

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

## SOLID AND HAZARDOUS WASTE DIVISION

### GUIDELINE #10

## WASTE SCREENING

### Introduction

The Wyoming Solid Waste Management Rules and Regulations require all sanitary landfills to screen incoming wastes in order to prevent the disposal of certain wastes which are prohibited. Prohibited wastes include such things as bulk liquids, lead-acid batteries, white goods containing CFCs, characteristic and listed hazardous wastes, and many more. Some wastes such as friable asbestos and petroleum-contaminated soils may be accepted at a landfill only if the facility has a special permit from the department. However, most landfills do not have permits for these types of special wastes.

The purpose of this document is to provide landfill owners/operators, managers and attendants with guidance in the following areas:

- instituting a waste screening program
- properly identifying hazardous wastes
- evaluating waste disposal requests
- providing management guidelines for typical Wyoming wastes which may be prohibited at a landfill

Landfill operators may impose more stringent criteria than those found in this guideline.

This guideline is being amended to clarify and expand on developing and instituting a waste screening program. New sections have been added to address the proper identification of hazardous wastes and the identification of waste management options for typical wastes which are generated in Wyoming but may not be suitable for disposal at a sanitary landfill. This version also provides detailed guidance to landfill operators on how to properly evaluate routine waste disposal requests and it includes new waste screening and disposal record forms.

### Waste Screening Programs

A waste screening program must be capable of preventing the disposal of wastes which are prohibited at a sanitary landfill. Programs should be tailored to an individual landfill, considering the types and quantities of prohibited wastes which may be present within a facility's service area. However, waste screening programs should also be capable of screening other prohibited wastes.

Examples of various waste screening methods are outlined below. An effective waste screening program should include some combination of the methods identified, rather than relying on any one single method.

- Signage at the gate with a list of prohibited wastes - Signs can be located at all landfill entrance points which list categories of wastes or specific wastes which are prohibited from disposal (i.e., bulk liquids, lead-acid batteries, solvents, ignitable wastes, corrosive wastes, reactive wastes, explosive wastes, etc.).

- Public awareness - One of the best and easiest ways of screening prohibited wastes is to educate the public on the proper use of the facility. Articles or advertisements in local newspapers, radio ads, or inserts in utility bills can be used to inform the public regarding the types of wastes that are and are not acceptable, and to offer alternative management methods for prohibited wastes.

- Specific notifications to potential hazardous waste generators in the community - A list of potential hazardous waste generators within a landfill service area can be obtained from the department. Notifications can then be sent to each business including information about State and Federal hazardous waste requirements, what wastes are acceptable for disposal, and the local landfill rules and requirements for management of prohibited wastes.

Face to face meetings with known or suspected hazardous waste generators within the landfill's service area may also be useful. When conducted at the generator's place of business, these meetings allow the landfill operator to become familiar with the specific waste streams which may be delivered to the landfill. These types of meetings or "audits" provide an excellent opportunity to exchange information and concerns regarding specific waste management activities.

- Limit operating hours - Illegal dumping of prohibited wastes is less likely to occur in broad daylight than under cover of darkness. Operating hours can be limited to certain hours of the day, or certain days of the week, or both. This approach is only practical when used in conjunction with access restrictions.

- Access restrictions - A secure perimeter fence and locking access gate can prohibit illegal access and dumping of prohibited waste at obscure times of the day or night.

- Inspection of incoming loads - An effective method for screening prohibited wastes is to randomly inspect incoming loads. These inspections can be made near the facility gate or at the working face, and should be conducted on an asphalt, concrete or plastic-lined pad. If these inspections are conducted on the bare ground, any prohibited wastes which are present could spill and contaminate the soil or ground water. In order for this approach to be used, inspectors must be trained in the proper use of and provided with appropriate personal protective equipment. Inspectors must also be trained to be able to recognize prohibited wastes. The department strongly recommends that photographs be taken to document random inspection activities. Inspections of incoming loads can be accomplished at sites which are normally unattended by having inspectors present on a random basis. For a random inspection program to be effective, the department recommends that at least one percent (1%) of all incoming loads (1 out of every 100 vehicles) should be inspected randomly. A sample "Random Waste Screening Form" is provided in Appendix D.

A written copy of the overall waste screening program should be prepared and kept on-site with a copy of the approved facility permit document. The written program should include a justification of the program (why it is adequate) and a specific description of the program (procedures, frequency, etc.). The waste screening program should be reviewed by all landfill personnel on a regular basis. Recordkeeping is an important part of any waste screening program. Records of all waste screening activities must be maintained through the active life of the facility and the entire post-closure period.

