

MAINE STATE LEGISLATURE

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UNDERSTANDING
MAINE'S
STANDARDS FOR GENERATORS
OF
HAZARDOUS WASTE

A Partial Review of Maine's Hazardous Waste Management Rules

by

Maine Department of Environmental Protection
Bureau of Oil and Hazardous Materials Control
State House Station #17
Augusta, Maine 04333

January 1988

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I. BACKGROUND INFORMATION

Regulation of hazardous waste stems from the Resource Conservation and Recovery Act (RCRA), which was passed by the U.S. Congress in 1976 and directed the U.S. Environmental Protection Agency (EPA) to issue federal regulations for the safe management of hazardous wastes. State regulatory programs for hazardous wastes, authorized under EPA's RCRA program, are required to be based upon state regulations that are at least as stringent as the federal regulations. Pursuant to 38 M.R.S.A., Section 1301 et seq. - the Maine Hazardous Waste, Septage and Solid Waste Management Act, the Department of Environmental Protection (DEP) promulgated Maine's Hazardous Waste Management Rules (the "Rules") and regulates hazardous waste management in Maine. The Rules contain provisions that, while consistent with federal regulations, are more stringent. In particular, Maine's Rules provide for: 1) full regulation of all businesses/generators that generate more than 100 kg/month (220 pounds) of hazardous waste or accumulate more than 100 kg of hazardous waste at any one time (as compared to 1,000 kg by federal standards); and 2) extension of some regulations to all small quantity generators (SQG) - which are defined more strictly by Maine's Rules as those that generate less than 100 kg/month or accumulate no more than 100 kg of hazardous waste (as compared to 1,000 kg by the Federal definition). [The SQG limit for "acutely hazardous" waste is 1 kg in Maine's Rules as well as the federal regulations. See Section II of this publication for further information on "acutely hazardous" waste.]

This publication is not meant to replace a thorough examination of the State and Federal regulations. Maine's Hazardous Waste Management Rules and specified Chapters (850-857) and Sections should be reviewed carefully along with this publication. Copies of Maine's Hazardous Waste Management Rules are available by calling or writing DEP at:

Department of Environmental Protection
Bureau of Oil & Hazardous Materials Control
State House Station #17
Augusta, Maine 04333
Tele. No. (207)289-2651

II. WHAT IS A HAZARDOUS WASTE?

Maine Chapter 850

It is the responsibility of the person or business that generates a waste to determine if that waste is hazardous by using the criteria outlined in Maine Chapter 850.

A waste is any useless, unwanted or discarded substance or material, whether or not it has any other or future use. This includes any substance or material that is spilled, leaked, pumped, poured, emitted, disposed, emptied, or dumped onto the land or into the water or ambient air.

A waste is hazardous if:

- A. It is not specifically excluded by the State regulations; there are very few exclusions - the most notable one is household wastes. Specific exclusions are included in Chapter 851, Section 3A(4). Appendix C has a variety of fact sheets that are industry-specific. The fact sheets list hazardous wastes most likely found in specific processes.

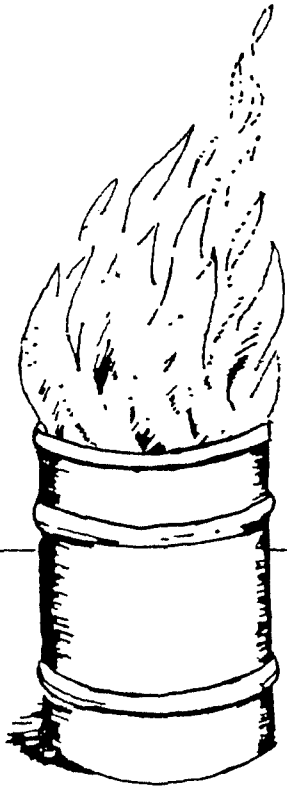
- B. It is listed by EPA or DEP as a hazardous or acutely hazardous waste. Waste is considered hazardous if it appears on any one of the four lists of hazardous wastes contained in the Hazardous Waste Management Rules. These wastes have been listed because they contain any number of toxic constituents that have been shown to be harmful to health and the environment. The regulations list over 400 hazardous wastes including wastes derived from manufacturing processes and discarded commercial chemical products. Listings are found in Chapter 850,

Section 3C and include wastes from non-specific sources (F-wastes); specific sources or processes (K-wastes); and discarded commercial chemical products, off-specification products, or manufacturing intermediates (P- and U-wastes).

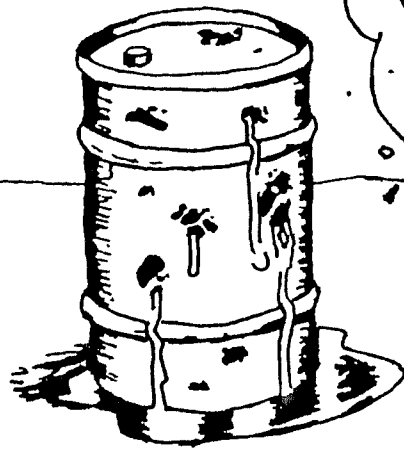
Some listed wastes are considered to be "acutely hazardous". Acutely hazardous wastes are considered to be such a high risk to human health and the environment that these wastes are subject to stricter small quantity generator limits, as set forth in Chapter 850, Section 3A(5)(c), so that small amounts are regulated in the same way as larger amounts of other hazardous wastes. Acutely hazardous wastes may be produced using certain pesticides. They also include dioxin containing wastes.

C. It exhibits any of the following four characteristics as defined in Chapter 850, Section 3B:

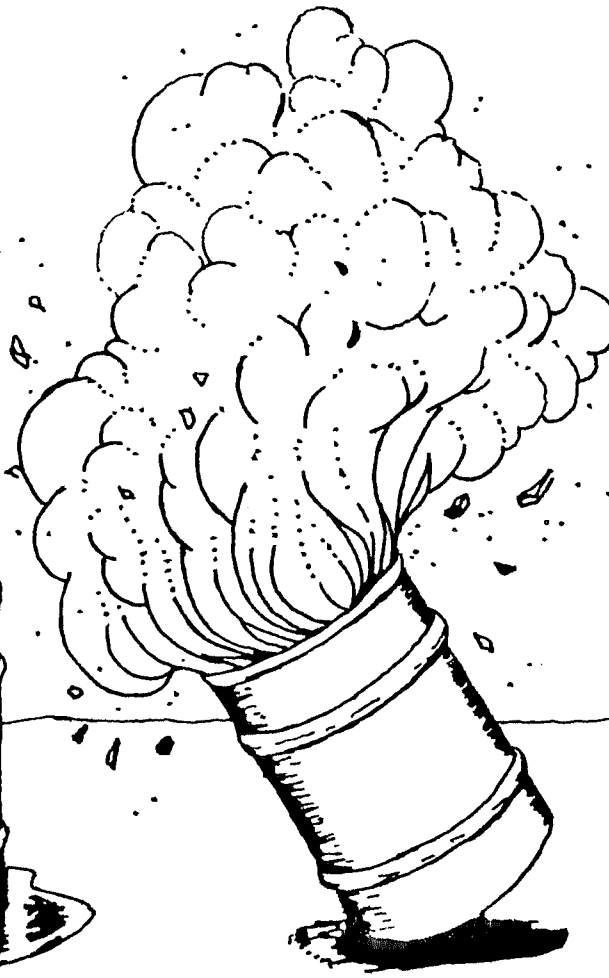
- 1) Ignitability (easily combustible or flammable). Examples are paint wastes, degreasers, solvents, and oxidizers.
- 2) Corrosivity (dissolves metals or burns skin). Examples are waste rust removers, waste acid or alkaline cleaning fluid, and waste battery acid.
- 3) Reactivity (undergoes rapid or violent chemical reactions with water or other materials or produces toxic vapors under certain conditions). Examples are cyanide plating wastes, waste bleaches, and explosives.



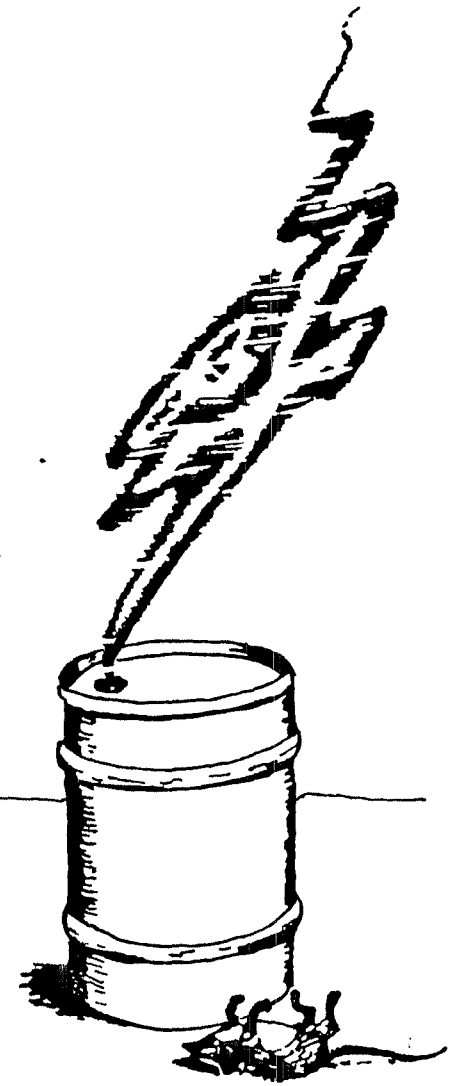
Ignitability



Corrosivity



Reactivity



Toxicity

4) EP (Extraction Procedure) Toxicity. An extract of these wastes contains high concentrations of heavy metals (such as lead, mercury, or cadmium) or specific pesticides that could threaten ground and surface waters.

D. It contains PCB's in amounts greater than 50 parts per million (ppm).
See Chapter 850, Section 3C(2)(b).

III. REGULATED COMMUNITY

In Maine, all persons or businesses that generate hazardous waste, as defined in Chapter 850, fall within the regulated community. The regulated community is divided into two categories according to the amount of hazardous wastes that a generator produces or accumulates. A generator must determine which category it falls within by measuring or "counting" the hazardous waste that it produces per calendar month or that it accumulates at any one time. In general, a generator must add up the weight of all the hazardous wastes it produces during a calendar month or accumulates at any one time. The monthly total or the accumulation total determines which of the two regulatory categories the generator falls within. A generator is either a:

- 1) Small Quantity Generator (SQG) - if it produces no more than 100 kilograms (220 pounds or approximately 27 gallons) of hazardous waste including no more than 1 kg (about 2 pounds) of acutely hazardous waste in any calendar month or if it accumulates, at any one time, no more than 100 kg of hazardous waste or 1 kg of acutely hazardous waste; or
- 2) Generator - if it produces more than 100 kg of hazardous waste or more than 1 kg of acutely hazardous waste in any calendar month or if it accumulates, at any one time, more than 100 kg of hazardous waste or 1 kg of acutely hazardous waste.

