costs.

### **Other Presentations**

A circuit of presentations on HHW has been made to municipal and state officials, business leaders, and citizens throughout Androscoggin county. These presentations include:

*The Androscoggin River Watershed Pollution Prevention Project - Overall Steering Committee - in Auburn - approximately 20 people*

*The Androscoggin River Watershed Environmental Action Conference - in Rumford - approximately 30 people*

*The Androscoggin River Watershed Pollution Prevention Project - Lewiston/Auburn team - in Auburn - approximately 15 people*

*Androscoggin County Natural Resource Conservation District - Little Androscoggin Project - in South Paris - approximately 12 people*

*Regional Programs workshop - in New Haven, CT - approximately 12 municipalities*

*International Paper Environmental Education Sub-Committee - The paper company in Jay, ME initiated an effort this year to involve their communities in an environmental education program.*

They created a subcommittee to educate residents about HHW and to develop a HHW collection plan for the town of Jay. The on-site project administrator attended 5 meetings of this subcommittee to assist them with their efforts.

### **WasteLine**

The agency's monthly newsletter, *WasteLine*, is mailed to 1200 municipal officials, including selectmen, town managers, public works directors, and recycling coordinators. *WasteLine* periodically provides information on HHW and brief updates as to the products of the EPA pilot.

In January 1995, the agency developed a brief outline on how to set up a HHW collection program. A one and one-half page article in *WasteLine* solicited suggestions from readers and provided a framework for towns to assist them with planning a program.

### *In the Works*

#### **How-To Manual**

Using the information gathered about HHW collection programs in Maine and across the country, we have begun assembling an educational manual for towns. The goal of the handbook is to overcome fears of the prohibitive costs of HHW programs and provide knowledge to carry out collection and programs. The manual, which will be completed by the end of July, will identify collection options, methods for reducing the costs of collection and disposal, and an overview of the regulatory scene. It will include a sample RFP, generic citizen educational materials, and lists of resources.

#### **Workshop**

A state-wide workshop is being planned for local recycling managers and municipal officials in the fall of 1995 for HHW.

#### **Newspaper Supplement**

An educational pull-out supplement is being developed in conjunction with the *Lewiston Sun Journal*. The supplement will address clean water issues including HHW and is expected to be issued in April 1996.

#### **PILOT**

The advisory committee has now begun planning a collection event for the participating towns.

#### **Goal-Setting**

The advisory committee addressed a number of goals that they would like to achieve as a result of the pilot, including:

- serving the largest number of households within budget
- collecting the most toxic materials
- making an educational statement by holding a one-day event

Decisions about the pilot design and what materials to exclude are contingent on the participating towns' goals.

**Date**

An October/November time frame was selected as the date to hold the collection event.

**Location**

The Lewiston landfill has been selected as a site for the collection event.

**Participants**

The following communities will participate:

Lewiston (up to \$10,000)

Auburn (up to \$7,000)

Mechanic Falls (up to \$1,700)

Bethel (individual fee basis) - will be asking the Selectmen to subsidize some costs

Bowdoinham (individual fee basis) - needs Selectmen approval for spending funds

Northern Oxford Region (individual fee basis) - still considering

Jay (individual fee basis)

**Materials**

Discussion continues about what materials to include/exclude? Concern was expressed about collecting common HHW materials that residents would go out and buy again (i.e. oven cleaner or toilet cleaner). Pesticides are the most toxic. There was discussion of whether to exclude anti-freeze. The cost will be a determining factor what the types of materials to be collected.

**RFP**

Lynn Rubinstein, a Massachusetts consultant, will assist with developing the RFP.

**OUTSTANDING ISSUES**

**Recruiting Towns**

The most significant obstacle has been recruiting towns to participate in the collection pilot. Because the grant only covers the design, education, and collection phase of the pilot, participating towns have to fund the disposal/recycling costs of the collected HHW. For some, this was not possible. Until May/June 1995 when town budget processes were complete, we were not certain of which and how many towns would participate in the pilot project. There are clearly fewer than we had originally anticipated.

**Small Quantity Generators**

Another obstacle has been how to incorporate small quantity generators (SQG). In Maine, any commercial hazardous waste, no matter how little, is regulated. Household hazardous waste is exempt from regulation. If the two are mixed, then it is all regulated. Regulations would require manifesting, transporting to a licensed disposal facility (no recycling of materials), and would

increase the project costs. On the other hand, a key element of the EPA grant is forging a partnership between public programs for households and private programs for businesses that are SQGs. DEP has not been interested in granting an experimental permit for the pilot program. This issue is not resolved.

*Printed on recycled paper*

**APPENDIX G**  
**MUNICIPAL HHW COLLECTION CONTACTS**

Town of Berwick  
Chris Rose, Town Manager  
PO Box 696  
Berwick, ME 03901  
(207) 698-1101

Brunswick  
John Foster, Public Works Director  
28 Federal Street  
Brunswick, ME 04011  
(207) 725-6654

Town Eliot  
Orland MacPherson, Road Commissioner  
141 State Road  
Eliot, ME 03903  
(207) 439-1990

Town of Kittery  
Richard Rossiter, Public Works Director  
200 Rogers Ext. PO Box 808  
Kittery, ME 03904  
(207) 439-0452

Mid-Coast Solid Waste Cooperative  
Sam Morris, Solid Waste Manager  
PO Box 10  
Rockport, ME 04856  
(207) 236-7958

Town of Sanford  
Richard Wilkins, Public Works Director  
267 Main Street  
Sanford, ME 04073  
(207) 324-9135

City of South Portland  
John True, Fire Chief  
25 Cottage Rd  
South Portland, ME 04116  
(207) 799-3311

**APPENDIX H**  
**JOB DESCRIPTIONS**  
**FOR**  
**PERSONNEL AT PERMANENT COLLECTION FACILITIES**

**Certified chemist/HHW specialist**

Responsibilities - identifies unknown materials, assists in sorting and packing, prepares manifests and paperwork.