A critical scenario to prepare for when developing any waste screening program is what will occur if a prohibited waste is identified at the landfill. Will the landfill personnel make arrangements to properly manage the waste or will the waste be rejected? If a prohibited waste is identified and rejected at the landfill, chances are that the generator will attempt to "sneak" it back into your landfill or another landfill, or dispose of it somewhere illegally and potentially place the public, livestock, wildlife or environment at risk. However, if a landfill owner/operator chooses to take responsibility for making sure that any prohibited waste which is identified will be properly managed, a contingency fund will be necessary to cover the associated costs. Under this scenario, it would be prudent to inform all landfill users that they will be charged for any costs which are incurred as a result of properly managing these wastes. Signs at the facility gate and other public education efforts are very useful in making sure that all landfill users are aware of the fact that a waste screening program is in place and the implications of delivering

prohibited wastes to the landfill.

Planning for how to deal with prohibited wastes which are identified should be carefully considered. Failing to plan ahead can place the public and landfill personnel at risk. Additionally, the cost of dealing with an unanticipated event can be much higher than if a basic contingency plan or procedure is prepared and reviewed ahead of time.

## Identification of Hazardous Waste

The most likely source of prohibited wastes are businesses which generate regulated hazardous wastes. There are two basic categories of hazardous waste : *listed* and *characteristic*. *Listed* wastes are regulated as hazardous because of how or where they are generated, or because of the known hazards associated with the pure form of the chemical. *Characteristic* wastes are regulated as hazardous because of the chemical characteristics (corrosive, ignitable, toxic, or reactive) which they exhibit.

Hazardous waste generators are classified by the amount of hazardous waste they generate in a calendar month. If a business generates more than 100 kilograms of hazardous waste in a single month, it is classified as a small or large quantity generator (SQG or LQG) and **MUST** manifest its waste to a permitted hazardous waste treatment, storage or disposal facility. If a business generates less than 100 kilograms in a calendar month, it is classified as a conditionally exempt small quantity generator (CESQG).

*Rule of Thumb* : 100 kilograms = 220 pounds .  $\frac{1}{2}$  of a 55-gallon drum

CESQGs may dispose of their hazardous waste at a sanitary landfill if they obtain written authorization from the landfill operator or the department. In order to obtain authorization, a written request should be submitted. Even if the request by the CESQG is approved, it may be prudent to impose additional treatment, containerization or handling requirements to protect landfill personnel and the public, and to insure that the waste is safely disposed.

Small quantities of hazardous waste which are generated by households are exempt from state and federal hazardous waste regulations, and they may be disposed in any permitted sanitary landfill. However, just because these wastes are exempt from regulation does not mean that they cannot pose significant hazards. Special screening, handling and disposal procedures may be appropriate for some types of household hazardous wastes (unused or old pesticides, drain cleaners, paints, etc.).

## Evaluating Waste Disposal Requests

Individual requests to dispose specific wastes should be submitted in writing and evaluated by the designated solid waste landfill manager. A sample standardized "Waste Disposal Request Form" is included in Appendix F. All requests to dispose of unusual or potentially hazardous wastes should contain the following information:

- name, address and telephone number of the generator
- location at which the waste was generated (if different than that of the generator)
- conditions under which the waste was generated (date of generation, particular process which generated it, conditions of spill, outdated or contaminated product, etc.)
- quantity (pounds, gallons, yd<sup>3</sup>, tons, etc.) and physical condition of the waste (odor, color, liquid, sludge, solid, contaminated soil)
- laboratory analysis for hazardous waste characteristics (Appendices A, B, C)

If a waste is suspected to be hazardous, the generator is required to properly sample the waste and have it analyzed using appropriate laboratory procedures. The results of the laboratory testing should be reviewed by the solid waste landfill manager using this guideline.

If a particular waste does not meet any of the hazardous waste criteria outlined in Appendices A, B, or C, and is not prohibited as outlined in Section V below, the solid waste landfill manager may authorize the treatment or disposal of the waste, without obtaining authorization from the department. However, the manager must retain a copy of the disposal request and any associated laboratory data. These records must be maintained throughout the active life of the facility and the entire post-closure period.

If a particular waste meets any of the hazardous waste criteria outlined in Appendices A, B, or C, the solid waste landfill manager should immediately notify the department. Solid waste landfill managers should also feel free to call the SHWD staff for additional assistance and guidance in evaluating unusual waste disposal requests.

