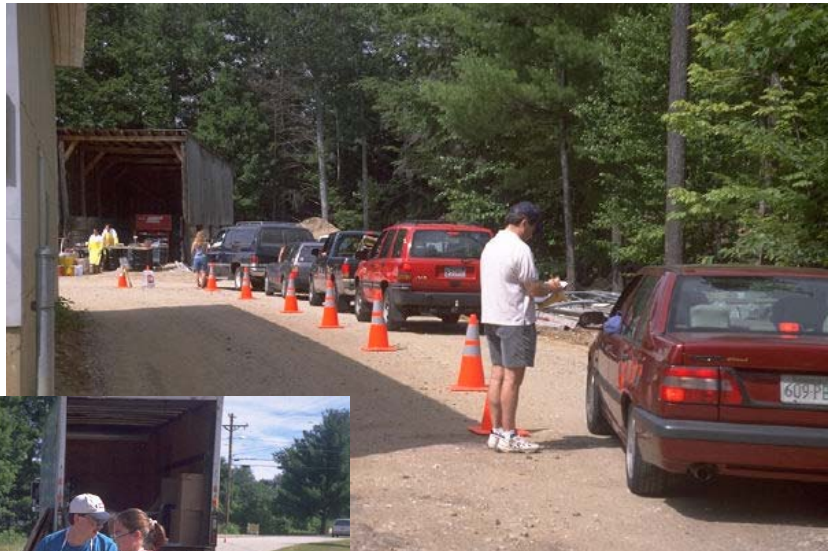


Guidelines For Organizing a Household Hazardous Waste Collection Event in Your Community



**Household
Hazardous
Waste
Program**

New Hampshire Department of Environmental Services
29 Hazen Drive
Concord, NH 03301

2008



- Guidelines for Organizing a HHW Collection Event

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Guidelines for Organizing a Household Hazardous Waste Collection Event in Your Community

I. Introduction

These guidelines will help community leaders and coordinators plan and operate a successful, one-day household hazardous waste (HHW) collection event. It is only a guide, not a template. Check your local and federal regulations for more specific information.

Why are Some Household Wastes a Problem?

Many common household products contain hazardous substances. These materials are hazardous because they contain chemicals that are corrosive, explosive, reactive, flammable or toxic. These products become HHW once the consumer no longer has use for them. The average household throws 15.5 pounds of **hazardous** materials into the trash every year. Household hazardous materials are disposed of in other ways, too. They are poured down the drain and end up in the sewer or septic systems. Dumping HHW into septic systems kills bacteria that are necessary for the proper functioning of the system. Disposing of HHW in landfills may contaminate ground and surface waters, ruining drinking water and killing fish and wildlife. Pesticides can damage sewage treatment plants, and oil poured into storm drains can flow directly into streams and ponds.



Many common household products contain hazardous substances.



How Can HHW Collection Events Help?

HHW collection events benefit communities by reducing the health risk and the environmental liability resulting from improper storage and disposal of these wastes. HHW collection events increase the communities' awareness of the potential risks associated with HHW and allow for their proper management. HHW events usually consist of annual or semi-annual collections, while some communities have established permanent or seasonal HHW collection programs.

II. Getting Started—The Basics

Establishing and maintaining a successful HHW event program is rewarding and effective but requires careful planning. Here is a step-by-step guideline for a one-day HHW collection event. Table A at the end of this document is a convenient timeline for collection events.

Choosing a Coordinator and Committee Members

Choose a Coordinator. This person will be the lead/contact person for the event. This person is usually the recycling coordinator, solid waste or department of public works (DPW) staff member, or a planning assistant. The coordinator makes the key decisions concerning the event and ensures that all aspects of the event are properly administered.

Set Up a Committee. This is optional but recommended. This will allow tasks to be delegated to help in the administration of the event. Committee members can be town staff, recycling or solid waste committee members, volunteers from town boards, DPW or fire department personnel, members of citizen groups such as conservation committee members, people with business or hazardous waste experience, etc. The process of forming a committee can begin by seeking volunteers at town meetings or similar events.



Establish the Basics

Contact Emergency Services and Town Officials. Emergency services, such as fire and police, should be contacted in advance, so they can prepare accordingly. Town officials should be aware of the events that are happening in their community. It is also helpful to have a town/city police officer assigned to the event.

Choose the Date and Location. Choose either a spring or fall event. Select a day that would be most convenient for residents. Events are most commonly scheduled on a Saturday morning, starting at 8 or 9 a.m. and running until Noon or 2 p.m. This time frame allows for the waste to be packed up by the hauler by the end of the afternoon, so they can transport it off site by the end of the day. This keeps the hazardous waste from being stored on-site overnight, eliminating the need to meet the waste storage requirements of Part Env-Wm 507.01 of the *Hazardous Waste Rules*. These rules must be followed if the waste is accumulated and stored, even on a temporary basis, since accumulating waste for any period of time increases the chances of health and environmental risks.



Emergency services should be notified in advance.

The location of the event should also be convenient for the residents. It must be in an area that has easy access, such as a school, a large paved parking lot, the transfer station, recycling center or town garage, with parking



US EPA has a new initiative, "Plug-In To eCycling," which encourages point-of-purchase computer recycling events.

spaces available for a number of cars. There should be an entrance that will allow waiting participants to remain off of the main roads and the entrance and exit should be easily accessed and not blocked to allow for easy traffic flow.

Choose the Type of Collection Types of household hazardous waste collections include one-day events, multiple events, satellite collections, reciprocal events and permanent facilities. These collection types, arranged in order of increasing effectiveness, are described below.