Minimum training - Chemistry, 40 hour HAZWOPER plus specialized HHW training, field experience with direct supervision and analytical experience. Annual 8-hr refresher course needed.

**Limited task worker**

Responsibilities - accepts HHW from residents, bulk, lab-pack under direction of chemist and supervisor. Unlikely to be exposed over permissible exposure limit

Minimum training - 24 hr OSHA training plus specialized HHW training and one-day field experience under direct supervision.

**General worker**

Responsibilities - data entry, report preparation data analysis, permit preparation, managing drum inventory data and shipment paperwork, answering calls, making appointments (if appropriate) and providing general administrative support. Work at site which has been monitored and characterized; exposure not likely and respirators not necessary.

Minimum training - 24 hr OSHA training and one day actual field experience under direct supervision.



**APPENDIX I**  
**SAMPLE RFP**

## REQUEST FOR PROPOSALS

The Androscoggin Valley Council of Governments will accept proposals for the supply of a one day regional household hazardous waste collection for at least four towns, to be held on Saturday, October 28, 1995.

Household Hazardous Waste Collection proposals should be placed in an envelope marked "Proposal HHW95" in the lower left corner, sealed, and mailed or hand carried to the Androscoggin Valley Council of Governments, 125 Manley Road, Auburn, ME 04210. The proposals will be accepted until Thursday, September 7, 1995, at 10 a.m., at which time they will be publicly opened and read aloud.

Specifications are available from the Androscoggin Valley Council of Governments, (207) 783-9186.

The Androscoggin Valley Council of Governments reserves the right to accept or reject any or all proposals in total or in part as it may deem in the best public interest.

ANDROSCOGGIN VALLEY COUNCIL OF GOVERNMENTS,

\_\_\_\_\_  
, Chair

\_\_\_\_\_  
Date

**REQUEST FOR PROPOSALS  
ANDROSCOGGIN VALLEY COUNCIL OF GOVERNMENTS  
HOUSEHOLD HAZARDOUS WASTE COLLECTION**

**INFORMATION FOR PROPONENTS**

It is the intent of the Androscoggin Valley Council of Governments, (hereinafter referred to as "AVCOG"), to solicit proposals from qualified contractors to provide all personnel, equipment, and related services for a Household Hazardous Waste Collection project described below:

**PROJECT DESCRIPTION**

**Overview**

The Household Hazardous Waste Collection is a program whereby residents of certain towns may dispose of unused and unwanted household chemicals in an environmentally safe manner. The successful proponent shall assist AVCOG's staff in the following manner: planning the project; staffing collection project sites; providing follow-up reports on volumes, disposal locations and methods, and the cost to AVCOG for the chemicals received; and being responsible for the proper handling, transportation, and disposal of household hazardous wastes collected from residents.

AVCOG intends to hold one collection in 1995 on Saturday, October 28, 1995. The collection will be held at the Lewiston Public Works Yard. Preregistration will be required for participation in the Collection. The household chemicals will be transported to the collection sites by individual residents. At the collection site, chemicals will be generally sorted in the car by the contractor and an AVCOG representative. Materials that are rejected for collection will be left with the resident to take home.

AVCOG would like recycling to be used as the disposal or treatment method for as much waste as possible which is accepted at the collection. At a minimum, it would like suitable paints to be sent for reformulation and nickel-cadmium batteries for recycling.

**Price Structure**

Proponents will provide a price quote based on a fixed cost per participant. Proponents should assume that an "average" participant is equal to 10 gallons of actual waste. Any car that appears at the collection, however, could count as more, or less, than one "participant equivalent" and will be counted in 1/2-participant intervals.

At the collection site, an authorized AVCOG representative and a designated contractor representative will reach agreement on the participant equivalent represented by each vehicle being serviced. This approach requires a cooperative effort between the contractor and the AVCOG. It also means that the amount of waste collected will be roughly, and quickly,

estimated. The contractor and AVCOG will each keep separate count of the number of participant equivalents handled. At the end of the collection, they will compare numbers and reach agreement on the total number of participant equivalents to be billed for that collection. The bill will be equal to this total number of participants multiplied by the fixed price per participant.

The volume of waste brought by each car will be approximated based on the apparent volume of waste in the containers, not on the container size.

### **Demographics**

Four towns will participate in this collection: Lewiston, Auburn, Bethel, and Mechanic Falls. Their combined population is: 69,314. There are a total of approximately 13,000 single family homes in these communities. This will be the first household hazardous waste collection for each of these towns. AVCOG also intends to offer the collection to residents of other towns in its region on a fee per participant basis.

### **Date & Location**

The collection will be held on Saturday, October 28, 1995. The collection site will be the Lewiston Public Works Yard.

### **Hours of Collection**

The Collection will be advertised as opening at 9 a.m. and closing at noon.

### **Preregistration**

Participants will be required to preregister with AVCOG in order to participate in the Collection.

### **Waste Removed from Site**

All hazardous wastes collected at the sites must be removed within 24 hours of the time that wastes are no longer accepted for collection. At no time shall the contractor leave the collected hazardous wastes unattended.