## Specific Waste Management Guidelines for Typical Wyoming Wastes

The following wastes and associated management options have been reviewed and approved by the department for use at landfills in Wyoming. Management options are qualified by what "SHOULD" be done (recommended) and what "MUST" be done (required). Prohibited acts are qualified by the phrase "MAY NOT". Many management options recommend that a particular waste "should" be disposed in a separate area or the dead animal trench. If these special areas or trenches are not available, these wastes may be managed in the main trench at the working face.

<u>Waste Type</u>	<u>Management Option(s)</u>
Lead-acid batteries	<p>Lead-acid batteries should be stockpiled for recycling in an upright, non-leaking position, no more than 2 batteries high, on a pallet (plastic liner recommended). Storage of more than 1200 batteries must be permitted by the department.</p> <p><b>LEAD-ACID BATTERIES <u>MAY NOT</u> BE DISPOSED IN A LANDFILL!</b></p>
Used oil	<p>Used oil may be accepted from do-it-yourself oil changers for recycling or energy recovery (burning in a space heater). Used oil should not be accepted from local businesses. Oil storage should occur in an approved and labeled barrel or tank with berms and a liner such as plastic, concrete or asphalt. Storage of more than 500 gallons of waste oil must be permitted by the department.</p> <p><b>USED OIL <u>MAY NOT</u> BE DISPOSED IN A LANDFILL!</b></p>
Used oil filters	<p>Used oil filters must be drained of all free liquids prior to disposal. NOTE: The department recommends that used oil filters be punctured or crushed prior to disposal.</p>
Liquids	<p>Household quantities of liquids (5 gallons or less) must be placed in a sealed container and should be mixed with absorbent material before disposal.</p> <p><b>BULK QUANTITIES OF LIQUIDS (more than 5 gallons) <u>MAY NOT</u> BE DISPOSED IN A LANDFILL!</b></p> <p>NOTE: Many household liquids can be discharged to public sanitary sewer systems if proper precautions are taken. For additional information, contact the department or the local waste water treatment plant operator.</p>
Treated wood	<p>Railroad ties, bridge timbers, fence posts, telephone poles and other materials treated with pentachlorophenol or creosote may exhibit hazardous waste characteristics (D023, D024, D025, D026, D037). However, if the treated wood is quite old, it may be reasonable to assume that it will not exhibit these</p>

characteristics and that it may be accepted for disposal without testing. Recently treated wood wastes should be analyzed for hazardous waste characteristics.

<u>Waste Type</u>	<u>Management Option(s)</u>
	TREATED WOOD <u>MAY NOT</u> BE BURNED!
Empty drums	<p>Drums must contain less than 1-inch of product and the bung should be removed. Drums should be crushed prior to disposal.</p> <p>Clean drums (triple-rinsed by generator) in good condition can be stockpiled for reuse as trash containers or used oil storage containers.</p>
White goods containing CFCs	<p>If it can be documented that the chlorofluorocarbons (CFCs) have been removed from the white good (refrigerator, freezer or air conditioner), it can be stockpiled for recycling or crushed and disposed.</p> <p>If the CFCs have not been removed from the white good, it must be rejected or stockpiled in a separate area for removal of CFCs at a later date.</p> <p>NOTE: If the white good is rejected, the operator should offer to damage the door or latch system so that it does not pose an entrapment hazard to children.</p>
Floor sumps	<p>All sump wastes must be screened, managed and disposed in accordance with an approved permit or Guideline #8 "Testing and Disposal of Sump Wastes".</p> <p>Floor sumps must also pass the Paint Filter Liquids Test (PFLT) unless the landfill has a permitted drying/disposal area.</p>
Car wash sumps	<p>Car wash sumps may be accepted without any special testing. See Guideline #8 "Testing and Disposal of Sump Wastes" for more information.</p> <p>Car wash sumps must pass the PFLT unless the landfill has a permitted drying/disposal area.</p>
Water treatment plant sludges	<p>Sludges must pass the PFLT and should be covered immediately.</p>
Sewage treatment plant sludges	<p>Sludges must pass the PFLT and be tested for hazardous waste characteristics using the TCLP. Sludges which are accepted for disposal must be covered immediately.</p> <p>Properly treated sludges may be suitable for use as soil supplements on reclaimed areas. Please contact the department regarding specific requirements.</p> <p>NOTE: Prior approval must be obtained from the department for any sludge management plan.</p> <p>Grit and bar screen wastesThese wastes must pass the PFLT, should be disposed in dead animal trench, and must be covered immediately.</p>
Grease trap wastes	<p>Grease trap wastes may be accepted for disposal if they pass the PFLT.</p>

Generators should be encouraged to recycle this waste.