Single town/single event – The one-day collection event is the most common although other formats are fast becoming as popular. A one-day event consists of a single town setting up only a single, annual collection event exclusively for their town's residents. A one-day event is usually scheduled



One-day HHW collections, often held on Saturdays, are the most common type of event.

in the late spring through early fall so seasonal residents may take advantage of the collection. Saturday is the day of choice with the event running from the morning through early afternoon and no registration required. This type of collection is the easiest to set up, but provides the least amount of service to the smallest number of the state's population and is, therefore, reimbursed at the lowest rate by the HHW grant program.

Multiple towns/multiple events – This format generally consists of a single grant applicant setting up a collection event that allows participation by residents from more than one community and/or collection events offered on several dates throughout the year. This type of collection needs to be organized a little earlier than a one-day event because the hazardous waste hauler will need to schedule a team on multiple dates and at multiple locations throughout the year. Because the combined populations from participating towns are being served, the HHW grant reimbursement is calculated based on the entire participating population rather than only the population of the town where the event is provided. Additionally, multiple events grants are awarded reimbursement at a higher per-capita rate than for a one-day event. All of the events' tasks and responsibilities fall on the grant applicant, although it is not unusual for participating towns to share the workload.

Reciprocal events – This is a variation on a multiple event format. In reciprocal events, two or more organizers each organize and provide a collection event or events in their community that is/are accessible to residents in each of the other participating towns. The events are scheduled for different days, throughout the year. This format allows residents access to a variety of collection dates and locations even though the organizational requirements for each applicant are no different than for a one-day event. As with multiple events, this format provides a greater level of service to a

greater population than a one-day event and is, therefore, awarded grant reimbursement at the same rate as for multiple events collections.

Satellite collection – This is also a multiple-town event but, in the case of a satellite collection, the professional hazardous waste hauler only sets up at a single, central site. Surrounding “satellite” towns then use their own staff to collect the HHW and “self-transport” it to the site where the hauler accepts and loads it onto their truck for transport to a disposal facility. This format offers the same service as multiple events but eliminates unreasonable travel time for satellite town residents who would normally have to travel to the central location. This format is also extremely cost effective because it minimizes or eliminates expensive set up fees and overhead costs charged by a professional hazardous waste collection team. This approach does require town staff to be properly trained but DES provides the training to municipalities free of charge.

Permanent facilities – These are multiple events where the organizer generally collects and stores homeowner hazardous waste in their own facility while awaiting periodic collection by a professional hazardous waste hauler. There are several permanent collection facilities in New Hampshire and the physical storage structures they use range from specially designed and constructed hazardous waste storage buildings to a section of an existing municipal building set aside for that purpose. As with satellite collections, tremendous savings are realized if community staff or a reduced professional staff collects, consolidates and stores wastes in the permanent facility with a periodic collection and transport by the hazardous waste hauler. These facilities are often open on multiple dates both on the weekend and during the work week, allowing for a high level of convenient service to the community while reducing the overall cost of collection. Permanent facilities in conjunction with satellite collections are awarded grant reimbursement calculated at the highest per-capita rate and generally based on a very large population figure.



City of Keene’s permanent HHW facility storage container.

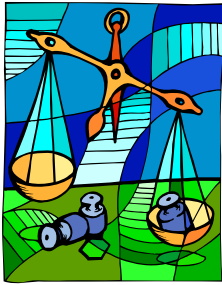
In general, the most effective collection types, from both a level of service to residents and cost-effectiveness point of view, are those that offer residents access to multiple events and multiple locations while minimizing the use of professional hazardous waste hauler services. Feedback received from residents in towns offering only a one-day collection event often consists of frustration and anger when responsible residents trying to properly dispose of their hazardous materials find they missed their town’s single, annual opportunity to do so. It is no coincidence that immediately following a one-day event, solid waste facility operators see an increase in the amount of homeowner-generated hazardous wastes improperly discarded in the solid waste stream or abandoned outside the facility.



You may not want to accept wastes that can be easily diverted through other programs, such as used oil.

Determine what Wastes are to be Accepted and Not Accepted. Decide what types of waste to accept or not accept at your event. You may want to set up alternative arrangements for wastes that can be easily diverted through other programs, such as used oil and antifreeze for recycling, and universal wastes (cathode ray tubes, mercury devices, fluorescent lamps, household batteries, antifreeze and certain pesticides). Work closely with your HHW hauler to determine what is and isn't acceptable to them. Unknowns, explosive and radioactive wastes are other items you may not want to accept at all, unless there is protocol in place for their safe management. Organizers should let participants know how to handle these wastes and provide alternative

management options so residents do not dispose of them in the nearest trash can. Keep fact sheets and pamphlets on hand to give to residents who need or request more information on specific wastes.



Some collections impose a five-gallon or 50-pound limit per participant.

Set Your Limitations. You may wish to limit the amount of households participating in the event in order to keep the costs within your budget. The average cost per participant is approximately \$50. Imposing a limit on the amount of HHW each participant may bring is another way of reducing the cost of the collection. For example, some collections impose a five-gallon or 50-pound limit per participant. Limiting amounts allow all wastes to be properly packaged before the end of the day, and allows the hauler's staff to terminate work at a reasonable time. Overnight storage requires that more stringent requirements be met. These include storage in properly constructed and labeled drums, providing a secure storage area, storing drums where leaks can be contained and having properly trained staff on site.