## **GENERAL INFORMATION**

### **Terms of Agreement with Successful Proponent**

The terms and conditions of AVCOG Request for Proposals will be incorporated by reference in its entirety into the Contract. The Contract will set forth the character and quality of the work to be done, services to be rendered, and the materials to be provided by the successful proponent.

## **PROPOSAL CONDITIONS**

### **Cost Minimization**

All contractors will be expected to do what they can to minimize costs to AVCOG. This will include, but not be limited to, practicing waste minimization strategies, using best management practices in the packing of waste, making suggestions to AVCOG for cost reduction, and using bulk packaging and consolidation of household chemicals to the maximum extent possible. The use of lab packing shall be minimized to the maximum extent possible. Materials to be bulked or consolidated will include, at a minimum, paint, general solvents (such as gas, paint thinner), and non-empty aerosol cans.

Lab packing is defined, for purposes of this document, as packing of chemicals in their original containers with protective material such as vermiculite in the drum.

Consolidation is defined, for purposes of this document, as packing of chemicals in their original containers in drums with either the minimum amount of absorbent required by the federal DOT, or no absorbent materials.

Bulking is defined, for purposes of this document, as the pouring or emptying of chemicals from their original containers into a drum of like materials.

### **Staffing Requirements**

The contractor shall provide a sufficient number of employees or agents to provide adequate staffing to ensure that no participant admitted onto the site waits more than 15 minutes beyond their appointment time before being unloaded.

### **Waste To be Collected as Part of the Collection**

AVCOG requires that the successful contractor be able to accept all household hazardous waste with the exception of those items listed below. AVCOG will require the successful proponent to accept 2,4,5-T wastes.

### **Waste Not to be Collected as Part of the Collection**

AVCOG intends that the successful proponent will collect all household chemical waste with the following exceptions:

- "empty" containers ("Empty" shall be defined as containing less than 3 tablespoons of material, unless that material is acutely toxic or AVCOG agrees that the container shall be accepted for disposal.)
- abrasive cleaners
- aerosol cans, except those containing pesticides, disinfectants, adhesives, or paints

- air fresheners/deodorizers
- ammonia based cleaners
- alkaline batteries
- asbestos
- automobile batteries
- borax/boric acid
- car waxes/polishes
- caulking/spackle/joint compound
- cosmetics
- detergents
- explosives of any type (including ammunition and compressed gas)
- fertilizer without pesticide
- glass and window cleaners
- latex driveway sealer
- latex paint
- medical waste (biological and pharmaceutical)
- nail polish
- pcb's
- products with no hazardous constituents
- radioactive materials (including smoke detectors)
- unknown products that require off-site testing
- waste oil

Note that AVCOG reserves the right to refuse any type of waste it chooses from the collection. The contractor will be notified in advance of all wastes or waste streams to be excluded from collection. In addition, AVCOG reserves the right to segregate waste before collection by the hauler; i.e. latex paint.

### **Volume Limits**

AVCOG will publicize in its promotional materials that a limit of 10 (ten) gallons of waste may be brought to the collection by each household. The contractor will not accept more than this volume of waste from any car unless expressly authorized to do so by the AVCOG.

### **Solid Waste Disposal**

AVCOG will provide suitable containers for the disposal of non-hazardous solid waste generated at the collection, and will be responsible for the disposal of the solid waste. Cardboard shall be separated for recycling. AVCOG will provide suitable containers for collecting the cardboard and be responsible for its disposal. The contractor will be responsible for lining the insides of any such containers with plastic to protect the container from contamination, and to prevent leaking in transport.

## **Recycling**

AVCOG would like as much waste collected to be recycled as possible. At a minimum, it would like suitable paint to be sent for reformulation and nickel-cadmium batteries for recycling.

## **Follow-Up Reports**

The successful proponent will be required to submit the following reports to AVCOG:

(1) A follow-up report that details the size of each container, the packing sheet for each container, and the category of waste it is manifested as. This information shall be provided in an easily readable and understandable format. The report will be due within thirty (30) working days after the collection.

(2) A report summarizing the disposal method used for each type of material (i.e. recycling, fuel blending, incineration, landfilling, neutralization), and the name and location of the ultimate disposal site. This report shall be filed within sixty (60) days after the collection.

(3) A report on the number of participants and the volume of waste received per participant (i.e., 0.5, 1.0, 1.5 increments).

## **Federal, State, and Local Laws**

The successful proponent must comply with all applicable Federal, State, and local laws and regulations. The successful proponent must also obtain all required permits for the handling, treatment, transportation, and disposal of hazardous wastes. Indication that the proponent or its subcontractors, including transporters, transfer, or storage facilities, or recycling facilities are substantially out of compliance or have a history of failing to comply with federal and state laws will be a basis for rejection of the proposal.

## **Execution of Contract**

Within five (5) days after receipt of the contract from AVCOG, the successful proponent shall execute, acknowledge, and deliver (in duplicate) to AVCOG a contract approved by AVCOG. The terms and conditions of this Request for Proposals will be incorporated by reference into the contract.

The successful proponent must simultaneous to executing and delivering the contract, provide written evidence that AVCOG has been named as an additionally insured party for the required insurance coverage. This evidence may be in the form of a letter from the insurance company or a certificate of insurance.

## **Performance Bond**

The successful proponent will be required to submit a performance bond in the amount of \$20,000 at the time of contract signing.