IV. SMALL QUANTITY GENERATOR (SQG) REQUIREMENTS

Chapter 850, Section 3A(5)

Small quantity generators are not subject to Maine's Hazardous Waste Management Rules to the same extent that generators are. However, there are requirements that a SQG must comply with in the same manner that a generator must comply. These SQG requirements include:

- 1) a SQG must determine if the waste it generates is hazardous using the methods described in the regulations. Basically, a SQG must determine, by knowledge of the waste or by testing, whether or not its waste is hazardous.
- 2) a SQG must properly label any containers of hazardous waste. The label must be marked clearly with the words "Hazardous Waste" and include the date upon which accumulation began.
- 3) a SQG must properly package hazardous waste for shipment in accordance with U.S. Department of Transportation (DOT) standards using DOT approved containers.
- 4) a SQG must use a Uniform Hazardous Waste Manifest to track the shipment of hazardous wastes for disposal. When completing the manifest, a SQG should use the State identification number MEX 020 000 000 unless the SQG has its own EPA identification number. See Section V of this publication for further information on the Uniform Hazardous Waste Manifest and its use.

- 5) a SQG must ship its hazardous waste off-site, using a licensed hazardous waste transporter, to a licensed hazardous waste facility.

Contact the Maine DEP for a list of licensed transporters and facilities.

- 6) a SQG must not exceed the monthly generation limits or the on-site accumulation limits of 100 kg (approximately 27 gallons) for hazardous waste or 1 kg for acutely hazardous waste.

V. STANDARDS FOR GENERATORS OF HAZARDOUS WASTE

Chapter 851

Generators that exceed the SQG limits are subject to full regulation in accordance with Maine's Hazardous Waste Management Rules, Chapter 851.

Requirements include:

A. Hazardous Waste Determination - Chapter 851, Section 5.

A generator must determine if the waste it generates is hazardous based upon the definitions, listings, and characteristics outlined in the regulations. A generator must determine, by knowledge of the waste or by testing, whether or not its waste is hazardous.

B. U.S EPA Identification Number - Chapter 851, Section 6

A generator must have a U.S. EPA identification number. Numbers can be obtained by applying with EPA form 8700-12 to the Maine DEP or directly to the U.S. EPA, Region 1, JFK Building, Boston, MA 02203. EPA identification numbers are site-specific. Generators with more than one plant site or business location where hazardous wastes are handled must obtain an EPA identification number for each site. If a business or generator moves to another location, an identification number must be obtained for the new location, unless the location previously had been assigned a number. This number should be used on all manifests for wastes shipped from that particular location. For businesses with more than one site, separate manifests must be utilized for wastes shipped from each different site of generation.

A sample of EPA Form 8700-12 is included for reference purposes on pages 13 and 14. Refer to this example along with the line-by-line instructions on pages 15 and 16 for guidance in completing EPA Form 8700-12, Notification of Hazardous Waste Activity.



Solid Waste

Notification of Hazardous Waste Activity

EPA Form 8700-12 (Rev. 1-86) Previous editions are obsolete.

IV. Line-by-Line Instructions for Completing EPA Form 8700-12

Type or print in black ink all items except Item XI, "Signature," leaving a blank box between words. When typing, hit the space bar once between characters and three times between words. If you must use additional sheets, indicate clearly the number of the item on the form to which the information on the separate sheet applies.

Items I-III — Name, Mailing Address, and Location of Installation:

Complete Items I — III. Please note that the address you give for Item III, "Location of Installation," must be a physical address, *not a post office box or route number*. If the mailing address and physical facility location are the same, you can print "Same" in box for Item III.

Item IV — Installation Contact:

Enter the name, title, and business telephone number of the person who should be contacted regarding information submitted on this form.

Item V — Ownership:

A) Name: Enter the name of the legal owner(s) of the installation, including the property owner. Use additional sheets if necessary to list more than one owner.

B) Type: Using the codes listed below, indicate the legal status of the owner of the facility:

FF = Federally Owned, Federally Operated
FC = Federally Owned, Operated By A Private Contractor to the Federal Government
FP = Federally Owned, Privately Operated
PF = Privately Owned, Constructed For Use By The Federal Government and Operated By The Federal Government
PL = Privately Owned, Leased And Operated By The Federal Government
PI = Privately Owned, Indian Land
FI = Federally Owned, Indian Land
C = County
D = District
M = Municipal
P = Private
S = State

Item VI — Type of Regulated Waste Activity:

A) Hazardous Waste Activity: Mark the appropriate box(es) to show which hazardous waste activities are going on at this installation.

1) Generator:

a) If you generate a hazardous waste that is identified by characteristic or listed in 40 *CFR* Part 261, mark an "X" in this box.

b) In addition, *if you generate less than 1000 kilograms of non-acutely-hazardous waste per calendar month, mark an "X" in this box.*

2) Transporter: If you move hazardous waste by air, rail, highway, or water then mark an "X" in this box. All transporters must complete Item VIII. Transporters do not have to complete Item X of this form, but must sign the certification in Item XI. Refer to Part 263 of the *CFR* for an explanation of the Federal regulations for hazardous waste transporters.

3) Treater/Storer/Disposer: If you treat, store or dispose of regulated hazardous waste, then mark an "X" in this box. You are reminded to contact the appropriate addressee listed for your State in Section III(C) of this package to request Part A of the RCRA Permit Application. Refer to Parts 264 and 265 of the *CFR* for an explanation of the Federal regulations for hazardous waste facility owners/operators.

4) Underground Injection: Persons who generate and/or treat, store or dispose of hazardous waste must place an "X" in this box if an injection well is located at their installation. An injection well is defined as any hole in the ground, including septic tanks, that is deeper than it is wide and that is used for the subsurface placement of fluids.

5) Market or Burn Hazardous Waste Fuel: If you market or burn hazardous waste fuel, place an "X" in this box. Then mark the appropriate boxes underneath to indicate your specific activity. *If you mark "Burner" you must complete Item VII — "Type of Combustion Device."*

Note: Generators are required to notify for waste-as-fuel activities only if they market directly to the burner.

"Other Marketer" is defined as any person, other than the generator marketing his hazardous waste, who markets hazardous waste fuel.

B) Used Oil Fuel Activities

Mark an "X" in the appropriate box(es) below to indicate which used oil fuel activities are taking place at this installation.

6) Off-Specification Used Oil Fuel: If you market or burn off-specification used oil, place an "x" in this box. Then mark the appropriate boxes underneath to indicate your specific activity. *If you mark "Burner" you must complete Item VII — "Type of Combustion Device."*

Note: Used oil generators are required to notify only if marketing directly to the burner.

“Other Marketer” is defined as any person, other than a generator marketing his or her used oil, who markets used oil fuel.

7) Specification Used Oil Fuel: If you are the first to claim that the used oil meets the specification established in 40 *CFR* Part 266.40(e) and is exempt from further regulation, you must mark an “X” in this box.

Item VII — Waste-Fuel Burning: Type of Combustion Device:

Enter an “X” in all appropriate boxes to indicate type(s) of combustion devices in which hazardous waste fuel or off-specification used oil fuel is burned. (Refer to definition section for complete description of each device.)

ITEM VIII — Mode of Transportation:

Complete this item only if you are the transporter of hazardous waste. Mark an “X” in each appropriate box to indicate the method(s) of transportation you use.

Item IX — First or Subsequent Notification:

Place an “X” in the appropriate box to indicate whether this is your first or a subsequent notification. If you have filed a previous notification, enter your EPA Identification Number in the boxes provided.

Note: When the owner of a facility changes, the new owner must notify U.S. EPA of the change, even if the previous owner already received a U.S. EPA Identification Number. Because the U.S. EPA ID Number is “site-specific,” the new owner will keep the existing ID number. If the facility moves to another location, the owner/operator must notify EPA of this change. In this instance a new U.S. EPA Identification Number will be assigned, since the facility has changed locations.

Item X — Description of Hazardous Waste: (Only persons involved in hazardous waste activity (Item VI(A)) need to complete this item. Transporters requesting a U.S. EPA Identification Number do not need to complete this item, but must sign the “Certification” in Item XI.)

You will need to refer to Title 40 *CFR* Part 261 (enclosed) in order to complete this section. Part 261 identifies those wastes that EPA defines as hazardous. If you need help completing this section, please contact the appropriate addressee for your state as listed in Section III(C) of this package.

Section A — If you handle hazardous wastes that are listed in the “nonspecific sources” category in Part 261.31, enter the appropriate 4-digit numbers in the boxes provided.

Section B — If you handle hazardous wastes that are listed in the “specific industrial sources” category in Part 261.32, enter the appropriate four-digit numbers in the boxes provided.

Section C — If you handle any of the “commercial chemical products” listed as wastes in Part 261.33, enter the appropriate four-digit numbers in the boxes provided.

Section D — Disregard, since EPA has not yet published infectious waste regulations.

Section E — If you handle hazardous wastes which are not listed in any of the categories above, but do possess a hazardous characteristic, you should describe these wastes by their hazardous characteristic. (An explanation of each characteristic is found at Part 261.21-261.24.) Place an “X” in the box next to the characteristic of the wastes that you handle.

Item XI — Certification:

This certification must be signed by the owner, operator, or an authorized representative of your installation. An “authorized representative” is a person responsible for the overall operation of the facility (i.e., a plant manager or superintendent, or a person of equal responsibility). *All notifications must include this certification to be complete.*

C. Pre-transport and Management Standards - Chapter 851, Sections 8 & 13

A generator must meet the following requirements:

1. Storage, Container, and Management Standards

A generator must store, containerize and manage hazardous waste according to standards which include:

- a) Store hazardous waste for no more than 90 days;
- b) Label containers with the words "Hazardous Waste";
- c) Mark containers with date upon which accumulation began;
- d) Use containers that are compatible with the waste type stored, meet DOT specifications and are not rusted, bulging or leaking;
- e) Segregate incompatible wastes;
- f) Allow access to containers for inspection;
- g) Store in a secure area, which prevents unknowing or unauthorized contact with the waste;
- h) Keep containers closed except when putting wastes in or removing wastes from containers;
- i) Inspect containers each business day and maintain an inspection log book that has name of inspection area, date inspected, time inspected, inspector's name and condition of drums;
- j) Store upon a firm working surface, such as a bermed asphalt or concrete base; in an enclosed storage area; or in tanks that meet minimum design standards;

- k) Refer to Chapter 851, Section 13 for other specific Management Standards that may apply; and
- l) Must not treat hazardous waste on-site prior to reuse or disposal without the required license from DEP.

2. Site Preparedness and Prevention Standards

A generator must meet site preparedness and prevention standards, as described in the Code of Federal Regulations Title 40, Part 264, Subpart C (40 CFR 264, Subpart C) including:

- a) Operate to minimize the possibility of fire, explosion, or release of hazardous waste;
- b) Maintain and test necessary emergency equipment including:
 - an alarm system for facility personnel;
 - telephone or two-way radio to summon fire or police department;
 - appropriate fire control equipment;
 - adequate water for fire control;
 - decontamination equipment;
 - spill control equipment;
- c) Maintain aisle space to allow the unobstructed movement of personnel and emergency equipment;
- d) Make arrangements to familiarize local fire departments, police, hospitals and emergency response teams with the facility, its wastes, and associated hazards.