Budgets, Funding Sources, Costs

Decide On and Approve a Budget. Towns should obtain budget approval for an event at their town meetings. The amount should be over-estimated by 50 percent so the event does not end up going over budget. Have the selectmen attend the meeting and involve them in important budget decisions. Obtain prior approval to make necessary emergency decisions, such as whether to close the event if it is going over budget.

Consider Funding Sources. Funding for HHW events can come from a wide variety of sources. It can be from state grants; county and local general funds; taxes, fees and penalties; contributions from industry, cities and districts; and local sponsors.

- **State HHW Grant Program.** To help communities better manage their household hazardous wastes, the state offers Household Hazardous Waste Grants. The grant is available once a year (deadline for grant applications is February 1). Eligible applicants are awarded grant monies at a designated per capita rate, up to half the cost of the collection for communities served.

Application requirements may change from one year to the next. Therefore, it is imperative that the grant application you submit is the most current version. Current applications are available to download at www.des.nh.gov/HHW/hhwgrant.htm. Specific requirements of the program can be found in the New Hampshire *Hazardous Waste Rules*, Part Env-Wm 1003.

Household Hazardous Waste Program

The state offers a Household Hazardous Waste Grant Program.

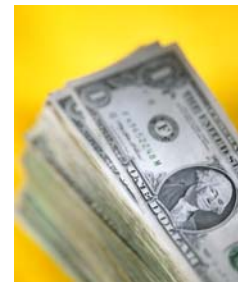
- **Town Funding Sources.** Since 1989, New Hampshire law (RSA 261:153) has allowed municipalities to establish a fund for collecting and disposing of residents' used tires, motor oil, antifreeze and motor vehicle batteries. To raise money for a town reclamation trust fund, municipalities may collect an additional amount when the town or city clerk registers residents' vehicles. Go to www.des.nh.gov/factsheets/sw/sw-23.htm for more information for establishing a fund in your community. A budget allocation request should be filed with the town in order to ensure that the funds are set aside for the collection.

- **Consider a Sponsor for Your Event.** A government agency, civic organization, solid waste district or planning commission can be chosen as a sponsor. The sponsor would represent all of the towns involved and administer the event on their behalf. The sponsor may fund all aspects of the program.

Factors Affecting Costs. Cost factors include the number of households that participate, the types and amounts of waste collected, the waste management methods used and the transportation costs to the hazardous waste facilities. Events that use less contractor help and equipment and that rely more on recycling and reuse options for waste management will see reduced costs. Discuss with potential contractors the various options on which hauling bids are based, e.g., per disposal costs, per household served by the collection event, per type and/or volume of items collected, etc. Then base your decision on what is most cost effective for your town.

The Cost Per Collection Event. The cost of a collection event can range from \$3,000 to greater than \$10,000, depending on a number of factors. Costs will be in the higher range if a contractor does most of the work and there are no other programs in place for recycling and reuse. The number of households that participate can be controlled through a pre-registration process that can also control the types and amounts of waste collected. Plan on extra costs for first-time events!

The Waste Hauler and Disposal Costs. These are the largest items in the HHW event budget and will depend on the types of waste collected and the waste management methods used. For example, reusing or recycling wastes is less expensive than incinerating the waste. A contractor that has its own treatment, storage and disposal facility (TSDF) or that has access to facilities close to the storage site can offer better rates than other contractors.



The Collection Methods and Costs. The method of collection can also affect the overall cost. Permanent programs might be more cost effective than one-day collections. Permanent facilities offer more opportunities to arrange for recycling or reuse of collected items, resulting in less waste being disposed of as hazardous waste.



A swap shop area for reusable products eliminates the need for some disposal and provides a service to the community.

Ways to Minimize Costs. Costs might be minimized by: soliciting bids from potential HHW contractors based on the number of households served by the project rather than the types and amounts of waste; reducing the amount of HHW generated through public education; and limiting the type of waste being collected at a HHW event. For example, used oil for recycling can be used as a fuel for heating a public works garage, transfer station or other public building. A swap shop table for reusable products eliminates the need for some disposal and provides a service to the community. Work with surrounding communities to establish regional collections or a permanent HHW facility. Solicit volunteers for the HHW collection day to control traffic, conduct surveys, and assist the organizer as required. The DES Household Hazardous Grant Program can provide some funding and technical information. Statewide contracts are available. These contracts can provide reduced costs for specific household hazardous wastes or services.

III. Education and Outreach

Grant Requirements for Outreach

Covered and Uncovered Expenses. Education and outreach is an extremely important component of the HHW collection. Public education activities must be conducted consistent with the HHW Grant Program in order to be eligible for reimbursement. This education should include information about the potential dangers of HHW and the proper means for disposal, as well as information about ways to reduce generation. The education component must include all three parts in order to be eligible for funds. DES maintains a brief list of sample informational materials on its website at www.des.nh.gov/hhw. Additional materials are also available at

your request. Some related items not eligible for reimbursement include, but are not limited to, t-shirts, hats or specific novelty items.



Public education can include brochures, fact sheets, radio broadcasts, public service announcements and posters.

Simply advertising the collection location and date is not considered public education. Public education can include brochures, fact sheets, radio broadcasts, public service announcements and posters.

Messages, Format, Media, Methods

Advertise the Event Early. Maximize participation in the HHW event through early advertising. The increased participation rate can have an immediate result of reducing the quantity of hazardous materials in the solid waste stream and the wastewater stream, since the waste collected will be disposed of and managed in an environmentally sound manner. Greater participation will mean higher costs for the community in the short run due to the large volume of waste usually collected at one-day events. The advantage of such an event is that it allows for more one-on-one education with the participants and helps avoid or reduce costs associated with potential environmental cleanups that may be needed when HHW is disposed of by less environmentally favorable methods.