<u>Waste Type</u>	<u>Management Option(s)</u>
Wood and coal ashes	Hot and cold ashes (including fly ash and bottom ash) should be placed in a separate area where they can be spread out by landfill equipment and fully cooled prior to disposal.
Tires	<p>Whole tires may be stockpiled at a landfill for the purpose of shredding or recycling. Storage of more than 5,000 tires must be permitted by the department.</p> <p>If disposed of whole, tires should be placed at the bottom of the trench and covered with broken concrete or asphalt to prevent them from "floating up".</p>
Infectious/red-bag waste	<p>Infectious wastes from hospitals, medical clinics, mortuaries, health care units, dental offices, etc. should not be accepted unless containerized in a properly labelled <u>red bag</u>.</p> <p>"Sharps" (needles, syringes, scalpels) should be placed in rigid containers with lids (i.e. 5-gallon plastic buckets or plastic milk jugs).</p> <p>All red bag wastes should be disposed in the dead animal trench. All red bag wastes should be immediately covered with at least 12 inches of cover material.</p> <p>NOTE: If possible, the department recommends that all red-bag wastes be autoclaved or incinerated by the generator prior to disposal.</p>
Latex/oil base paints and cans	<p>Empty cans can be crushed and disposed.</p> <p>Small volumes of paint from households should be absorbed, dried or solidified prior to disposal.</p>
Dry cleaning wastes	Filters and sludges from CESQG dry cleaners should not be accepted for disposal without specific written authorization.
Lab chemicals	Laboratory chemicals should not be accepted for disposal without specific written authorization.
Pesticide containers	Pesticide containers must be empty and triple rinsed, and should be punctured. Pesticide containers should be crushed prior to disposal.
Fluorescent tubes/ballasts	<p>Fluorescent light tubes contain mercury and may exhibit hazardous waste characteristics (D009). These wastes may be accepted for disposal from households or CESQGs.</p> <p>Ballasts manufactured before 1979 may contain small quantities of PCBs. These wastes may be accepted or disposal from households or CESQGs. If the ballasts are suspected of containing PCBs, they should be placed in a bucket and mixed with cement prior to disposal.</p>
PCB wastes	Electrical transformers and soils contaminated with PCBs <u>are prohibited unless</u> the concentration of PCBs is less than 50 ppm (parts per million) <u>and</u> specific written authorization from the department is obtained.

<u>Waste Type</u>	<u>Management Option(s)</u>
Petroleum contaminated wastes	Large quantities of soils and debris contaminated with petroleum <u>are prohibited unless</u> the facility is permitted under the provisions of SHWD Chapter VIII, Section 5. Petroleum contaminated soils should be screened, treated and disposed in accordance with an approved permit or Guideline #2 "Petroleum Contaminated Soils".
Asbestos	<p><b>Non-Friable</b> asbestos can be disposed at permitted landfills provided that the wastes are covered immediately with a minimum of six (6) inches of cover material (prior to compaction) and in a manner which minimizes an increase in the friability of any exposed edges.</p> <p><b>Friable</b> asbestos <u>is prohibited unless</u> the facility is permitted under the provisions of SHWD Chapter VIII, Section 4.</p> <p>See Guideline #5 on "Identification of Friable and Non-Friable Asbestos".</p>
NORM wastes	Naturally Occurring Radioactive Material (NORM) should not be disposed at State permitted landfills unless the Ra <sub>226/228</sub> activity is less than 5 picocuries/gram (pCi/gm) <u>and</u> specific written authorization from the department is obtained.

## Further Information

Please be advised the procedures and guidelines outlined above for screening prohibited wastes are only recommendations from the department. Other methods may be submitted to the department for consideration and approval.

The following relevant publications are available for review at all Solid and Hazardous Waste Division offices:

- + "Waste Screening at Municipal Solid Waste Management Facilities" (SWANA, 1993)
- + "Solid Waste Disposal Facility Criteria - Technical Manual" (EPA530-R-93-017)
- + "Commercial Waste Disposal and Recycling Facilities in Region VIII (SHWD, 1991)

Questions or comments on this guideline should be directed to SHWD staff at the following locations:

### Solid and Hazardous Waste Division

Casper	(307) 473-3450
Cheyenne	(307) 777-7752
Lander	(307) 332-6924

Signed,

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David A. Finley  
Administrator  
Solid and Hazardous Waste Division

September 7, 1994

Date

### Attachments

- Appendix A - "Listed Hazardous Wastes"
- Appendix B - "Characteristic Hazardous Wastes"
- Appendix C - "Toxicity Characteristic Leaching Procedure"
- Appendix D - "Waste Screening Form"
- Appendix E - "Paint Filter Liquids Test"
- Appendix F - "Waste Disposal Request Form"