3. Contingency Plan

A generator must maintain a contingency plan on-site that meets the standards described in 40 CFR 264, Subpart D including:

- a) Descriptions of emergency response actions to be taken in the event of fire, explosions and spills such as notifying emergency coordinator, characterizing the release, activating alarms, containing released wastes, handling recovered wastes, notifying DEP immediately, submitting written reports to State authorities;

NOTE: DEP maintains a toll free number (1-800-482-0777) for reporting all hazardous spills and emergencies. DEP also mans emergency response teams, located in South Portland, Augusta, Bangor and Presque Isle.

- b) Descriptions of arrangements agreed to (or declined) by State or local emergency response authorities;
- c) Identification of emergency coordinator(s) - must list names, addresses, and phone numbers of employees responsible for coordinating all emergency response measures and at all times, at least one employee must be available (on-site or on call) to respond to emergencies;
- d) Emergency equipment list, including location(s) and capabilities of the equipment;
- e) Evacuation plan for facility personnel;

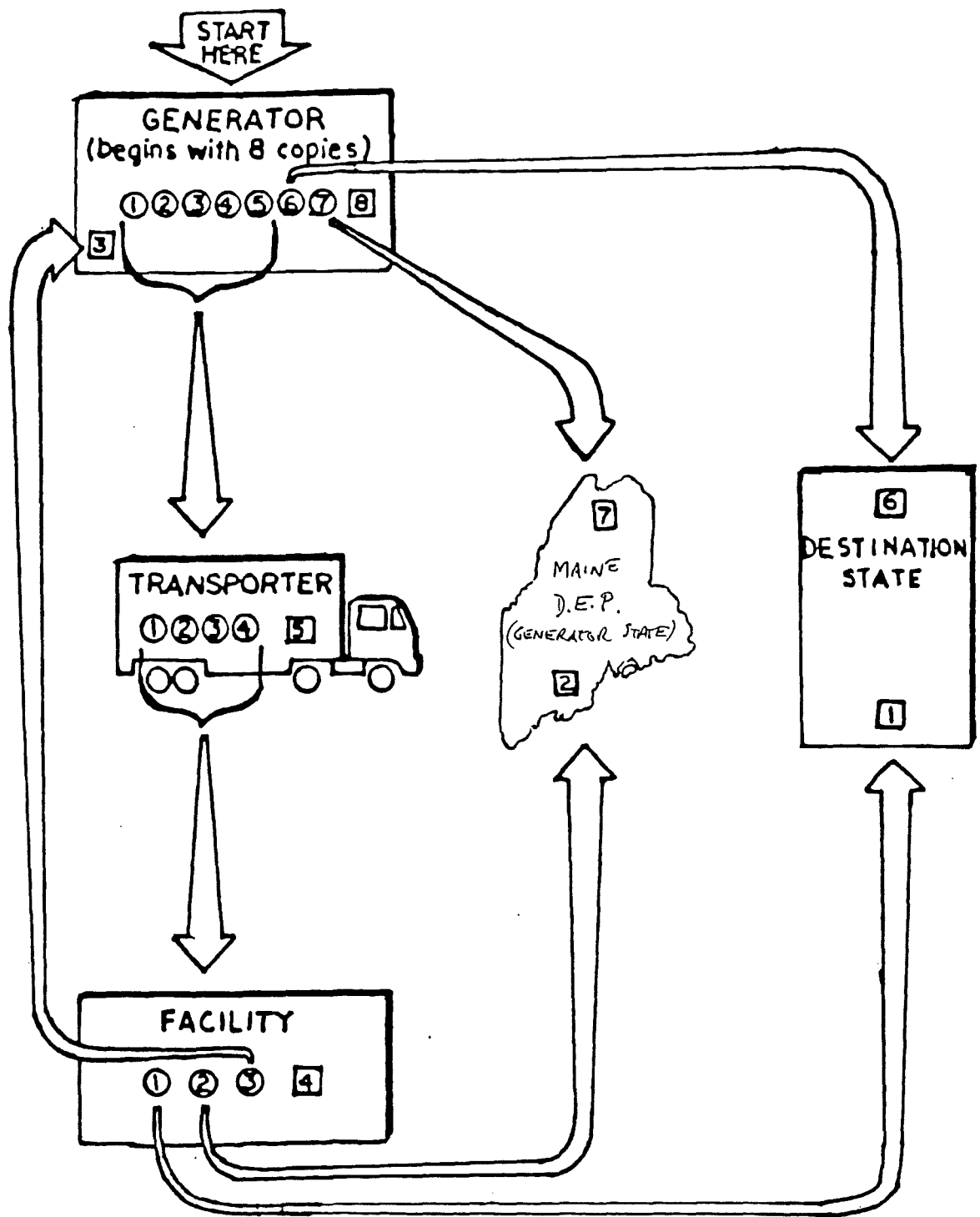
- f) Copies submitted to local police, fire department, hospitals, and emergency response teams;

4. Personnel Training Program

A generator must have a Personnel Training Program that meets the standards of 40 CFR 264.16, including classroom or on-the-job training on hazardous waste management and implementation of the Contingency Plan in order to ensure that facility personnel are able to respond effectively to emergencies. The training program must be documented with records of job titles; names of employees; job descriptions; types, amounts, and dates of training provided. Personnel must complete training within six months of employment and take part in an annual review of initial training.

D. Requirements for Transportation - Chapter 851, Sections 7 and 8A

- 1. Prior to the transportation of hazardous waste a generator must have wastes properly packaged, labelled, marked, and placarded in accordance with the applicable Federal Department of Transportation (DOT) regulations (49 CFR Parts 172, 173, 178, and 179). Containers of 110 gallons or less must have the following information clearly displayed:



KEY

○ Copy is sent to next point

□ Copy stays at this point

HAZARDOUS WASTE--Federal Law Prohibits Improper Disposal.
If found, contact the nearest police or public safety
authority or the Maine Department of Environmental
Protection (1-800-482-0777) or the nearest office of the
United States Environmental Protection Agency.

Generator's Name & Address _____

Manifest Document Number _____

2. Containers must be acceptable for transportation in accordance with DOT standards (49 CFR Part 172).

***NOTE:** U.S. DOT puts out a packet called Standard Packet for Hazardous Materials Transportation. Write to:

U.S. Department of Transportation
DMT-11
400 Seventh St., SW
Washington, DC 20590

This packet contains information on labeling, placarding, containers and general information on DOT shipping rules.

3. A generator must ship its hazardous waste off-site with a Uniform Hazardous Waste Manifest using a licensed hazardous waste transporter, to a licensed hazardous waste facility. Contact Maine DEP for a list of licensed transporters and facilities.

E. Uniform Hazardous Waste Manifest - Chapter 857

A Uniform Hazardous Waste Manifest is a multicopy shipping document that a generator must fill out and use to accompany hazardous waste shipments. The form is designed to track hazardous waste from its point of generation to its final destination, the so called "cradle to grave" system. The diagram on page 21 illustrates where each copy of the hazardous waste manifest gets sent to as part of the tracking system. Requirements include:

1. All hazardous waste shipments off-site must be accompanied by a Uniform Hazardous Waste Manifest, authorized by the state to which the hazardous waste is destined. A sample copy with instructions is on pages 24 and 25.
2. A generator who transports, or offers for transportation, hazardous waste for handling shall prepare a manifest before the waste is transported and comply with all the requirements and instructions which are specified on the manifest.
3. A generator must complete the generator portion of the manifest and include his hand written signature.
4. A generator must retain the Generator Copy (copy #8), send the Generator State Copy (copy #7) to the State where the waste was generated, and send the Destination State Copy (copy #6) to the State where the designated hazardous waste facility is located.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Hazardous Waste MANIFEST SECTION, State House, Station 17, Augusta, ME 04333



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No 2050-0039 Expires 9-30-88

DESTINATION STATE COMPLETED COPY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. M E I D 1 2 3 4 5 6 7 8 9		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law but may be required by State Law					
3. Generator's Name and Mailing Address ABC Auto Body 100 Main Street, Sometown, Maine 04333						A.State Manifest Document Number ME A 014161							
4. Generator's Phone (207) 123-4567						B.State Generator's ID Same							
5. Transporter 1 Company Name Super Auto Body Supply				6. US EPA ID Number M I A D I O O I O 1 2 3 4 5 6		C.State Transporter's ID MA 1234							
7. Transporter 2 Company Name				8. US EPA ID Number		D.Transporter's Phone 617-111-0000							
9. Designated Facility Name and Site Address Mid-State Incinerator 200 South Street Anytown, Mass 00000						E.State Transporter's ID							
10. US EPA ID Number M I A D I O O I O 1 2 3 4 5 6						F.Transporter's Phone							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit		15. Waste No.	
a. Waste Petroleum Naptha, Combustible Liquid, UN1255, (D001)						No. Type		Quantity		Unit		Waste No.	
						4 D M		20		G		D001	
b.													
c.													
d.													
J. Additional Descriptions for Materials Listed Above						K.Handling Codes for Wastes Listed Above							
a. I						a. S02							
b.						b.							
c.						c.							
d.						d.							
15. Special Handling Instructions and Additional Information													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name Fred Johnson					Signature <i>Fred Johnson</i>			Month Day Year 1 8 1 1 8 1 8 7					
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Bob Driver					Signature <i>Bob Driver</i>			Month Day Year 1 8 1 1 8 1 8 7					
18. Transporter 2 Acknowledgement or Receipt of Materials													
Printed/Typed Name					Signature			Month Day Year					
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.													
Printed/Typed Name Jane Smith					Signature <i>Jane Smith</i>			Month Day Year 1 8 1 2 1 1 8 7					

In the event of a spill, contact the National Response Center, U.S. Coast Guard 1-800-424-8802. For spill within Maine, contact DEP, Oil and Hazardous Materials Control at 1-800-482-0777.

GENERATOR

TRANSPORTER

FACILITY

ME A 014161

**STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE MANIFEST SECTION
INSTRUCTIONS**

**FOR COMPLETING THE MAINE UNIFORM HAZARDOUS WASTE MANIFEST
IMPORTANT: READ ALL INSTRUCTIONS BEFORE COMPLETING THIS FORM ALL 8 COPIES MUST BE TOTALLY LEGIBLE**

GENERAL INFORMATION

The Hazardous Waste Manifest is designed to track waste from the point of generation to final disposal ("cradle to grave"). In order to accomplish this goal, it is essential that all items in the manifest be completed correctly. Incomplete, incorrect, or illegible manifests are violations of the law and could subject you to civil or criminal liabilities as specified in Maine Hazardous Waste Management Rules and the Maine Hazardous Waste, Septage and Solid Waste Management Act.

The Maine manifest contains 8 copies. ALL COPIES MUST BE LEGIBLE! (Illegible manifests submitted to the State will be returned to Generator for proper completion.) This form is designed for use on a 12 pitch (elite) typewriter. A firm ball point pen may also be used only if you press down HARD. The eight copies must be filed with the appropriate parties as they are completed.