Targeting the Audience. Residents are the most important targets of a HHW education program. The information should also reach public officials, civic groups, solid waste division or general services personnel and the business community in order to encourage financial and other forms of support for your program. The media's understanding of the HHW issues helps ensure accurate and responsible reporting. Others that can benefit from education about HHW include manufacturers, retailers, students, health care providers, farmers and educators.

Determining the Message and Educational Methods. Public education is helpful even if a collection is not planned. The campaign can include information on how to identify HHW, why it's harmful, alternatives to these products, purchasing tips, how to use products so that they have little environmental harm, and how to properly store and handle hazardous products in the home. Good publicity explains why people should bring items to a HHW collection program, how to transport HHW safely, when and where the collection will be held, which materials will be accepted/not accepted and what to do with items that are not accepted at the event.

Outreach includes ads by local television, radio stations and local and regional newspapers, contacting local solid waste operators and regional planning directors organizations, and columns in community newsletters. Speak at town meetings, planning board and conservation commission meetings, school assemblies, and civic group meetings. Distribute HHW information and brochures at public buildings, transfer stations or recycling centers, libraries, schools, hardware stores and supermarkets. Mailings and mailing inserts can be included with utility, tax bills or other local mass mailings.

Establish a HHW Education Program. This program should provide information to consumers about proper HHW management but should focus on ways to **reduce** the generation of hazardous waste, such as purchasing non-hazardous alternatives, purchasing only what they need, and



Advertise the event as early as possible.



Distribute HHW information and brochures at public buildings, transfer stations or recycling centers, schools, libraries, hardware stores and supermarkets.

using all the products they buy for their intended purpose. More information is available on our website at www.des.nh.gov/hhw.

Conducting Follow-Up. Follow-up is an important part of the HHW collection event. Local media should be provided with follow-up stories of the event, such as a report about the amount and types of HHW collected. The results of program should be documented in a summary report.

IV. Contracts and State HHW Grants

Costs Covered by a State Grant

Disposal and Public Education Costs. The grant covers up to 50 percent of the disposal and public education costs for the household hazardous waste event at a designated per capita rate. These costs must be charges that are directly related to the collection and disposal and/or for public education on household hazardous waste. Some items have a maximum reimbursement amount, e.g., wastes that are listed on a state contract, such as fluorescent lamps. The costs for disposing of non-hazardous household waste such as alkaline batteries or wastes that can be managed through another program (like the Rechargeable Battery Recycling Program for rechargeable batteries) will not be reimbursed. These items are listed in a DES policy letter that is issued by the HHW Grant Program on a regular basis and is posted on the website. Grant awards for collection events are calculated using a per capita rate and based on the total population served. The per capita rate varies with a higher rate being applied to collection events serving multiple towns on multiple dates. A town offering a single collection event with access restricted to only town residents is awarded a reimbursement calculated at the lower rate. The per capita award rates may vary, based on the amount of grant funding in the approved budget.

The State HHW Grant Program Application Process

Obtaining a Grant Application. An application can be obtained by contacting the HHW Grant Program at DES (contact information is listed at the end of this document) or you can download the application form by visiting the HHW website www.des.nh.gov/hhw. The application packet contains the application form, example forms, applicable hazardous waste rules, a list of hazardous waste contractors and other useful information.



The Application Process. The application should be completed and post-marked prior to the deadline specified on the website or in the application packet. Applications received after these deadlines may not be considered. Once all applications are received, DES reviews them and determines if they are eligible for funding. Priority is given to applicants that serve a population greater than 10,000 people, to those that serve the greatest number of communities, to applicants that have not received grant money in the previous grant period, and to applicants that collect a broad range of household hazardous waste.

Developing a Request For Proposal (RFP)

Writing a Request for Proposal. A well developed proposal should include the sponsor's goals for the program, site, community and project information, including: the location and date of the collection; community size and demographics; the targeted waste categories and specific waste collection; management and destination requirements; type of collection (drop-off, curbside, etc.); specific waste handling requirements; volunteer/staffing requirements; the costs; and services required of the contractor. Include specific requests, such as consolidating all paints into large containers vs. packing individual cans, setting all batteries aside, and what is or is not accepted at the event.

A poorly developed Request for Proposal does not specify your requirements. This may result in a response from a contractor that does not meet your specific goals and can greatly affect your waste disposal costs. Read over the response and ask the bidder specific details, for example, the cost of bulking oil-based paint vs. other methods; how they manage rechargeable and non rechargeable batteries; the cost for managing used oil for recycling and how all wastes are treated and disposed of. Pay particular attention to items that you want disposed of as solid waste and not as hazardous waste, e.g., alkaline batteries. How the collection will be set up and staffed are also important questions to ask. Understaffing and an improper set up can lead to long lines and irritable participants. Pay attention to details to cover all of your bases.

Advertise the RFP. Advertise your RFP in all areas, such as the local and other newspapers, listserves, or business related newsletters. The more global your RFP, the more competition, thereby increasing your chances of getting better services for a better price. A list of household hazardous waste contractors can be obtained by contacting DES or on line at www.des.nh.gov/OneStop/docs/HHW_Contractors.doc.

Contracting Considerations

Price considerations. A long-term contract may lock you into a higher price than the current market value, but a two- or three-year contract may save time and allow for easier budgeting. You may want to have a clause that allows you to renegotiate in the event of a drastic change in price.