## **Subcontractors**

1. The contractor shall assume all liability for any and all subcontractors.
2. If subcontractors will be used they must be identified, their qualifications stated, and all information provided as if they were the proponent. Proponents who submit proposals that will use subcontractors who are not considered to be qualified will be considered to have submitted a non-responsive proposal.
3. If subcontractors will be used for any phase of the handling, treatment, transportation or disposal of the waste, the subcontractors must meet and comply with the standards outlined in this Request for Proposals.
4. If, after a contract is awarded, it becomes necessary to hire subcontractors, subcontractors may only be hired with the written approval of AVCOG. AVCOG shall have the right to determine both the use of subcontractors and the qualifications and competence of subcontractors before they are hired. All subcontractors will be held to the same standards as the contractor.
5. If the use of subcontractors is anticipated at the time of submitting a proposal, the anticipated use of subcontractors must be stated, the subcontractors must be identified, and qualifications stated for subcontractors. The same qualification forms that must be completed for the proponent must also be completed for each subcontractor.
6. If subcontractors will be used, contractor compliance history forms must be provided for each subcontractor as well.

## **Generator Status**

The contractor shall be deemed the generator for all waste which is collected by the contractor at the event. Generator status will be assumed when the waste is removed from the vehicle of a resident.

## **Indemnification**

The contractor shall indemnify, defend, and hold harmless, AVCOG, AVCOG's agents, AVCOG's employees, the municipalities of Lewiston, Auburn, Mechanics Falls, and Bethel and their employees and agents, AVCOG approved volunteers, and the Maine State Planning Office, Maine Waste Management Agency from and against all losses and claims, demands, payments, suits, actions, or recoveries and judgements of every nature and description brought or recovered against them by



reason of any act or omission of the said proponent, his agents, or employees in the execution of its obligations hereunder.

### **Assignment of Rights**

The proponent shall not assign, transfer, convey, sublet, or otherwise dispose of the contract, or his rights, title or interest in or to the same of any part thereof, without consent in writing by AVCOG. If the proponent shall, without previous written consent, assign, transfer, convey, sublet or otherwise dispose of the contract, in whole or in part, or of his right, title or interest therein, the contract may, at the option of AVCOG, be canceled and terminated.

### **Disposal Audit Procedures**

The proponent shall describe in the proposal its procedures to select and audit hazardous waste disposal facilities. This information shall include the date on which each facility that may be used for disposal of AVCOG waste was audited and the results of that audit.

### **Insurance Requirements**

Proponents must submit as part of the proposal insurance certificates proving that they possess the following minimum limits of insurance:

- A. General Liability Including: \* \$1,000,000.00
  - 1. Personal
  - 2. Fire
  - 3. Medical Expense
  - 4. Property Damage

\* AVCOG is to be listed as additionally insured.

- B. Automobile Liability Including: \$1,000,000.00
  - 1. CSL
  - 2. Bodily Injury
  - 3. Property Damage
- C. Environmental Impairment Liability: \$2,000,000.00 Annual Aggregate
- D. Workmen's Compensation: Statutory
- E. MCS-90 Endorsement for hazardous materials transportation: \$5,000,000

Contractor shall not commence work until the required insurance is obtained, and an acceptable Certificate of Insurance is filed with AVCOG's Project Manager.

## **Insurance Coverage for Disposal Facilities**

All disposal facilities must have the minimum federally required insurance coverages in effect.

## **Report of Insurance Claims**

The Contractor shall report to AVCOG as soon as possible any accident or occurrence resulting in injury to any person, including any subcontractors' employees, or any property damage arising out of, or during, the course of performance of this contract, including site set up, collection, packing, site closure, transportation, storage, and disposal. The Contractor and any subcontractors shall provide AVCOG with a copy of any and all reports made by the Contractor's insurers or others of any such accidents and occurrences, at AVCOG's request.

## **Delegation of Duties**

The following responsibilities will be applicable, as indicated, for the Contractor and AVCOG.

### **Contractor's Responsibilities:**

1. Assist AVCOG in planning and organizing the collection, including answering questions, and being available for site inspection before the collections.
2. At least two weeks before the collection the contractor shall provide plans describing procedures to minimize the risk of spill or fire during on-site activities, as well as a Contingency Plan for each collection site (including a format for notification to emergency response personnel and evacuation procedures). AVCOG must have an opportunity to review and comment on these plans before the collection.
3. Provide all equipment and supplies (including at a minimum barrels, absorbent, fencing, labels, tables, tents, polyethylene tarps, tape, and drop boxes) necessary for collection, handling, packaging, transportation, and disposal of the collected wastes, including safety equipment (including at a minimum neoprene inner gloves, cloth outer work gloves, chemical resistant boots, OSHA approved protective suits and safety glasses, hard hats, portable showers, first aid kit, portable eye washes, fire extinguishers, traffic cones, respirators, spill absorption materials, emergency spill equipment).
4. Line all solid waste containers with plastic to prevent contamination of the container or leaking during transport.
5. During site clean-up the successful proponent must fill any holes created in blacktop while erecting the tents.