COPY DISTRIBUTION

- COPY 1: DESTINATION STATE COMPLETED COPY: Mailed by HWF:** This original stays with the shipment from generation to completion by the HWF. When the manifest is completed, the HWF must mail this copy to the State where his facility is located.
- COPY 2: GENERATOR STATE COMPLETED COPY: Mailed by HWF:** When the HWF has completed his section of the manifest, he mails this copy to the State where the waste was generated.
- COPY 3: GENERATOR COMPLETED COPY: Mailed by HWF:** When the HWF has completed his section of the manifest, he mails this copy back to the Generator of the waste, who must retain it on site for his records.
- COPY 4: HWF COPY: Retained by HWF:** When the HWF has completed his portion of the manifest, he keeps this copy for his records.
- COPY 5: TRANSPORTER: Retained by the Transporter:** When the transporter has completed his section of the manifest, and transfers the waste to the HWF, he keeps this copy for his records.
NOTE: If a CONTINUING TRANSPORTER is used, the Generator is responsible for supplying him with a legible photocopy of the manifest, which must contain signatures where required.
- COPY 6: DESTINATION STATE: Mailed by Generator:** When the Generator has completed his section of the manifest and transfers his waste to the transporter, he mails this copy to the State where the designated facility (HWF) is located.
- COPY 7: GENERATOR STATE: Mailed by Generator:** When the Generator has completed his section of the manifest and transfers his waste to the transporter, he mails this copy to the State where the waste was generated.
- COPY 8: GENERATOR: Retained by Generator:** When the Generator has completed his section of the manifest and transfers his waste to the transporter, he keeps this copy for his records.

GENERATOR SECTION

- Item 1: GENERATORS US EPA ID NO-MANIFEST DOCUMENT NO. —** Enter the U.S. EPA 12 digit identification number. Small Quantity generators should enter the number MEX02000000 here. Then enter a UNIQUE 5 digit number you assign to this manifest. Use of serially increasing numbers (eg. 00001, 00002 etc.) is recommended.
- Item 2: PAGE 1 OF —** Enter the total number of pages used to complete this manifest, i.e., the first form plus the number of Continuation Sheets, if any.
- Item A: STATE MANIFEST DOCUMENT NUMBER —** Number preprinted by Maine except on the Continuation Sheets. Enter this number on each of the Continuation Sheets attached to or part of a manifest under Item L.
- Item 3: GENERATOR'S NAME AND MAILING ADDRESS —** Enter the name (as notified to EPA) & mailing address of the Generator.
- Item 4: GENERATOR'S PHONE NUMBER —** Enter a telephone number with the area code where an authorized agent of the Generator can be reached in a emergency.
- Item 8: STATE GENERATOR'S ID —** The State Generator ID is the STREET ADDRESS of the Generator's pick-up location. If the mailing address and the street address are the same, enter "same" in this block.
- Item 5: TRANSPORTER 1 COMPANY NAME —** Enter the company name (as notified by EPA) of the first transporter who will transport the waste.
- Item 6: US EPA ID NUMBER —** Enter the U.S. EPA ID 12 digit identification number of the first transporter identified in Item 5.
- Item C: STATE TRANSPORTER'S ID —** Enter the State of registration & the license plate number of the waste-carrying portion of the vehicle being used to transport the waste.

NOTE: ALL HAZARDOUS WASTE TRANSPORTERS OPERATING IN MAINE MUST HAVE A VALID MAINE HAZARDOUS WASTE TRANSPORTER'S LICENSE.

- Item D: TRANSPORTER'S PHONE —** Enter a telephone number with area code where an authorized agent of the transporter can be contacted.
- Item 7: TRANSPORTER 2 COMPANY NAME —** If applicable, enter the company name (as notified to EPA) of the 2nd transporter who will transport the waste. If more than 2 transporters will be used, use a Maine Manifest Continuation Sheet & list the transporters in the order they will be transporting the waste.
- Item 9: US EPA ID NUMBER —** If applicable, the U.S. EPA 12 digit identification number of the 2nd transporter identified in Item 7.
- Item E: STATE TRAN ID —** If applicable, enter the 2nd transporter's State of registration & license plate number for the waste-carrying portion of the vehicle being used to make the pick-up.
- Item F: TRANSPORTER'S PHONE —** If applicable, enter the 2nd transporter's telephone number with area code where an authorized agent of the transporter can be contacted.
- Item 9: DESIGNATED FACILITY NAME & SITE ADDRESS —** Enter the company name (as notified to EPA) of the HWF designated to receive the waste listed on this manifest. The address must be the site address, which may differ from the mailing address.
- Item 10: US EPA ID NUMBER —** Enter the U.S. EPA 12 digit identification number of the designated HWF identified in Item 9.
- Item G: STATE FACILITY'S ID —** Enter mailing address if different from site address.
- Item H: FACILITY PHONE —** Enter a telephone number with area code for the HWF designated to receive the waste listed on the manifest.
- Item 11: US DOT DESCRIPTION —** ALL of the following information must be entered: The correct US DOT (Dept. of Transportation) name for the waste as identified in 49 CFR Parts 171-177 (usually found in Column 2 of Section 172.101), the assigned DOT Hazard Class (usually in Column 3) & the 4 digit UN/NA ID Number (Column 3A). (Example: Waste Acetone, flammable liquid, UN 1090). US DOT requires the word "waste" before or in the shipping name for all hazardous waste.
- Item 12: CONTAINERS (NO. & TYPE) —** Enter the number of containers for each waste and the appropriate abbreviations from TABLE I (below) for the type of container used:

TABLE I — CONTAINER TYPE

DM = Metal drums, barrels, kegs	TP = Tanks, portable	CM = Metal boxes, cartons, cases (incl. roll-offs;
DW = Wooden drums, barrels, kegs	TT = Cargo Tanks (tank trucks)	CW = Wooden boxes, cartons, cases
DF = Fiberboard or plastic drums, barrels, kegs	TC = Tank Cars	CF = Fiber or plastic boxes, cartons, cases
CY = Cylinders	DT = Dump Trucks	BA = Burlap, cloth, paper/plastic bags

- Item 13: TOTAL QUANTITY —** Enter the total quantity of waste described on each line, relative to the units used in ITEM 14.
- Item 14: UNIT (Wt./Vol.) —** Enter the appropriate abbreviation from Table II (below) for the unit of measure used in determining the total quantity of waste described on each line. Do NOT use fractions.

TABLE II — UNITS OF MEASURE

G = Gallons (liquids only)	L = Liter (liquids only)	Y = Cubic Yards
P = Pounds	K = Kilograms	N = Cubic Meters
T = Tons	M = Metric Tons (1,000 kg)	

- Item I: WASTE NO. —** Enter the 4 digit EPA hazardous waste number as it appears in 40 CFR Part 261, Subparts C & D. (Note: if a non-RCRA STATE REGULATED waste is being manifested, enter the state waste code here. If both the Destination and Generator States have assigned codes, use the Destination State code. If there is no EPA State code, enter "NONE" - Do NOT leave blank.)
- Item J: ADDITIONAL DESCRIPTIONS FOR MATERIALS LISTED ABOVE —** Enter description (chemical names, constituent percentages, etc.) for any waste which has a US DOT shipping name ending in N.O.S. If you entered a STATE-DESIGNATED WASTE CODE in Item I, provide description or note any EPA Hazard Codes: Ignitatie (I), Corrosive (C), Reactive (R), EP Toxic (E), Acute Hazardous (H), Toxic (T). Enter specific gravity if other than 1.0 and physical state of waste. Any additional desired waste description may be entered here.
- Item 15: SPECIAL HANDLING INSTRUCTIONS & ADDITIONAL INFORMATION —** Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate facility is designated, note it here. For INTERNATIONAL SHIPMENTS, the Generator must enter here the point of departure from the U.S. through which the waste must travel before entering a foreign country (City & State). This space may also be used for emergency response numbers, and other information the Generator wishes to include about the shipment.
- Item K: HANDLING CODES —** HWF completes this section — see "Designated Facility Section" (below)
- Item 16: GENERATORS CERTIFICATION —** The Generator must read, sign (by hand) & date the certification (with date of transfer to transporter). If a mode other than highway is used, the word "highway" should be lined out & the appropriate mode (rail, water or air) inserted in the space below. If another mode in addition to the highway mode is used, enter the appropriate mode (eg. "and rail") in the space below.

TRANSPORTER SECTION

- Item 17: TRANSPORTER-1 ACKNOWLEDGEMENT —** Print or type the name of the person accepting the waste on behalf of the 1st transporter. That person must acknowledge acceptance of the waste described on the manifest by signing & entering the date of receipt.
- Item 18: TRANSPORTER 2 ACKNOWLEDGEMENT —** If applicable, follow instructions for Item 17 for Transporter 2.

DESIGNATED FACILITY (HWF) SECTION

- Item K: HANDLING CODES (HWF COMPLETES) —** Enter the final Handling Code as described in 40 CFR 264 Appendix, I, Table 2 for each waste listed in Item 11. For example, D81-Landfill or T07-Rotary Kiln Incinerator.
- Item 19: DISCREPANCY INDICATION SPACE —** The authorized representative of the designated facility's owner or operator must note in this space any significant discrepancy between the waste described on the manifest & the waste actually received at the facility. Any rejected materials should be listed here, along with an indication of the disposition of the rejected materials. Any applicable Discrepancy or Exception reporting requirements must also be compiled with. Federal & State regulations vary.
- Item 20: FACILITY OWNER OR OPERATOR CERTIFICATION —** Print or type the name of the person accepting the waste on behalf of the owner or operator of the designated HWF. That person must acknowledge acceptance of the waste described on the manifest by signing (by hand) & entering the date of receipt. The signature of the authorized HWF agent indicates acceptance (except for items specified in Item 19) & agreement with the statements on this manifest.

NOTE FOR INTERSTATE SHIPMENTS (between different states) YOU MAY BE REQUIRED TO COMPLY WITH THE MANIFESTING REQUIREMENTS OF BOTH THE DESTINATION & GENERATOR STATES REGARDING THE COMPLETION OF SPECIFIC INFORMATION INCLUDED IN LETTERED ITEMS A-L. You may wish to contact State agencies for more information on this subject.

REMINDER: ALL 8 COPIES OF THIS FORM MUST BE LEGIBLE

5. A generator must retain signed manifests for at least three (3) years.
6. If a generator does not receive the Generator-Completed Copy (copy #3) from the designated waste facility within twelve (12) days from the date waste was accepted by the initial transporter, the generator must notify DEP (as well as the destination state agency) and must undertake to track and locate the waste by contacting the transporter and facility. If copy #3 of the manifest is not received by the generator within fifteen (15) days of the initial shipment date, the generator must file a written Exception Report with the DEP.
7. Separate manifests must be utilized for wastes shipped from different sites of generation.
8. State of Maine manifests are available from the DEP.

F. Recordkeeping and Reporting - Chapter 851, Section 9

1. A generator must keep copies of all test results and waste analyses used in hazardous waste determinations for a period of ten (10) years.

2. A generator must retain copies of all reports filed with the DEP or EPA for a period of ten (10) years.
3. A generator must furnish reports on quantities and handling of wastes as the DEP deems necessary for effective management of hazardous waste.
4. Annual Reports - a generator must submit an Annual Report to the DEP, no later than March 1st for the preceding calendar year, on forms specified by the Department.