Choosing a Contractor. The selection of a contractor should be based on the following criteria:

- Contractor's license
- Experience and references
- Compliance record
- Insurance, services offered
- Final destination of the waste

The proposal should include:

- Itemized costs (site set-up, labor, equipment, transportation, disposal,

cost per drum, per product, per unit of waste and how much waste will be placed in each drum)

- Available collection dates
- Wastes not accepted by the contractor
- Consolidation costs of high-volume wastes
- A sample contract
- Proposed staffing at the event
- Additional charges for “special wastes” (e.g., contaminated gasoline or oil, etc.)
- A health and safety plan for the event



Contract with the most qualified hazardous waste firm. The contract should include a description of:

- The materials and equipment provided
- The fee schedule for all the work provided
- Staff training



- The insurance carrier and coverage
- Consultations and meeting requirements
- The final destination of the wastes
- The services provided on collection days
- Compliance with all federal, state and local requirements
- Submission of proof of delivery of all wastes prior to payment and the post collection report

The sponsor and their legal advisors should review the contract before it is signed to make sure that the contract is legal and that all of the requirements are met.

Sequence of Events/Timing for Grants and Contracts

Grant applications must be postmarked or received by DES by the program deadline. Any applications received after the deadline may not be considered for funding.

The grant applicant must contract with the Department of Environmental Services and have or obtain a vendor code. The contract will require internal or Governor and Executive Council approval. The established deadlines are important to ensure that grants are approved prior to the collection date.

The Governor and Executive Council (G&C) Contract. Almost all household hazardous waste collections funded by DES require G&C approval. G&C meetings and the deadline for submittal of items for the meetings are posted at www.nh.gov/council/#governor. The G&C contract

approval process can take up to eight weeks, depending on whether the proper and correct paperwork has been submitted and the Governor and Council's schedule. The submittal of all the required paperwork is critical in speeding up the approval process so it can meet the required deadline. Once the contract is approved, it will be sent to the applicant's mailing address.

V. Running the Event

Setting Up the Site/Location and Equipment

Choosing the Site. The site chosen for the collection should be at a location that is familiar to residents, conveniently located and easily accessed. The site should take into account local regulations and approval for the event must be obtained from the local government. Sites with an impervious surface, like a paved parking lot, are required to help minimize environmental risks, although haulers may use heavy plastic tarps on gravel lots in some cases. On-site utilities should include running water, fire hydrants, electric hookups, and access to restroom facilities (could be portable). The site should provide shelter for the HHW collection workers and containers of HHW must be kept dry. If the site does not have adequate shelter, the contractor or organizer should provide a temporary tent. Project sites are typically schools, fire stations, solid waste landfills or transfer stations, and empty parking lots.

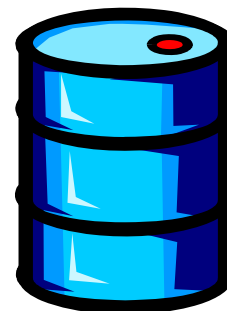


The site should provide shelter for the HHW collection workers and containers of HHW must be kept dry.

Collection Equipment. The site organizer or hauler should provide all the necessary equipment for receiving, collecting, and analyzing the waste. This equipment includes tables, chairs, labels, shipping containers, hazardous waste manifests, office supplies and dumpsters. The equipment should also include safety supplies such as Tyvek suits, portable showers, eye-washes, decontamination equipment, gloves, boots, and "speedi dry" for packing and spills.

Setting Up the Clean Area. The break area should be a "clean area" for staff and volunteers. It should be separate from the waste handling area so they can drink, eat, rest and use the washroom. All personnel should remove protective equipment and wash before entering the clean area.

Temporary Storage Area. Empty drums, along with fully packed and sealed drums, can be placed in a temporary storage area. This area should



stay dry and protected by providing a precipitation-proof cover. The storage area must be on an impervious surface. For collections of less than ten consecutive days, this could be accomplished by using plastic sheeting of 6 mils minimum for a floor.



There should be staff on hand to direct traffic, offer educational materials, and answer questions.

Traffic and Parking Issues

Directing the Traffic. Posted signs should direct the participant to the unloading area. The site should allow participants to move through the collection area quickly and efficiently and there should be staff on hand to direct traffic, offer educational materials, and answer questions. The size of the site is critical to the efficiency of the program. The site should be at least 10,000 square feet and take into consideration traffic overflow.

Parking Considerations. A special parking area is recommended to accommodate people who need extra attention, such as those who bring in special wastes or have spilled a container in their vehicle. Parking should also be available for volunteer and staff vehicles.

Avoiding the Wait. The event organizer should plan ways to avoid long waits by participants. Strategies for reducing waits include: holding a main collection in conjunction with several others in separate locations; holding the collection over several days; having a pre-registration requirement where the resident registers for the event and is given a specific time to come to the event or having the cars form two lines using volunteers to survey and pre-register.

Volunteer vs. Contractor Roles

The Site Entrance. Municipal staff or volunteers should stand at the entrance or check-in station, greet the participants and direct them to the service area. Personnel should be stationed outside the entrance to manage traffic flow; a police officer stationed here can be very helpful in maintaining order. Signs and traffic cones can help control the traffic flow on and off site. Before they drop off their waste, participants should be screened for residency, complete questionnaires and list the wastes they have brought to the site. Educational materials can be distributed, questions answered, and information provided on what to do with unacceptable wastes.



Only trained staff should remove wastes from the vehicle.

The Hazardous Waste Screening Process. Trained personnel should screen each vehicle for unknown, unacceptable, recyclable or nonhazardous waste. For liability and safety reasons, participants should remain in their cars and should not remove any wastes from their own vehicles. Only trained staff should remove wastes from the vehicle, take them to a sorting table and direct the participant to the exit.