6. Storm drains which could potentially become contaminated due to an accidental release of household chemical waste shall be sealed by the contractor. Such seals shall be removed after the site is free of hazardous wastes and before the contractor leaves the site.
7. Be responsible for the set up and take down of those portions of the collection sites devoted to collection, handling, and transportation of the collected wastes.
8. Be directly responsible for sorting materials in participants cars and then unloading the cars; segregating hazardous, non-hazardous, and non-acceptable materials; packaging and transporting all hazardous wastes in accordance with state and federal requirements; preparing container sheets, manifests, notifications, certification, and other shipping documents. Contractor will not accept more than ten gallons of waste per vehicle unless authorized by the AVCOG.
9. Provide properly trained and qualified staff necessary to review, segregate, package, manifest, and transport incoming wastes.
10. Cooperate with AVCOG, the local government and public safety officers to develop a site contingency plan. AVCOG will be responsible for contacting the local government and emergency response personnel. The Contractor will be responsible for developing the contingency plan.
11. Assist members of the public with information on their wastes, including the reasons for any waste rejection.
12. Provide for the safe treatment, incineration, recycling, and disposal of collected waste in compliance with all applicable state and Federal regulations. Hazardous wastes will be treated, incinerated, and disposed of at fully permitted EPA or state approved hazardous waste treatment, storage and disposal facilities, recycling facilities, or facilities that have been given interim approval status by EPA. Non-hazardous wastes will be disposed of by AVCOG.
13. Ensure that the collection site is ready for operation prior to the announced opening time. Any delay resulting from the failure of the contractor to have its staff, equipment and materials ready for operation may be considered a breach of contract.
14. Ensure that all wastes are removed and the collection site is cleaned up to the same or better condition than the site was in before the event within 24 hours of the official closing time of the collection. The contractor shall have personnel on-site at all times until the contracted wastes have been removed from the site.
15. The contractor shall identify a single person as project manager to work with the AVCOG. The contractor shall be responsible for managing any subcontractor work.

16. The contractor shall, no later than thirty (30) days after the event, provide AVCOG with:

- a. copies of all manifests, packing slips, and a copy of the attached sheets to each manifest;
- b. a written description, itemizing the quantity, and U.S. DOT classification of each type of waste handled and tallying the total amount (by type) collected in gallons; and
- c. a written description of mode of transportation and disposal methods to be used for each type of waste.

17. All services shall be performed in the most highly professional manner, and in accordance with the utmost industry standards. Unless the means or methods of performing a task is specified elsewhere in this contract, the Contractor shall employ methods that are generally accepted and used by the industry. Failure to meet the performance requirements of this contract shall constitute breach of contract.

18. The contractor shall assume generator status and obtain a generator EPA I.D. number.

19. The Contractor shall indemnify AVCOG against general, automobile, and pollution liability for operation of the collection to the limits specified in the minimum insurance coverage requirements. The contractor's certificates of general liability insurance shall name AVCOG as additional insured with a hold harmless agreement.

**AVCOG's Responsibilities:**

1. Traffic control by AVCOG support staff.
2. Verify residency and household generator status of participants.
3. Provide roll-off containers for solid waste and cardboard recycling, and provide for its disposal.
4. Provide suitable site location.
5. Work with contractor to coordinate and plan event.
6. Provide advance publicity describing hours, location, types of waste to be accepted, waste not accepted, volume limits per household.
7. Contact local governments and public safety officers concerning contingency planning.
8. Provide all media contact.

9. Preregister participants.

10. Work with contractor to determine the "per car equivalent" for each participant.

### **Contractor Training Requirements**

The Contractor Project Manager and all chemists working at the collection shall be OSHA 40 hour trained and will have additional training in spill response, containment, and evacuation techniques, as well as in hazardous materials handling. All other workers, including contractor s agents and subcontractors, shall have completed a minimum of 24 hours of training in hazardous materials handling. Copies of the training certificates for each employee, agent, or subcontractor shall be provided to AVCOG 48 hours in advance of the event.

### **Management Requirements**

1. If storage will occur after collection, the Contractor shall store all materials collected at a permitted Transfer, Storage, and Disposal Facility until final disposal.
2. Smoking by vendor employees and agents will be prohibited in the participant unloading area, waste segregation, packing, consolidation, or bulking areas.
3. All vendor employees and agents working in the participant unloading area, waste segregation, packing, consolidation, or bulking areas shall wear personnel protective equipment consisting as a minimum of neoprene inner gloves, cloth outer work gloves, Tyvek suites, and OSHA approved safety glasses.
4. All waste segregation, packing, consolidation, or bulking areas shall be covered with poly sheeting.
5. All packing, labeling, manifest preparation, and waste transportation shall be in accordance with state and federal guidelines and laws.
6. Any waste being stored or accumulated at a transfer or storage facility before final disposal shall be in containers or in a covered area. Bulk material or any other material not in a form of secondary containment will be stored in a covered area with secondary containment equal to that provided for RCRA wastes.
7. To the maximum extent practicable, the policy of the State of Maine and AVCOG is to encourage waste management in the following hierarchy: reduction, reuse, recycling, resource recovery, landfill. Household chemical waste disposal should reflect this hierarchy.

## **BASIS OF AWARD**

The contract will be awarded to the proponent that is the lowest responsible and responsive proponent and which best meets the needs of AVCOG. Proposals will be reviewed and decisions made only on the basis of information required to be submitted. AVCOG would like paint which is suitable to be sent for reformulation, and encourages the use of recycling as the disposal method of choice, especially for nickel-cadmium batteries.

Proposals should clearly indicate any exception to the specifications of this Request for Proposals. Such exceptions may be cause to reject the proposal.

AVCOG retains the right to reject any and all proposals and to waive any formality or technicality.

## **PROPOSAL FORMAT**

In order to be considered a responsive proposal, the proponent must provide AVCOG with four (4) copies of the proposal. Household Hazardous Waste Collection proposals should be placed in an envelope marked "Proposal HHW95" in the lower left corner, sealed, and mailed or hand delivered to the Androscoggin Valley Council of Governments, 125 Manley Road, Auburn, ME 04210. The proposals will be accepted until Thursday, September 7, 1995, at 10 a.m., at which time they will be publicly opened and read aloud.