G. Closure - Chapter 851, Section 11

A generator who no longer generates waste at a site, must remove all hazardous waste and residues to a facility licensed to handle the wastes and decontaminate any remaining contaminated containers, tanks, equipment, and structures. Written notice of closure and certification of closure by the generator and an independent State of Maine registered professional engineer must be submitted to the DEP in accordance with the provisions of Chapter 851, Section 11.

VI. "GOOD HOUSEKEEPING" AND SAFE ENVIRONMENT

A. Four important points for managing your wastes properly.

1. Reduce the amount of your hazardous waste.
2. Conduct your own self-inspection.
3. Cooperate with State and local inspectors.
4. Call your State hazardous waste management agency or the U.S. EPA with your questions.

B. Good housekeeping

Good hazardous waste management can be thought of simply as using "good housekeeping" practices such as: using and reusing materials as much as possible, or reducing the amount of waste you produce. To reduce the amount of wastes you generate:

1. Do not mix nonhazardous wastes with hazardous ones. For example, do not put nonhazardous cleaning agents or rags in the same container as a hazardous solvent or the entire contents become subject to hazardous waste regulations.
2. Avoid mixing several different hazardous wastes. Doing so may make recycling impossible or make disposal more expensive.

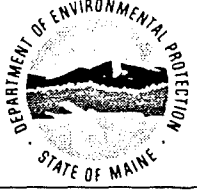
3. Avoid spills or leaks of hazardous products. The materials used to clean up such spills or leaks also will become hazardous.
4. Make sure the original containers of hazardous products are completely empty before you throw them away. Use ALL the product.
5. Avoid using more of a hazardous product than you need. For example, use no more degreasing solvent or pesticide than you need to do the job. Also, do not throw away a container with unused solvent or pesticide in it.

Reducing your hazardous waste means saving money on raw materials and reducing the costs to your business for managing and disposing your hazardous waste.

C. Conducting your own self-inspection:

1. Have you made proper hazardous waste determinations?
2. What quantities of hazardous waste do you generate or accumulate?
3. Do you have an EPA identification number?
4. Are you complying with all pre-transport standards including requirements for proper storage, labelling, management, site preparedness, contingency plans, and personnel training?

5. Are you shipping hazardous waste off-site, using a licensed hazardous waste transporter, to a licensed hazardous waste facility? Do you ask the transporter for his/her licenses from the Department? Samples are provided on page 31.
6. If you are treating or recycling the waste on-site prior to reuse or disposal, do you have the required license from DEP?
7. Are you using a Uniform Hazardous Waste Manifest for such shipments?
8. Are you filing the necessary Annual Hazardous Waste reports?
9. Are you maintaining copies of reports and manifests, and records of hazardous waste management activities?

		License NO.		
		STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE TRANSPORTER Conveyance License – NON-TRANSFERABLE		
REGISTRATION NO.	YEAR	MAKE	TYPE	CAPACITY
SERIAL NO.	EFFECTIVE DATE		EXPIRES	
LICENSEE		_____ AUTHORIZED SIGNATURE _____ TITLE		
ADDRESS				

STATE OF MAINE Department of Environmental Protection HAZARDOUS WASTE TRANSPORTER OPERATOR LICENSE (Non-Transferable)	LICENSE NO. _____ EXPIRES _____
---	--

 NAME

 ADDRESS

OPERATOR'S NAME DRIVER'S LICENSE NO./STATE

STATE OF MAINE Department of Environmental Protection HAZARDOUS WASTE TRANSPORTER OPERATOR LICENSE (Non-Transferable)	LICENSE NO. _____ EXPIRES _____
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 NAME

 ADDRESS

OPERATOR'S NAME DRIVER'S LICENSE NO./STATE

VII. TIPS ON CHOOSING A HAZARDOUS WASTE TRANSPORTER AND FACILITY

Tips on Choosing a Hazardous Waste Transporter

1. Are they licensed in Maine? See Appendix A for listing of licensed transporters in Maine. This list is updated monthly so make sure the transporter is currently licensed.
2. Ask what their EPA I.D. number is. A licensed transporter must have one.
3. Are they licensed in the destination state?
4. Do they have \$500,000 of liability insurance?
5. Do they have a contingency plan?
6. Do they keep cleanup material in the truck and do they know how to use it?
7. Do they have the proper placards on the truck?
8. Question the transporter on how long it will take for the waste to get to the facility. Will another transporter be taking over responsibility for the waste?

Tips on Choosing a Hazardous Waste Facility

A. Questions for the Facility

1. Is it licensed or authorized?
2. How do they treat, dispose or store the waste?
3. If they store, how long will it be stored? How will your waste be handled beyond storage?
4. If applicable, ask for a certificate of disposal. Some facilities provide certificates as assurance that your waste is properly disposed of.
5. Ask for a copy of their permit to assure that it is valid and that the facility is permitted to handle your type of waste.
6. How long is the acceptance process?
 - a. Who samples? How long before results are back?
 - b. What kind of waste profile does the facility require?
 - c. How often is the acceptance period repeated?
7. Which hazardous waste transporters are acceptable to the facility?
8. How are unacceptable wastes handled?

B. Questions for the Regulatory Agency in the State where the Facility is Located

1. Is the facility in compliance with the license?
2. Ask about the past compliance history. Is the facility a Superfund site?
3. Are they operating under any Enforcement Orders for any portion of the facility?
4. Ask for the date and results of the last inspection. Ask to speak to the inspector if possible.
5. Is any groundwater or air monitoring being done? If so, does it show any contamination? If yes, what type and why?

C. Visit the Facility if Possible

1. Check their security. Are they monitoring the trucks that enter the facility?
2. Check the condition of the structures. Does the facility maintain good housekeeping?
3. Are there spill containment structures, liners that will protect soil and groundwater?

4. How are empty tanks and drums handled?
5. Take a tour of the on-site lab.
6. How are wastes handled after treatment; such as still bottoms and incinerator ash?
7. Do they have a backlog of wastes to treat?

D. Before Arranging the Waste Shipment

1. Obtain a contract with the facility for every waste stream.
2. Know how and when your waste will be handled from the time it leaves your control until it is disposed of by the facility.
3. Know that the facility is all set to receive the waste.
4. Instruct the transporter to return the waste directly to your company if the facility will not or cannot receive the waste. You get ninety (90) more days to find a facility that can accept it.

VIII. REFERENCES AND ADDITIONAL READING

- Brown, E.L. 1986. Hazardous Waste Generators: Regulatory Update. Maine EnvironNews. Vol. 13, No. 4. Nov. 1986. pp. 1 - 4.
- Maine DEP. 1986. Hazardous Waste Management Rules. November 1986. 06-096 Department of Environmental Protection, Augusta, ME. Chapters 850-857.
- U.S. DOT. 1983. Emergency Response Guidebook: Guidebook for Hazardous Materials Incidents (DOT P 5800.3). U.S. Department of Transportation, Washington, D.C. 20590.
- U.S. DOT. 1986. Code of Federal Regulations. Title 49. Parts 100 to 177. U.S. Government Printing Office, Washington, D.C. 20402.
- U.S. DOT. 1986. Code of Federal Regulations. Title 48. Parts 178 to 199. U.S. Government Printing Office, Washington, D.C. 20402.
- U.S. EPA. 1982. Code of Federal Regulations. Title 40. Parts 190 to 399. U.S. Government Printing Office, Washington, D.C. 20402
- U.S. EPA. 1986. Solving the Hazardous Waste Problem: EPA's RCRA Problem. U.S. Environmental Protection Agency Office of Solid Waste, Washington, D.C. 20460.
- U.S. EPA. 1986. Understanding the Small Quantity Generator Hazardous Waste Laws: A Handbook for Small Business. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. 20460

Appendix A

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 AUGUSTA, MAINE (207-289-2651)
 HAZARDOUS WASTE TRANSPORTER LICENSES - Alphabetical Order:

Advanced Pollution Control Corporation, 120 High Street, Bridgewater, MA 02324 (Michael F. Flaherty III) (617-843-8881)	000042
AmerEco Environmental Services, Route 1, Box 159, Kingsville, MO 64061 (Dennis Nix) (816-732-5591)	000005
Applejack Services, Inc., P.O. Box 704, N. Hampden, NH 03862 (Bruce K. Bentham) (603-431-4655) (WOT #000005)	000080
Aptus (National Electric, Inc.), 21400 Hamburg Avenue, Lakeville, MN 55044 (Tom Meehan) (612-469-3475) (WOT #000028)	000231
B. Littlefield & Sons, P.O. Box 485, Lower Main St., North Berwick, Maine 03906 (Caroline R. Littlefield) (207-676-2255)	000059
Beede Waste Oil, Inc., P.O. Box 127, Kelley Road, Plaistow, New Hampshire 03865 (Leo. P. LaRochelle) (603-382-5761) (WOT #14)	000128
Board of Pesticide Control, ME Dept. of Agriculture, Station #28, Augusta, ME 04333 (Robert I. Batteese, Jr.) (207-289-2731)	000268
Burnham Service Corporation, 5000 Burnham Blvd., Columbus, Georgia 31907 (Jay Patterson) (404-563-1120, in MA 617-373-8200)	000276
C.M. Laboratories, P.O. Box, 8002, 731 Broadway, Portland, 04101 (Gene McGurl) (207-772-3689)	000015
Cataract Industrial Warehousing & Transportation, Inc., 4626 Royal Avenue, Niagra Falls, NY 14303 (Gregory Brown) (716-285-8208)	000075
Central Maine Power Company, Edison Drive, Augusta, Maine 04336 (Andy Towt) (207-623-3521)	000258
Chemical Recovery Inc., 197 Portland Street, Boston, MA 02114 (Thomas Trafton) (617-523-7740)	000045
Chemical Waste Management, Inc., 3003 Butterfield Rd., Oak Brook, IL 60521 (Kevin Connors) (312-218-1621)	000182
Chicago Industrial Waste Haulers, 4206 Shirley Lane, Alsip, Illinois 60658 (Kevin Prunsky) (312-597-9500)	000284
Clean Harbors, Inc., 100 Joseph Street, P.O. Box 193, Kingston, MA 02364 (Jo-Ann Collins) (617-585-5111) (WOT # 000001)	000105
Clean Harbors of Natick, Inc., 10 Mercer Road, Natick, MA 01760 (Anthony Pongonis or Jo-Ann E. Collins) (617-849-1800) and 17 Main Street, S. Portland, ME 04106 (207-799-8111) (WOT #000002)	000004
Coating Systems, Inc., 55 Crown Street, Nashua, NH 03060 (Aram A. Jeknavorian) (603-883-0553)	000173
CTC Industrial Services, Inc., 1827 Latham Street, Memphis, TN 38106 W.E. Dowdy (901-942-1212) (WOT #0026)	000303