The Sorting Area. In the sorting area, trained staff or contractor personnel sort the wastes into hazard categories. Empty containers and nonhazardous waste should be placed in dumpsters located in the sorting area. Any unknown materials need to be sorted as a hazardous material, but be kept separate from the other materials.

The Packing Area. In the packing area, trained personnel should lab-pack the wastes, bulk them into drums or pack them into designated containers. All the containers should be labeled according to hazard class and loaded into the appropriate truck(s). The consolidation of wastes can be performed in this area. A trained town employee should check all drums before they are sealed to ensure that they are not being charged the full drum price for a partially filled drum or a drum overfilled with packing material.



In the packing area, trained personnel should lab-pack the wastes, bulk them into drums, or pack them into designated containers.

Weather Considerations

Rain, Snow, Sleet and Hail. Severe weather conditions can hamper the event. Wet conditions will require shelter for the staff and volunteers. Hazardous materials must be covered to prevent run-off and contamination of the ground and surface waters. Ice and snow conditions will result in the need for snow removal equipment and supplies. Portable heaters may be needed to keep the staff and volunteers warm and prevent the chemicals from freezing.

Summer Heat and Sun. Protection from the sun may be required if the event is held outdoors in the summer months. The hazardous materials, in particular flammables, must be covered to prevent combustion. The protection will also keep the staff and volunteers cool and prevent heat stroke and sunburn.



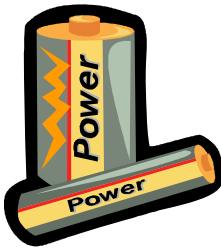
VI. After the Event

“Cradle-to-Grave” Issues

Importance of Tracking Your Wastes. It is important you track the waste from the time it is generated or collected at your facility (*cradle*) to its final destination or treatment facility (*grave*). The manifest system is designed to do just that for the generator. Ultimately, it is the responsibility of the waste generator and all responsible parties to ensure the waste is properly treated and disposed of. Make sure the transporter is registered in New Hampshire and in other states where it may take your waste. This information can be obtained from DES’s OneStop website at www.des.nh.gov/OneStop/. You can also check this website to see if signed facility copies of the manifests or required tracking papers have been received by DES by looking under the Hazardous Waste Generator category. You may want to

call the final destination on the manifest to ensure that the paper work is authentic and that it is a registered treatment and disposal facility.

Disposal Options for Non-Hazardous/Recyclable Wastes



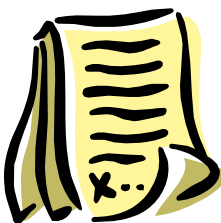
Disposing of non-hazardous waste as solid waste, and recycling or reusing items reduces the amount of waste the contractor has to receive, package and process. Household wastes that are not considered hazardous according to the *Hazardous Waste Rules* (e.g., alkaline batteries, dried latex paint, non-toxic cleaners) may be disposed of as regular trash. Recyclables can be easily collected at your local recycling center. This increases the convenience of drop off for residents and reduces costs at the collection event. Examples of recyclable HHW are: antifreeze, lead acid batteries, mercury devices, fluorescent lamps, computers and used oil.

Compilation of Results

Program Goals and Feedback. To determine whether program goals have been met, the sponsor should compile data from the event. The sponsor's contract with the hazardous waste company should specify what the sponsor needs from the contractor for post-collection evaluation. This data should include the number of participants, the percentage of the target population served, the quantities of the different wastes collected, the quantities and percentages of recycled waste, the itemized total costs, the cost per participant, and the waste management cost per pound. There is also specific data that must be collected as part of the grant requirement. The information needed is listed in the household hazardous waste report form and survey that can be obtained from the Household Hazardous Waste Grant Program Coordinator by calling 271-2047. These survey questions may change according to the grant program's need.

Final Report. The contractor should be required to submit a report to you following the event. This would include all amounts and types of wastes collected, invoices and other information requested as part of the contract requirements. Some of the information included in the final report may be a requirement of your hazardous waste grant. These submittal requirements are listed on the fact sheet WMD-HW-13 *Household Hazardous Waste Grant Program Guidance*; to download, go to www.des.nh.gov/factsheets/hw/hw-13.

Manifests and Invoices



Manifesting Requirements. Signed facility copies of the manifests must be received by you in order to ensure you that the wastes collected were received at their final destination for proper disposal. Copies of these manifests must be submitted to DES as part of the HHW Grant Program requirement. For more information on manifests and manifest requirements, log on to www.des.nh.gov/rims/rims_forms.

Grant Reimbursement Requirements. Major invoices that total greater than 50 percent of the grant amount are required to be submitted to DES in order to be eligible for the total grant amount. These invoices must be pertinent to the collection and disposal of the HHW, or part of the required

public education requirements.

All the manifests and invoices will be reviewed and compared and any discrepancies will be noted.

VII. Special Issues

Permanent HHW Collection Facilities

The Pros and Cons. Communities can choose to develop a permanent collection facility to make collection more convenient for participants and for workers. Because materials don't have to be removed from the site at the end of the day (as with one-day events), permanent programs afford more opportunities for recycling, reuse, consolidating and local treatment, and offer a superior level of service to taxpayers.

The main disadvantage to permanent programs is the initial cost for the construction of the facility and the need for institutionalized, ongoing sources of funding. The establishment of a collection facility serving a number of municipalities can be more cost effective, since the cost of operating the facility is shared among the participants. Commitment can be guaranteed in the form of a written contract between the participating municipalities and the host town. Permanent facilities may fall under state and local permitting and reporting requirements. Finally, because facilities are fixed in place, they may be inconveniently located to part of the community. Ultimately, permanent programs provide a greater level of service to taxpayers.