All proposals must contain the following information and in the order as indicated below. In addition, all forms provided by AVCOG must be completed in full:

- I. Title Page: Name, address and telephone number of proponent; date of proposal; name and title of contact person(s).
- II. Form A -- Cost Proposal
- III. Form B -- Contractor Enforcement History
- IV. Form C -- Limitations on Wastes to be Accepted
- V. Form D -- Auditing Procedures
- VI. Form E -- Transporter, Facility Identification
- VII. Form F -- Signature Page
- VIII. Sample Contract
- IX. Contractor's Acknowledgment

X. Certificate of Authority

XI. Non-Collusive Bidding Certification

XII. Affirmative Action Program Requirement

XIII. Minimum Wage Rates Form

XIV. Licenses and Permits: Proponents are required to possess all necessary State and Federal licenses or permits required for the collection, transportation and disposal of hazardous wastes. Provide evidence of such permits.

XV. Proof of Insurance: In this section, provide documentation of required insurance coverages. AVCOG will only accept a certificate of insurance from a licensed insurance broker.

XVI. Transportation and Disposal Facilities: Provide a list of all transporters, recycling, and treatment, storage, and disposal facilities which may be used in performance of this program

XVII. Staffing Information & Qualifications: Proponents are required to list all personnel by name and title (specify Project Manager(s), Chemists, Technicians, etc.); include each employee's degree(s), training and certification, and approximate number of field work hours performed. The role of each position during on-site collection activities must be outlined. Substitutions of personnel shall be made only with the approval of AVCOG.

XVIII. Site Set-up: Proponents are required to submit a diagram of how collection activities will be organized at the proposed household chemical waste sites. The diagram must include traffic flow; positioning of sorting tables and tent(s); fire, spill, and other safety equipment; and the minimum area required to perform the project. A brief description of site activities including sorting, receipt, segregation, packaging, testing, loading, etc. must be attached to the diagram.

XIX. On-site Equipment List: Provide a list of equipment which will be provided at the collection site, including all fire prevention, safety, personal protective equipment, and other supplies or equipment the proponent deems suitable or necessary for this project.

XX. Spill and Fire Prevention Plan: Provide a plan describing procedures to minimize the risk of spill or fire during on-site activities at the collection.

XXI. Contingency Plan: Provide a format for a contingency plan, including description of notification procedures for on-site emergencies and evacuation of participants and site workers if necessary.

XXII. Related Project Experience: Provide a complete list of all household hazardous waste collections the proponent has participated in during the past three years (1992 - 1995), including the approximate number of participants for each collection. Names, addresses, date, and the name and phone number for a contact person must be provided.

XXIII. References: Provide references and information on a minimum of three (3) household hazardous waste collection projects of a size and scope similar to AVCOG collection that were performed by your company in the Northeast, United States, in 1992 - 1995. This list must include the clients' company names, telephone numbers, a contact for each project, and a brief description of the projects.



BIDDER NAME: \_\_\_\_\_

**COST PROPOSAL  
PRICE PER VOLUME  
FORM A  
3 PAGES**

For purposes of determining the proposed collection cost, the following cost proposal must be filled out. On this form submit: (1) the price per participant based on 10 actual gallons of waste per household (and including any set up costs) and (2) disposal or management strategy to be used for the waste.

**FIXED PRICE PER PARTICIPANT** (assume 10 gallons per participant and including set up costs) \$ \_\_\_\_\_

PROPOSER NAME: \_\_\_\_\_

COST PROPOSAL, FORM A, CONTINUED,  
DISPOSAL METHOD AND LOCATION

Waste Category	Disposal Method	Disposal Facility (name/location)
Paint for recycling		
Bulked paints & varnishes (sludge & liquids)		
Consolidated resins & small paints, adhesives (with cans)		
Consolidated organic liquids		
Reactives (not explosives or ordnances)		
Consolidated aerosol cans		
Lab packed chemicals oxidizers		
Lab packed: acids, alkalines/bases		
Lab packed pesticides		
Consolidated recyclable batteries		

DEFINITIONS:

LAB PACK: packing of chemicals in their original containers with protective material such as vermiculite in the drum.

CONSOLIDATION: packing of chemicals in their original containers in drums with either the minimum amount of absorbent required by the federal DOT, or no absorbent materials.

BULKING: the pouring or emptying of chemicals from their original containers into a drum of like materials.

PROponent NAME: \_\_\_\_\_

COST PROPOSAL, FORM A, CONTINUED

Information about other potential waste disposal categories is welcome.

Waste Category	Disposal Method	Disposal Facility (name/location)
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Other (please list)

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PROPONENT NAME: \_\_\_\_\_

FORM B

CONTRACTOR ENFORCEMENT HISTORY

NOTE: A separate "Contractor Enforcement History" form must be completed for the proponent and all subcontractors whose work involves the collection, recycling, handling, or transportation of the household chemical waste, and by any transfer or storage facilities which will be used which are not owned or operated by the proponent. Enforcement History information must be provided for 1992 - 1995.

NAME AND ADDRESS OF ENTITY WHOSE HISTORY IS BEING REPORTED:

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone number \_\_\_\_\_

Contact person \_\_\_\_\_

1. Proponent (Company) must list all indictments, formal charges, and convictions against the Company, key employees, officers, directors, or owners regarding any environmental, public health or safety law, statute, or regulation at the federal, state, or local level. List on a separate sheet of paper or state here that no such actions apply.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Is the Company suspended or barred from doing business with the State of Massachusetts or any other governmental entity within the state?

YES \_\_\_\_\_ NO \_\_\_\_\_

CONTRACTOR ENFORCEMENT HISTORY, CONTINUED

3. List and explain any violation of environmental protection laws in any jurisdiction that the Company has been cited for. List on a separate sheet of paper or state here that no such actions apply.