HAZARDOUS WASTE TRANSPORTER LICENSES - Alphabetical Order, page 2

Custom Environmental Transport, Inc., One Rollins Plaza, 2200 Concord Pike, Wilmington, DE 19803 (Ken Lee) (302-479-2955)	000100
Cyn Oil Corporation, 1771 Washington Street, Stoughton, MA 02072 (Gerald E. McCarthy) (617-344-0265) (WOT #000004)	000283
D & J Transportation Specialists, Inc., 227 Solar St., Syracuse, NY 13204 (Jack Miller) (315-652-7706)	000055
Department of Environmental Protection (WOT #13)	000099
Diamond Machine Co., P.O. Box 1608, River Rd., Lewiston, ME 04240 (Gerald Tardiff) (207-784-1381)	000159
EASE Transportation, Inc. (Eastwood Associates, Services for the Environment), 2050-C Chamblee Tucker Rd., Suite #2, Atlanta, GA 30340 (Virginia Eastwood) (404-455-8996)	000024
East Coast Environmental, 454 Quinnipiac Avenue, New Haven, CT 06513 (Leo P. Tancreti) (203-469-2376)	000110
Emergency Technical Services Corp., P.O. Box 96, Newfoundland, New Jersey 07435 (Thomas F. Gundlach) (201-694-4424)	000280
ENPRO Services, Inc., 12 Mulliken Way, Newburyport, MA 01950 (John R. Davey) (617-465-1595)	000248
Envirite Corporation, Old Waterbury Road, Thomaston, CT 06787 (Christopher M. Beyus) (203-283-8235)	000018
Energy Systems Company (ENSCO), Box 1975, El Dorado, Arkansas 71730 (J. Larry Williamson) (501-863-7173)	000069
Environmental Transport Group, Inc., P.O. Box 296, Flanders, NJ 07836 (E.R. Collioud) (201-347-8200)	000202
Environmental Transfer Corp., Gold Mine Rd., Flanders, NJ 07836 (William C. Ehrhardt) (201-347-7111)	000025
ESC Environmental, Inc., 7281 Commerce Circle West, Minneapolis, MN 55432 (Greg St. Hilaire) (612-571-2430)	000050
Environmental Transportation Services, Inc., P.O. Box 36118, Oklahoma City, OK 73136 (Larry Smathers) (405-745-2002) (WOT #0025)	000301
Environmental Waste Removal (EWR), Inc., 130 Freight St., Waterbury, CT 06702 (Mark Ecsedy) (203-755-2283) (WOT # 000003)	000181
Evergreen Construction Co., Inc., 15 N. Main St., Bellingham, MA 02019 (Thomas S. Clark, Sr.) (617-966-0330)	000017
Franklin Pumping Service, Inc., P.O. Box 617, Industrial Rd, Wrentham, MA 02093 (Jeffery R. Franklin) (617-384-3134)	000029
Freehold Cartage, Inc., P.O. Box 4629, Freehold, New Jersey 07728 (Tim Blanchet) (201-462-1001)	000047

HAZARDOUS WASTE TRANSPORTER LICENSES - Alphabetical Order, page 3

Geittmann Woodruff, Inc. d/b/a GW, Inc., 902 S. Main Street, P.O. Box 000294
A, Saukville, WI 53080 (G. Thomas Manthey) (414-284-3427) (WOT #16)

General Chemical Corporation, 133 Leland St., P.O. Box 608, Framingham, 000023
MA 01701 (John J. Gillis) (617-872-5000)

Gloucester Iron & Metal, Inc., Brick & Stinsman Sts., Gloucester City, 000224
NJ 08030 (Daniel Pizzutillo) (609-456-0717)

Great Northern Paper Company, Engineering & Research Building, 000020
Katahdin Avenue, Millinocket, Maine 04462 (Ronald C. Howes)
(207-723-5131)

GSX Services, Inc., P.O. Box 210799, Columbia, SC 29221 (Elizabeth A. 000012
Morgan) (803-798-2993)

HARGO Industries, 28 High St., Claremont, NH 03743 (Harold C. Gobin) 000072
(603-543-3657)

Hawk Transportation Services, Inc., 16 Haverhill St., Andover, MA 000041
01810 (Mike Austin) (617-470-0334) (WOT #21)

Hazco International, Inc., 5305, Lee Highway, Arlington, VA 22207 000011
(Butch Cahoon) (703-237-5700)

HazMat Environmental Group, Inc., P.O. Box 676, Buffalo, NY 14214 000086
(Robert Olesko) (716-877-5533)

Hitchcock Gas Engine Co., 50 Cross St., Bridgeport, CT 06610 (John 000238
R. Brown, Jr.) (203-334-2161)

Houlton Water Co., P.O. 729, 21 Bangor St., Houlton, ME 04730 000092
(Steve Sacoby) (207-532-2259)

Hulme Transportation, P.O. Box 4510, East Providence, Rhode Island 000152
02914 (Richard MacNeill) (401-434-9090)

Industrial Vacuum Co., 26 Beech St., Orono, ME 04473 (Chris 000228
Witherall) (207-866-5552)

Inland Pollution Control, Inc. 345 Quincy Avenue, Braintree, MA 02184 000111
(Larry Michel) (617-843-7110) (WOT #18)

Inland Waters Pollution Control, 24354 King Rd., Romulus, MI 48174 000124
(Richard G. Prawdzik) (313-479-0440)

J.F. Walton and Co. Inc., 201 Marginal Street, P.O. Box 1120, Chelsea 000138
Chelsea, MA 02150 (Jim Jabbusch) (617-884-0350)

Jack Gray Transport, 4600 East 15th Avenue, Gary, IN 46403 (Doris 000010
Ure) (219-938-7020)

Jackson B. Silva Company, 61 Nichols St., Danvers, MA 01923 (Jackson 000038
B. Silva) (617-777-2020)

HAZARDOUS WASTE TRANSPORTER LICENSE - Alphabetical Order, page 4

Jeffrey Chemical Co., Inc. 289 Woburn Street, Wilmington, MA 02887 (Stephen Salzman) (617-657-7560/353-0005) (WOT #00027)	000304
Jet Line Services, Inc., 441R Canton Street, Stoughton, MA 02072 (Al Marzelli) (617-843-2829) and 106 Main St., S. Portland, ME 04106 (Jim Guzelian) (207-799-0850 or 800-JET-LINE) (WOT #000009)	000074
Krajack Tank Lines, Inc., 480 E. Westfield Ave., Roselle Park, NJ 07204 (John Ready) (201-352-2093) (WOT #20)	000021
LPM Corp., 11 Bird Lane, Rye, NY 10580 Flyod L. Scholz) (203-259-8321)	000013
Lincoln Environmental, Inc., P.O. Box 117, Manville, RI 02838 (Eugene Benoit) (401-769-3033)	000257
M-T Drum Service, Inc, 16101 Old Statesville Road, Huntersville, No. Carolina 28078 (Mack Walden) (704-875-6014)	000196
MacDermid, Inc., 50 Brookside Rd., Waterbury, CT 06708 (Cherrie Gillis) (203-575-5700)	000082
MacDonald & Watson Waste Oil Company, Inc., Pole 18, Peep Toad Road, North Scituate, Rhode Island 02857 (Eugene K. D'Allesandro) (401-946-0200) (WOT #10)	000282
Maine Dept. of Transportation, Box 1208, Hogan Rd., Bangor, ME 04401 (John Rand) (207-942-4868)	000087
Marine Shale Processors, Inc., 110 James Dr. West, Suite 120, St. Rose, LA 70087 (Charles Bennett) (504-631-3626) or (504-531-7817)	000298
Merrill Transport Company, Box 739, 1037 Forest Avenue, Portland, ME 04104 (James E. Mountain) (207-797-7611) (WOT #22)	000076
Mid-America Environment Service, Inc., 13840 South Halsted Street, Riverdale, Illinois 60627 (James E. Hoelzeman, V.P.) (312-841-7020)	000292
Mr. Frank, Inc., 201 West 155th St., South Holland, IL 60473 (Richard Grad) (312-349-7697)	000262
Nappi Trucking Corp., P.O Box 510, Matawan, NJ 07747 (Thomas Morin) (201-758-8215) (WOT #0024)	000300
The NDJ Corporation, P.O. Box 791, Peekskill, NY 10566 (Peter J. Pastorelle) (914-737-7330)	000052
New Breed Hauling & Rigging Corp., 24 Lucon Dr., Deer Park, NY 11729 (Thomas O'Sullivan) (516-586-2535)	000146
New England Marine Contractors, Inc., 13 Dorset Ln., Williston, VT 05495 (Charles E. Peterson) (802-879-8800) (WOT #12)	000235
Northeast Solvents, 221 Sutton Street, North Andover, MA 01845 (Stephen B. Weiner) (617-683-1002)	000014

HAZARDOUS WASTE TRANSPORTER LICENSES - Alphabetical Order, page 5

Northland Chemical, Inc., 275 Allens Avenue, Providence, Rhode Island (Avery Noe) (401-781-2500)	000006
Oil Recovery Corporation, P.O. Box 1065, West Springfield, MA 01090 (Jonathan D. Gagnon) (413-737-2949) (WOT #15)	000230
Olin Hunt Specialty Products, 5 Garret Mountain Plaza, West Paterson, New Jersey 07242 (James R. Crifasi) (201-977-6070)	000062
OSCO, Inc., (Oil Service Co.), P.O. Box 1205, 202 Hill Street, Columbia, TN 38401, (Clayton Harris) (615-381-4999)	000295
Osmose Wood Preserving, Inc., 980 Ellicott Street, Buffalo, NY 14209 (Walter Chambliss) (716-882-5905 days; 901-682-2681 nights)	000296
Portland Oil Recycling, RR1, Box 1320, Kennebunkport, ME 04046-9558 (George R. West III) (207-985-3975) (WOT #11)	000030
Price Trucking Corp., P.O. Box 70, Permitting Department, Buffalo, NY 14220 (Kelvin Kelkenburg) (716-822-1414)	000150
Resource Technology Service, Inc., 6 Berkeley Road., Devon, PA 19333 (William J. Minnick) 215-687-4592)	000008
R.S. Liquid Waste Disposal Inc., P.O. Box 3289-09, Providence, RI 02909 (Raymond S. Silvestri) (401-461-2030)	000022
S.D. Myers, 180 South Avenue, Tallmadge. OH 44278 (John Wunderle) (216-633-2666)	000249
S-J Transportation Company, East Millbrooke Avenue, P.O. Box 91, Woodstown, NJ 08098 (S.H. Jones, Jr.) (609-769-2741)	000064
SCA Chemical Services of NY, 1550 Balmer Road, Model City, New York 14107 (Arlie V. Kirkpatrick) (716-754-8231)	000148
Safe Transport, Inc., 7 Belver Ave., Room 103, Quonset Point, RI 02852 (Charles Sullivan) (401-294-6320) (WOT #17)	000297
Safety-Kleen Corp., 655 Big Timber Road, Elgin, IL 60120 and Route 202, Leeds, Maine 04263 (Jeff Pellitier) (in IL: 312-697-8460; in ME: 207-933-4496)	000040
Seacoast Ocean Services, 37 Custom House Wharf, P.O. Box 2316, South Portland, ME 04106 000026 (David P. Look) (207-774-2111) (WOT #000008)	000026
Sealand Environmental Services, Inc., 326 Derby Avenue, Derby, CT 06418 (James Blatchley) (203-735-1818)	000234