Nashua Regional Household Hazardous Waste/Small Quantity Generator Waste Collection Center

Facility Design. A basic facility design typically includes an unloading area, containment and storage areas, fire suppression equipment, grounded bulking area, safety equipment, emergency eyewash and shower, and supplies storage. More elaborate facilities have separate sorting bays, laboratories, employee break rooms, offices, restrooms, carports, explosion-proof heaters, swap rooms, and landscaping.

Curbside Pickups

Pros and Cons. Curbside collection programs usually are limited to a few selected wastes, such as oil-based paint, and collected from households on a regular scheduled basis. Placing restrictions on the types of waste is necessary to prevent dangerous, highly toxic or incompatible wastes from being left at the curb. Collecting and transporting hazardous materials in residential neighborhoods can pose certain difficulties, such as the proximity of pets, children and personal property. The most common, easily collected, types of household hazardous waste are used oil, batteries and paint. Curbside collection of household hazardous waste is convenient to residents but expensive and labor intensive. The collector must go from house to house and the waste must be packaged and prepared for trans-



Fluorescent lamps are considered universal waste.

portation. Incompatibles must be kept separate from each other and the collector must be properly trained in the handling of HHW.

Swap Shops

Reusing materials brought to HHW collections can reduce the amount of waste that the contractor must manage, thereby lowering program costs. For example, reusable paint can be placed on “drop-and-swap” tables for collection program participants to pick up or it can be bulked and blended for use by people or institutions that request the paint. Experience shows that paint swap shops can reduce the amount of paint being disposed of by as much as 90 percent. Communities should offer products for reuse only if they are in the original container and the label is intact and legible.

Universal Wastes

Universal waste rules allow common, low-hazard wastes to be managed under less stringent and less costly requirements than other hazardous wastes. These wastes include mercury containing devices, fluorescent lamps, cathode ray tubes (CRTs), certain household batteries, antifreeze and certain pesticides. See the fact sheets at this link for more information www.des.nh.gov/uw.htm.

Other Wastes



Cans may be disposed of as a solid waste or recycled, if completely emptied of any free liquids.

Latex and Oil-Based Paint. Latex paint is non-hazardous. Instruct your residents to dry out the liquid in the can and then dispose of it as solid waste. Oil based paint may contain flammable constituents and should be managed as a hazardous waste. Go to www.des.nh.gov/hhw/PaintTipBrochure.pdf for information on purchasing, using and disposing of household paint.

Disposing of Empty Steel and Plastic Paint Cans. Cans may be disposed of as a solid waste or recycled, if completely emptied of any free liquids. Turn the can upside down and drain into a container. The liquid waste must be dried if latex or water-based or disposed of as a hazardous waste if oil-based.



Used oil filters can be managed easily on a day-to-day basis at your facility.

Managing Used Oil. If the used motor oil is from Do-It-Yourselfers (DIYs), it can be easily collected and managed at your facility on an ongoing basis. Technical assistance and used oil grants are available from the DES Used Oil Grant Program. Call 1-888-TAKEOIL or log on to www.des.nh.gov/hwcs/used_oil.htm for more information.

Managing Propane Tanks. For information on managing propane tanks at your facility, refer to the following: www.des.nh.gov/factsheets/sw/sw-30.htm or www.des.nh.gov/SWTAS/propane_tanks.htm or contact the Department of Environmental Services Waste Management Division at 271-2900.

Small Quantity Generator (SQG) Wastes

Most collections are limited to homeowners but some allow businesses to participate. The New Hampshire *Hazardous Waste Rules* allow small quantity generators (SQGs) to bring wastes to HHW events as long as certain terms and conditions are met. These terms include: waste can only be brought to a one-day collection event; waste must be manifested; and waste must be given directly to the contractor at the event. If you decide to allow SQGs to be included in the event, you should discuss collection and payment terms with your hauler. It is common practice for the SQG, not the town, to pay the hauler, unless other arrangements are made. These generators are usually charged based on the cost of managing their waste. Allowing drop-off by appointment only will prevent the collection site from being overwhelmed by too many SQGs. Contact DES at 271-2900 for more information on hosting such an event.

Liability Issues: Safety Training, Knowledge of Rules

Minimizing Your Liability. Minimize liability by becoming familiar with federal, state, and local hazardous waste regulations. Know the laws that govern collection activities. While hazardous waste laws might seem complex, the liability associated with taking no action at all may be higher. By complying with the requirements and laws, you limit your liability.

Developing a Safety Plan. The safety plan should include steps for preventing spills, a contingency plan in the event of a spill or accident, a list of health and safety equipment available on site, and evacuation information. This plan should be available at the collection site during collection hours.

Making Training and Education a Priority. The collection staff and volunteers should be properly trained in order to minimize risk. Public education and publicity can also help ensure a safe operation. Educate the public about safe packaging and transportation of wastes to the event. For example, participants should be instructed not to transport HHW within the passenger compartments of their vehicles or to transport HHW in bags.

Obtaining the Necessary Insurance. The program should have adequate insurance to cover general, employee, transportation and environmental liability. Minimum insurance liabilities include general liability, motor vehicle insurance, in-transit insurance, an indemnification clause and workers' compensation. If the town is a hazardous waste generator, it may already have insurance in place. The sponsor can also require additional protection, such as a "bid bond," "performance bond," or "certificate of insurance" to help minimize liability.