\_\_\_\_\_  
\_\_\_\_\_

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4. List all actions or violations of hazardous waste transportation laws and regulations in any jurisdiction that the Company has been cited for and indicate if the violations are ongoing. List on a separate sheet of paper or state here that no such actions apply.

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5. Has the Company's license or permit for either transportation of hazardous waste and/or treating, storing, or disposing of hazardous waste been suspended or is pending suspension in any jurisdiction pending final hearing?

YES \_\_\_\_\_ NO \_\_\_\_\_

6. Has the Company received a notice of revocation of any permit it holds, even if a hearing is pending?

YES \_\_\_\_\_ NO \_\_\_\_\_

NOTE: For any questions answered yes above, provide the jurisdiction, date, and details, and resolution of the event or incident.

PROPONENT NAME: \_\_\_\_\_

**LIMITATIONS ON WASTES TO BE ACCEPTED  
FORM C**

Specify any and all limitations, restrictions or exclusions to your company's acceptance of chemicals and explain why. Do not include wastes listed in the above section, "Waste to be Excluded from Collection."

**WASTE TO BE EXCLUDED**

**WHY**

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

PROPONENT NAME: \_\_\_\_\_

**FORM D**  
**AUDITING PROCEDURES**

What are your auditing procedures and standards for disposal facilities? Describe the procedure, frequency of audit and date of most recent audit for each disposal location to be used under this contract.

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PROPONENT NAME: \_\_\_\_\_

**FORM E**  
**TRANSPORTER, FACILITY IDENTIFICATION**

Provide a list of all transporters, recycling facilities, and treatment, storage, and disposal facilities that may be used in performance of this program. The list must include the name, address, and EPA I.D. or permit number for each transporter or facility.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EPA id or permit number: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EPA id or permit number: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EPA id or permit number: \_\_\_\_\_

Please use additional sheets of paper as necessary, indicating the same information.



**FORM F  
SIGNATURE PAGE**

Submitted by: \_\_\_\_\_  
(signature)

Name and title: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX J**  
**HHW MATERIALS LIST**

*These are some of the things that should be brought to the collection event if there are no alternatives:*

antifreeze	lye
art/craft/photography supplies automotive fluids	metal polishes
car batteries	mercury/mercury-containing- devices
chemistry sets	moth balls
creosote	motor oil
DDT	muriatic acid
degreasers	old fire extinguishers
disinfectants	paints/stains/varnishes
drain cleaners, or drain openers	paint thinners, cleaners
driveway sealer/roofing tar	pesticides/weed killers
engine degreasers	rodent killers
flea killers	root killers
furniture polish	rug cleaners (containing PERC)
furniture strippers	septic tank cleaners
glue (containing toluene)	spot removers/solvents
herbicides/fungicides	swimming pool chemicals
insect pump sprays	toilet bowl cleaners
kerosene/gasoline/dry gas	upholstery cleaner (containing trichloroethylene)
	wood preservatives

**IMPORTANT: DO NOT MIX CHEMICALS OR REMOVE ITEMS FROM THEIR ORIGINAL PACKAGE!**

*Some things should not be brought to a collection because they aren't dangerous and it is cheaper to put them in the trash:*

air fresheners/deodorizers	cosmetics
caulk/spackle/grout	oven cleaner
fertilizer without pesticides	car wax/polish/cleaner
nail polish	empty containers
scouring powder	glass/window cleaner
aerosol cans without pesticides or disinfectants	latex driveway sealer
	medicine

*Some things should not be brought to a collection because they need special handling:*

explosive materials and ammunition  
infectious or medical waste  
compressed gases (other than aerosols)  
PCB's (transformers)  
dioxin containing waste  
radioactive materials  
hazardous materials from industry/non-  
households  
smoke detectors  
Silvex  
2-(2,4,5 Trichlorophenoxy)

*Some materials can be collected throughout the year as well as during the hazardous waste event; they can be recycled or stored and shipped separately, if a lower price can be found (see appendix A for a list of processing and recycling companies).*

- |                       |  |
|-----------------------|--|
| antifreeze -          | hauling cost may be significantly lower when it is done by a vendor specializing in antifreeze.  |
| button batteries -    | recycle through approved dealers if there is mercury content such as button batteries.   |
| car batteries -       | residents should be encouraged to take them to dealers where they are purchased.   |
| household batteries - | mercury content reduced to nearly zero in batteries manufactured since 1993. May be landfilled if there is no mercury.   |
| ni-cad batteries -    | Recycle through approved dealers. Contact David Thompson, RBRC, 345 Route 17, Suite 44, Upper Saddle River, New Jersey 07458-2327 for information on shipping ni-cads to INMETCO (412-758-5515) in Pennsylvania. Processing is free. |
| latex paint -         | can be stored in its original cans or may be exchanged by residents. At the end of the fall it can be collected by a paint recycler.   |
| used motor oil -      | can be used in waste oil burners in many municipal garages. During the summer months, it can be hauled away, sometimes at no charge.   |

**APPENDIX K**  
**TRAINING REQUIREMENTS AND OPPORTUNITIES**

Municipalities sponsoring HHW collection events need no special training. The hazardous waste contractor will provide all trained personnel. If towns wish to provide volunteers for the collection event, the contractor will provide an outline for the volunteer training needed.

If a town wishes to separate, store and ship some materials to save money, they will have to obtain further training. This should be planned in conjunction with an emergency management plan to identify exactly what will be collected, who will be responsible, and exactly what their capabilities will be. There are RCRA standards, DOT standards, and OSHA standards that will have to be met. Be sure you know which training requirements there are for the activities you have planned.