HAZARDOUS WASTE TRANSPORTER LICENSES - Alphabetical Order, page 6

Security Heel-Maine, 1 Saratoga St., P.O. Box 1811, Lewiston, ME 04240 000009
(J. Robert Krauss) (207-783-2081)

Service Station Maintenance Corp., 24 Rockdale St., Worcester, MA 000019
01606 (Leonard M. Doyle) (617-853-8771) (WOT #19)

Services Sanitaire Blainville, Inc., 556 Cote, St. Louis East, 000260
Blainville, Quebec, Canada J7E 4H5 (Normand Martin)
(514-430-1496)

7-7, Inc., 661 Weber Drive, Wadsworth, OH 44281 (Calvin F. Lowe II) 000077
(216-336-8877)

Solvents Recovery Service of N.E., Inc., P.O. Box 362, 000058
Southington CT 06489 (Dale A. Bliss) (203-628-8084)

St. Joseph Motor Lines, 5724 New Peachtree Rd., Atlanta, GA 30341 000161
(Virginia Eastwood) (404-452-1744)

Suffolk Services, Inc, 26 Tanner Street, Lowell, MA 01852 (Rick 000095
Shaffer) (617-458-2500)

Swan's Island Electric Co-op, Inc., P.O. Box 8, Minturn, Maine 000264
04659 (David Honey) (207-526-4336)

Tonawanda Tank Transport Service, P.O. Box H, 1140 Military Road, 000034
Buffalo, 000034 14217 (Dennis Grell) (716-873-9073)

Total Waste Management, 142 River Road, Newington, NH 03801 000103
(Don Littlefield) (603-431-2420) (WOT #000006)

Transtec Environmental, Inc., 1700 Gateway Blvd., SE, Canton, OH 000007
44707 (Jack Lewis) (216-453-4771) (WOT #7)

Tri-S, Inc., 25 Pinney St., Ellington, CT 06029 (Frank S. Pappalardo) 000293
(203-875-2100)

Transformer Service, Inc., P.O. Box 1077, Concord, NH 03301 (Andy 000145
Serzans) (603-224-4006)

Transtec Environmental, Inc., 1700 Gateway Blvd, SE, Canton, OH 000007
44707 (Jack Lewis) (216-453-4771) (WOT #000007)

UNISON Private Truck Fleet, 4160 Perimeter Dr., Columbus, OH 43228 000143
(R.D. Nelson) (614-275-4100)

University of Maine, Department of Environmental Safety, Service Bldg. 000302
Orono, ME 04469 (David A. Fielder) (207-581-4055 or 4040)

U.S. Pollution Control, Inc., 10220 West Reno, Oklahoma City, OK 000246
73127 (Ben Autrey) (405-324-5011)

Zecco, Inc., 345 West Main St., Northboro, MA 01532 (Patrick A. Zecco) 000060
(617-383-2537)

Appendix B

Operating Commercial Incinerator Facilities

OWNER	LOCATION	TYPE OF UNIT	TYPE OF WASTES
Environmental Systems Company	El Dorado Arkansas	Rotary Kiln	PCB, Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics
International Technology Corporation	Martinez California	Liquid Injection	Acids, Non-Halogenated Solvents & Organics, Metallic Inorganics
Chemical Waste Management Inc.	Sauget Illinois	Liquid Injection & Fixed Hearth	Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics
Chemical Services, Inc.	Chicago Illinois	Liquid Injection & Rotary Kiln	PCB, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Non-Metallic Inorganics
LWD, Inc.	Calvert City Kentucky	Liquid Injection	Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics
LWD, Inc.	Clay Kentucky	Rotary Kiln	Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics
Rollins Environmental Services	Baton Rouge Louisiana	Liquid Injection & Rotary Kiln	Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics, Metallic and Non-Metallic Inorganics
Rollins Environmental Services	Bridgeport New Jersey	Liquid Injection & Rotary Kiln	Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics, Metallic and Non-Metallic inorganics
Rollins Environmental Services	Deer Park Texas	Liquid Incineration & Rotary Kiln	PCB, Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics, Metallic and Non-Metallic Inorganics
Caldwell Systems, Inc.	Lenoir North Carolina	Liquid Injection & Solid Incineration	Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic & Non-Metallic Organics
Ross Incineration	Grafton Ohio	Liquid Injection & Rotary Kiln	Acids, Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics,
Stablex South Carolina Inc.	Rock Hill South Carolina	Fixed Hearth	Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics, Metallic Organics
GSX Thermal Oxidation Corp.	Roebuck South Carolina	Liquid Injection	Halogenated & Non-Halogenated Solvents, Halogenated & Non-Halogenated Organics
B.D.T., Inc.	New York	Not Available	Metals

* In addition, there are four TSCA commercial incinerators permitted to burn PCB wastes. They include: Pyrochem (Coffeyville, Kansas), Pyrotech Systems - mobile unit, U.S. EPA Incinerator - mobile unit, and General Electric (Pittsfield, Massachusetts).

Source: EPA, Office of Solid Waste and Office of Toxic Substances.

Operating Commercial Land Disposal Facilities

OWNER	LOCATION	TYPES OF FACILITIES	WASTE
Chemical Waste Management Inc	Emelle Alabama	Landfill, Storage Impoundments, Treatment Impoundments	Metals, Cyanides, Acidic Corrosives, PCBs, Halogens
Lion Oil Company	El Dorado Arizona	Land Treatment, Storage Impoundments	Metals
IT Corp Benecia	Benecia California	Landfill, Disposal Impoundments, Storage Impoundments,	Metals, Cyanides, Solvents
IT Corp Vine Hill	Martinez California	Treatment Impoundments	Metals
IT Corp Imperial	Westmoreland California	Disposal Impoundments, Treatment Impoundments	Metals, Solvents
Casmalia Resources	Casmalia California	Landfill, Disposal Impoundments, Treatment Impoundments	Acidic Corrosives, Metals, Cyanides, Halogens
Chemwest Industries Inc	Fontana California	Storage Impoundments	Acidic Corrosives
AMCE Fill Corporation	Martinez California	Landfill	Other
IT Corp Baker Facility	Martinez California	Disposal Impoundments, Treatment Impoundments	Metals, Acidic Corrosives
Chemical Waste Management Inc	Kettleman City California	Landfill, Treatment Impoundments	Acidic Corrosives, Metals
CECOS International Inc	Bristol Connecticut	Waste Piles	Metals, Cyanides
City of Danbury	Danbury Connecticut	Landfill	Metals
Torrington Landfill	Torrington Connecticut	Landfill	Metals
Salsbury Laboratories	Charles City Iowa	Storage Impoundments, Treatment Impoundments	Metals, Solvents, Halogens
Envirosafe Services of Idaho	Grand View Idaho	Landfill, Waste Piles	Acidic Corrosives, Metals, Cyanides, Solvents, PCBs, Halogens
SCA Chemical Services Inc	Chicago Illinois	Storage Impoundments, Treatment Impoundments	Other
Peoria Disposal Co	Peoria Illinois	Landfill	Metals
CID-Landfill	Calumet City Illinois	Landfill	Acidic Corrosives, Metals, Cyanides, Solvents, Halogens
Kerr-McGee Chemical Corp	Madison Illinois	Storage Impoundments	Other
CECOS International Inc./BFI	Zion Illinois	Landfill	Metals, Solvents, Halogens
Four County Landfill	Rochester Indiana	Landfill	Metals
Adams Center Landfill Inc	Fort Wayne Indiana	Landfill	Acidic Corrosives, Metals, Cyanides, Solvents, Halogens

Operating Commercial Land Disposal Facilities (cont.)

OWNER	LOCATION	TYPES OF FACILITIES	WASTE
CECOS International Inc.	Westlake Louisiana	Storage Impoundments	Acidic Corrosives, Metals, Solvents, Halogens
CECOS International Inc	Livingston Louisiana	Landfill	Acidic Corrosives, Cyanides, Solvents, Halogens
Chemical Waste Management Inc	Carlyss Louisiana	Landfill	Metals, Cyanides, Solvents, Halogens
Rollins Environmental Services	Baton Rouge Louisiana	Landfill, Storage Impoundments Treatment Impoundments	Metals, Solvents, Cyanides, Acidic Corrosives
Wayne Disposal, Inc	Bellerville Michigan	Treatment Impoundments	Acidic Corrosives, Metals
Environmental Waste Control	Inkster Michigan	Treatment Impoundments	Acidic Corrosives, Metals
Chem-Met Services Inc	Wyandotte Michigan	Waste Piles	Acidic Corrosives, Metals, Solvents, Halogens
Federal-Hoffman Inc	Anokia Minnesota	Landfill	Other
North Star Steel Co	St. Paul Minnesota	Waste Piles	Metals
B. H. S. Inc	Wright City Missouri	Landfill	Metals, Halogens
Rogers Rental Landfill	Centreville Mississippi	Land Treatment	Other
Burlington Northern Somers	Somers Montana	Waste Piles, Storage Impoundments	Acidic Corrosives, Metals, Solvents
US Ecology Inc	Beatty Nevada	Landfill	Metals, Cyanides, Solvents, PCBs, Halogens
Frontier Chemical Waste Process	Niagara Falls New York	Waste Piles	Metals
CECOS International Inc	Niagara Falls New York	Landfill	Acidic Corrosives, Metals, PCBs
F E I Landfarming	Oregon Ohio	Land Treatment	Metals
Ashland Chemical Co	South Point Ohio	Waste Piles	Other
Chemical Waste Management Inc	Vickery Ohio	Storage Impoundments	Acidic Corrosives, Metals
Fondessy Enterprises Inc	Oregon Ohio	Landfill	Metals, Cyanides, Solvents, Halogens
Erieway Pollution Control Inc	Bedford Ohio	Waste Piles	Acidic Corrosives, Metals, Halogens
CECOS International Inc	Williamsburg Ohio	Landfill	Metals, Cyanides, Solvents, PCBs, Halogens
Delhi Industrial Products	McDonald Ohio	Waste Piles	Metals

Operating Commercial Land Disposal Facilities (cont.)

OWNER	LOCATION	TYPES OF FACILITIES	WASTE
Eagle Picher Industries Inc	Quapaw Oklahoma	Disposal Impoundments	Metals, Solvents
USPCI	Waynoka Oklahoma	Landfill, Disposal Impoundment, Waste Piles, Storage Impoundments Treatment Impoundments	Acidic Corrosives, Metals, Cyanides
Chem-Security Systems Inc	Arlington Oregon	Landfill, Storage Impoundments, Treatment Impoundments	Acidic Corrosives, Metals, Solvents, PCBs, Halogens
Mill Service Inc	Yukon Pennsylvania	Disposal Impoundments, Waste Piles	Metals
Mill Service Inc	Bulger Pennsylvania	Disposal Impoundments, Waste Piles	Metals
GSX Services of South Carolina	Pinewood South Carolina	Storage Impoundments	Acidic Corrosives, Metals, Cyanides
Yale Security Inc	Lenoir City Tennessee	Storage Impoundments	Acidic Corrosives, Metals
Gibraltar Chemical Resources	Winona Texas	Treatment Impoundments	Cyanides, Halogens
US DOE K-25 Site	Oakridge Texas	Storage Impoundments	Acidic Corrosives, Metals
Gulf Coast Waste Disposal	Texas City Texas	Landfill, Land Treatment	Metals, Cyanides
Chemical Waste Management Inc	Port Arthur Texas	Landfill, Disposal Impoundments, Storage Impoundments, Treatment Impoundments	Acidic Corrosives, Metals, Cyanides, Solvents, Dioxins Halogens
Rollins Environmental Services	Deer Park Texas	Landfill, Storage Impoundments, Treatment Impoundments	Metals, Cyanides, Solvents, Halogens
Olin Corporation	Beaumont Texas	Treatment Impoundments	Acidic Corrosives, Metals, Cyanides, Solvents, Halogens
Malone Service Company	Texas City Texas	Landfill, Storage Impoundments, Treatment Impoundments	Metals, Cyanides, Acidic Corrosives
Texas Ecologists Inc.	Robstown Texas	Landfill	Metals, Cyanides, Solvents, Halogens
USPCI	Knowles Utah	Landfill, Land Treatment, Storage Impoundment	Metals, Acidic Corrosives, Solvents, PCBs, Halogens

Source: EPA, Office of Solid Waste.