Training and Certifying the Staff. The contractor is responsible for ensuring that all of its staff are properly trained and certified. Topics at the training should include the names of the personnel re-



Develop a safety plan.



A HazMat training session at DES.



Training is offered by DES free of charge.

responsible for site safety and health, the hazards present at the site, the use of personal protective equipment, work practices that can minimize risks, and the safe use of engineering controls and equipment on site. This training is recommended for all personnel even if law does not require it. The contractor's staff should be briefed on any special requirements, including unacceptable materials and procedures to be followed. The staff should be briefed on the safety plan, spill response procedures and evacuation plans. Training is offered by DES free of charge. The workshops are listed at www.des.nh.gov/SWTAS/workshop/default.asp?goto=list.

Training Volunteers and In-house Staff. Volunteers and in-house staff who will work at the project site should also receive proper training. Due to accident and liability concerns, the responsibilities of the volunteers should be limited to traffic control, conducting surveys, and providing general assistance. The in-house staff can perform other collection day duties, such as unloading cars or opening and scraping out paint cans, depending on their training and qualifications. These tasks must be performed under the contractor's or authorized staff's supervision. The project coordinator should explain to volunteers and in-house staff what they may and may not do on collection day; the procedures for receiving participants, controlling traffic, and handling waste; and what their role would be in the event of a spill.



The staff should be able to identify different types of wastes, separate them according to their classification, and be trained in other aspects of handling household hazardous waste.

Town Operated Collections

Towns can employ authorized trained personnel to operate a collection event. The staff must have the necessary training in household hazardous waste to be able to collect, manage and transport the waste. The staff should be able to identify different types of wastes, separate them according to their classification, and be trained in other aspects of handling household hazardous waste. The town would be the generator and would be subject to all the rules and regulations for small or large quantity generators, depending on how much waste they collect. When transporting household hazardous waste to a household hazardous waste collection project or a transfer, treatment, storage, or disposal facility, government entities are exempt from specified rules as long as certain conditions are met. These conditions are listed in Env-Wm 501.02 (b) of the New Hampshire *Hazardous Waste Rules*. This exemption makes it easier for government entities to conduct their own events.

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Table A: Timeline for Household Hazardous Waste Collection Event Checklist

1) The planning of your first HHW collection must begin six to 18 months prior to the collection date:

- Establish a committee, identify the goals, and select the program sponsors.
- Contact environmental regulatory agencies.
- Research the costs and funding sources.
- Apply for eligible local, state or federal grants.
- Design and implement an education and outreach program.
- Determine the collection methods, dates and the site location.
- Issue a Request for Proposal (RFP).

2) Three to five months prior to the collection:

- Confirm collection date(s) as soon as possible.
- Evaluate the RFPs and interview and select the contractors.
- Identify the markets for reusables and recyclables.
- Involve emergency services.
- Begin publicizing the collection program.
- Obtain the necessary permits.

3) Six to 12 weeks prior to the collection:

- Design and draw the site layout.
- Develop a collection day procedure/ written plan.
- Identify and order the necessary equipment.
- Arrange for the disposal and recycling of nonhazardous materials.
- Intensify the education and publicity efforts.
- Solicit volunteers.
- Acquire the necessary insurance.
- Develop the collection day surveys.

4) Zero to six weeks prior to the collection:

- Receive the equipment and supplies.
- Conduct worker training / safety training.
- Complete publicity campaign.
- Confirm police/emergency service involvement.

5) Collection Day:

- Set up the site.
- Orient community staff and volunteers.
- Complete participant questionnaires.
- Receive, package, and ship HHW.
- Clean up the site.

6) Post- Collection Day:

- Tabulate survey results.
- Evaluate collection/ public education results.
- Publicize results.
- Thank participants and volunteers through the media.
- Write a summary report.
- Prepare for future collection.



References

Household Hazardous Waste Coordinator
Waste Management Division
N.H. Department of Environmental Services
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095
(603) 271-2047

Websites

New Hampshire Department of Environmental Services: www.des.nh.gov/hhw

Environmental Protection Agency: www.epa.gov/ebtpages/wastehazardhouseholdhazardouswaste.html

Fact sheets on various topics: www.des.nh.gov/hw.htm

State of New Hampshire: www.nh.gov

New Hampshire *Hazardous Waste Rules*: www.des.nh.gov/rules/hwrules.pdf

Other states' websites with information on HHW event organizing:

Texas: www.tnrcc.state.tx.us/exec/oppr/hhw/org_how_to.html

Oklahoma: <http://pearl.agcomm.okstate.edu/waste/t5106.htm>

For updates on this document, log on to www.des.nh.gov/hhw/guidelines/updates

Laws and Regulations

RCRA requirements for hazardous waste management vary depending whether the waste is HHW, Small Quantity Generator (SQG) waste or Full Quantity Generator (FQG) waste. These requirements are described in the New Hampshire *Hazardous Waste Rules* (www.des.nh.gov/rules/hwrules.pdf).

HHW is exempt from federal hazardous waste regulations and liability under RCRA Subtitle C (see 40 CFR 261.4(b)(1)). Programs that collect and manage HHW are required to follow the state regulations as listed in the *Hazardous Waste Rules*.

To be defined as "Household Hazardous Waste," the waste must be generated from a household that can include houses, multiple family dwellings, bunkhouses, camps or recreation areas. It can include any place that a person resides.

Even if waste generated by a commercial or industrial establishment *looks* like household waste, it is not exempt from federal hazardous waste regulations. It is regulated by the State as hazardous waste and must meet all of the generator requirements.