FOR RCRA TRAINING AND LICENSING:

Maine DEP, Division of Oil and Hazardous Waste Facilities - (207) 287-2651

- This is a source of information on the different requirements and training needs for hazardous waste separation and handling. Some courses may be available, depending on the need.

FOR DOT TRANSPORT REGULATIONS:

Maine State Police, Traffic Division - (207) 287-1057

- Provides training for packaging, labeling, manifesting, and shipping materials.

FOR OSHA HAZCOM AND EMERGENCY RESPONSE TRAINING:

Maine Bureau of Labor Standards - Safety Division: (207) 624-6460

- OSHA certification courses offered to municipal personnel free of charge. Registration is on a "first come, first serve" basis. This course provides information on worker safety and accident prevention, hazard communication law and the use of Material Safety Data Sheets (MSDS). It covers the CFR 1910 standards for general industry.

Maine Emergency Management Association - (207) 287-4080

- Local training for "First Responder" at the Awareness Level. It is important for Transfer Station Operators to know when not to attempt clean up of spills; this training informs personnel about whom to call for emergencies.

PRIVATE SECTOR SOURCES OF TRAINING:

Safe Tech Consultants, Inc. 500 Scarborough Dr. South Portland, ME 04106 (207) 773-5753 Deborah Roy.

Maine Labor Group on Health, PO Box 5 Augusta, ME 04330 (207) 622-7823 Erik  
Lauentz

Burgess Associates, Bangor ME 04364 (207) 257-2401 Joe Burgess

Maine Fire Service Training and Education, 2 Fort Rd. SMVT, South Portland ME 04106  
(207) 767-9555 Steve Doyle.

Clean Harbors provides training required by OSHA, EPA and DOT.

- Courses range from OSHA 40-Hour Course to 8-Hour Refresher Course. For information call (617) 849-1800, ext. 1490. Central Cust. Svc.(800) 533-5900.

University of Southern Maine-Production technology Center, Gorham ME (207) 780-5439  
Ivan G. Most.

Industrial Hygiene of New England, 121 Main St. Biddeford, ME 04005 (207) 282-1912  
Peter Noddin.

Safety Communications Corp., 117 Allen Rd. Presque Isle, ME 04769 (207) 762-3481  
Francis Allen.

**APPENDIX L**  
**BIBLIOGRAPHY OF EDUCATION MATERIALS**

*A Clean Bay Begins at Home.* Fact Sheet. Casco Bay Estuary Project. 312 Canco Road, Portland, ME 04103, No. 3.

*Alternatives to Toxic Household Products,* Bulletin #4098, University of Maine Cooperative Extension, April 1992 (being revised; available winter 1995).

*Assessment of the Effects of Household Chemicals Upon Individual Septic Tank Performances.* 1987. Mark A. Gross. University of Arkansas, Little Rock, Arkansas.

*Be an Environmentally Alert Consumer,* Brochure. U.S. Environmental Protection Agency, (800) 424-9346.

*Buy Smart, Buy Safe; A Consumer Guide to Less Toxic Products.* Philip Dickey. Washington Toxics Coalition, 4516 University Way NE, Seattle, WA 98105. (206) 632-1545. 1994. Cost \$5.00

*Cleaning up Toxics at Home.* Video. League of Women Voter's of California, Education Fund. The Video Project, 5332 College Ave, Suite 101, Oakland, CA 94618.

*Cleaning up Toxics in Business.* Video. League of Women Voter's of California, Education Fund. The Video Project, 5332 College Ave, Suite 101, Oakland, CA 94618.

*Collecting Used Oil for Recycling/Reuse: Tips for Consumers Who Change their Own Motor Oil and Oil Filters.* United States EPA, Publication Number 530-F-94-008, 1994.

*Disposal of Household Hazardous Waste.* Ann Lemley. Cornell Cooperative Extension. (607) 255-3151.

*Disposal Tips for Home Health Care.* United States EPA, 1993

*Home Safe Home;* A guide to indoor air pollution, water contamination, household toxics and other hazards commonly found in homes - with suggestions about how you can make your home a safer place to live. Natural Resources Council of Maine 271 State St. Augusta, ME 04330 (207) 622-3101.

*Household Hazardous Waste.* Fact Sheet. Maine State Planning Office (former Maine Waste Management Agency). , State House Station 154, Augusta, ME 04333, January 1993.

*SAFE H<sub>2</sub>OME PROGRAM.* Bulletin #7119; How much do you know about your drinking water? A water quality project from: University of Maine Cooperative Extension and the

State of Maine Department of Environmental Protection. (207)581-3185

*The World is Full of Toxic Waste; You're Home Shouldn't Be.* Brochure/Poster. Natural Resources Council of Maine, 271 State Street, Augusta, ME 04330.

*The Household Hazardous Waste Disposal Wheel.* Environmental Hazards Management Institute, 10 New Market Road, PO Box 932, Durham, NH 03824. (603) 868-1496. 1994. Volume discounts available.

*The Guide to Hazardous Waste Around the Home.* The Household Hazardous Waste Project, 1031 East Battlefield, Suite 214, Springfield, MO 65807. Cost is \$9.95.

*Toxics: Everyone's Guide to Toxics in the Home.* Greenpeace, 1436 U Street, Washington, DC 20009.

*Your Toxic Trash.* Video produced by KERA-TV, Dallas/Fort Worth. Contact Roy Dunn (214) 740-9288. Cost is \$24.95. Time appx. 30 mins.

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