Commercial Deep-Well Injection Systems

OWNER	LOCATION	WASTE
CECOS International	Lake Charles Louisiana	Acids, Caustics, Cleaning Solutions, Organic and Inorganic Wastewaters, Leachate, Contaminated Soils
CECOS International	Livingston Louisiana	Acids, Chromic Acids, Pickling Acids, Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products, Contaminated Soil, Asbestos, Spent Catalysts
Chemical Waste Management Inc.	Lake Charles Louisiana	Acids, Chromic Acids, Pickling Acids, Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Non-metallic Inorganic, Metallic Inorganics, Non-Halogenated Organics, Halogenated Organics, Contaminated Soils
Rollins Environmental Services	Baton Rouge Louisiana	Acids, Chromic Acids, Pickling Acids, Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products, Non-metallic Inorganics, Metallic Inorganics, Non-Halogenated and Halogenated Organics, Pesticides, PCB Liquids <50ppm, PCB Solids <50ppm, Contaminated Soil, Lab Packs.
Chemical Waste Management Inc.	Vickery Ohio	Acids, Chromic Acids, Pickling Acids, Caustics, Waste Oil, Non-metallic Inorganics, Metallic Inorganics, Non-Halogenated Organics.
Chemical Resources, Inc.	Tulsa Oklahoma	Acids, Pickling Acids, Cyanides, Paint and Inks, Non-Halogenated Solvents, Waste Oil, Metallic Inorganics, Metallic Organics, Pesticides.
Disposal Systems, Inc.	Houston Texas	Acids, Chromic Acids, Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products, Non-Metallic Inorganics, Metallic Inorganics, Metallic Organics, Non-Halogenated Organics, Halogenated Organics, Pesticides, Contaminated Soil, Texas Class I Hazardous Wastes.

Commercial Deep-Well Injection Systems

OWNER	LOCATION	WASTE
Chemical Waste Management Inc.	Corpus Christi Texas	Acids, Chromic Acids, Pickling Acids Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Non-metallic Inorganics, Metallic Inorganics, Non-Halogenated Organics, Halogenated Organics
Malone Service Co.	Texas city Texas	Acids, Chromic Acids, Pickling Acids Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products Non-Metallic Inorganics, Metallic Inorganics, Metallic Organics, Non-Halogenated Organics, Pesticides.
EMPAK, Inc.	Deer Park Texas	Acids, Chromic Acids, Pickling Acids Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products Non-Metallic Inorganics, Metallic Organics, Non-Halogenated Organics, Pesticides.
Gibraltar Chemical Resources	Winona Texas	Acids, Chromic Acids, Pickling Acids Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Texas Class I Waste
Chemical Waste Management	Port Authur Texas	Acids, Chromic Acids, Pickling Acids Caustics, Cyanides, Paints and Inks, Non-Halogenated Solvents, Halogenated Solvents, Waste Oil, Commercial Chemical Products Non-Metallic Inorganics, Metallic Organics, Non-Halogenated and Halogenated Organics, Pesticides, Contaminated Soil.
CECOS International, Inc	Odessa Texas	Acids (pH >5), Chromic Acids, Pickling Acids, Caustics, Metallic Organics Flammable Liquids, Cyanide Waste Stream.

Source: EPA, Office of Solid Waste.

Appendix C

Hazardous Waste Fact Sheet for Maine Generators

ACIDS/BASES

THESE WASTES ARE HAZARDOUS!

Acidic and basic waste streams are hazardous because of their corrosivity. The corrosivity characteristic refers to a highly acidic solution (pH less than or equal to 2) or a highly basic solution (pH greater than or equal to 12.5).

WASTE SOURCES

Acidic and basic waste streams may be generated from several sources including manufacturing and service-related industries. These sources and waste streams may include:

Source	Waste Stream
Boiler cleaning	descaler, alkaline neutralizer
Electroplating	soak and/or electrocleaner, acid dip, rust remover
Engine overhaul/vehicle repair	hot tank caustic (alkaline) cleaner
Machine shop	hot tank caustic (alkaline) cleaner
Metal pickling	pickle (acid rust removal)
Paint stripping	hot caustic (alkaline) stripper
Painting	acid phosphatizer; acid brightener; hot tank alkaline cleaner; rust remover
Plating stripping	acid stripper or hot stripper with current
Printing	developer, plate etch, fixer, fountain solution

MANAGEMENT OPTIONS

Corrosive acids and bases should be managed on site with proper storage, labeling, and disposal practices:

Storage:

- Segregate acids/bases from solvents and other wastes
- Store on diked, impermeable surface
- Store in sturdy, leakproof, and closed containers
- Containers must be plastic or glass

Labeling:

- Label as hazardous waste and with corrosive labels where required

Recycle/Treatment/Disposal:

- Acids and bases may be combined to neutralize within an acceptable pH range to be sewered. This requires a "License by Rule" obtainable from the DEP.

DON'TS

Don't sewer without neutralizing or without approval of local sewer authority and the DEP.

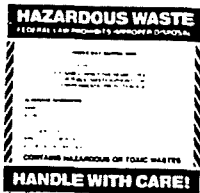
Don't mix with other waste streams in order to enhance opportunities for recycle, treatment, or disposal.

WASTE REDUCTION OPTIONS

Waste reduction options for acidic or basic waste streams are few; however, they may include:

- Reuse hot caustic and cold acid solutions until they are spent; consult with DEP and sewer authority before disposal.
- Acid recovery systems (ion exchange, crystallization, or other technology) only if licensed to do so by DEP.
- Neutralize acids and bases by combining or adding chemicals to reach a pH range acceptable for sewerage - only if licensed to do so by DEP.

Hazardous Waste Label



Corrosive Label



For more information contact the Maine Department of Environmental Protection at 207-289-2651.

Hazardous Waste Fact Sheet for Maine Generators

DRYCLEANING AND LAUNDRY PLANTS

Drycleaning and laundry plants may include:

- retail drycleaning stores
- industrial and linen supply plants with drycleaning operations
- leather and fur cleaning plants
- self-service laundromats with drycleaning equipment
- other establishments with drycleaning operations

Those establishments using solvents may be subject to Maine's hazardous waste regulations. These solvents include:

- perchloroethylene (also called perc, PCE, or tetrachloroethylene)
- Valclene (also known as fluorocarbon 113, freon, or trichlorotrifluoroethane)
- petroleum solvents such as Stoddard, and other solvents with a flashpoint less than 140°F.

HAZARDOUS WASTE FROM DRYCLEANING AND LAUNDRY PLANTS

Drycleaning and laundry plants may generate the following hazardous wastes from recovery of these solvents:

- still residues from solvent distillation
- spent filter cartridges
- cooked powder residue

REGULATORY REQUIREMENTS

A business in Maine which generates any waste classified as hazardous is subject to rules affecting how the waste is stored and handled. In Maine there is no exemption when generating only small quantities of waste.

The table below lists the typical hazardous wastes found in drycleaning and laundry plants. Hazardous waste shipped off site is required to be accompanied by a hazardous waste manifest. A manifest must be completed with the correct Department of Transportation shipping information. The table below provides this information, as well as the U.S. Environmental Protection Agency hazardous waste code.

NOTE: This listing of hazardous wastes may not be complete. The list is limited to the most common wastes from the most common operations. You may have other operations which generate hazardous wastes.

**EXAMPLES OF HAZARDOUS WASTES FROM
DRYCLEANING AND LAUNDRY OPERATIONS**

The table below provides information for classifying your hazardous waste prior to off site shipment. The correct designation for a specific waste should be verified with your transporter or the appropriate regulatory authority prior to completion of the hazardous waste manifest. **ITEMS LISTED ARE EXAMPLES.** Other DOT descriptions and identification codes may be applicable in some circumstances.

PROCESS DESCRIPTION			WASTE DESCRIPTION		
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
drycleaning	perc	F002	waste perchloroethylene or waste tetrachloroethylene	ORM-A	UN1897
drycleaning	Valclene	F002	hazardous waste liquid or solid N.O.S.	ORM-E	UN9189
drycleaning	Stoddard	D001	waste petroleum naphtha	combustible liquid	UN1255

Hazardous Waste Fact Sheet for Maine Generators

EDUCATIONAL AND VOCATIONAL SCHOOL

Educational and vocational institutions often include programs which produce hazardous wastes. Institutions with the following kinds of programs most likely generate hazardous wastes:

- automotive and small engine repair
- heavy equipment mechanics
- automobile body repair
- machining and tooling
- metalworking
- graphic arts production (e.g. printing, photography)
- woodworking
- dry cleaning

Hazardous waste are also produced in maintenance operations and from laboratories.

Wastes generated from commercial laboratories are not addressed in this fact sheet discussion; a separate sheet on laboratory wastes is available.

HAZARDOUS WASTE FROM EDUCATIONAL AND VOCATIONAL SHOPS

The majority of hazardous wastes from educational and vocational shops are:

- solvents (e.g. paint removers, thinners, and press clean-up)
- paint wastes
- cleaners (strong acids or caustics)

Automotive repair and truck or vehicle mechanics generates waste solvents and acid or alkaline cleaners used for cleaning and rust removal.

Graphic arts production may generate several types of waste which may be hazardous. Printing wastes include solvents used to clean presses and waste ink. Ink wastes may be flammable or contain heavy metals. Photoprocessing generates waste which may need to be addressed for silver content.

Auto body repair generates waste solvents and paints. The solvents may be flammable and/or toxic, and paints may contain heavy metal pigments as well as hazardous solvents.

Farm or diesel mechanics generate waste similar to that generated by vehicle mechanics.

REGULATORY REQUIREMENTS

A business in Maine that generates any waste classified as hazardous is subject to rules affecting how the waste is stored and handled. **In Maine there is no exemption when generating only small quantities of waste.**

The table below lists some typical operations found in vocational or educational institutions. The management of the wastes generated by these operations (listed below) may include reuse or licensed reclamation on site, off-site treatment or disposal.

If hazardous waste is shipped off site, it is required to be accompanied by a hazardous waste manifest. A manifest must be completed correctly with the required Department of Transportation shipping information. Therefore, the table includes two identification codes: the code required according to U.S. EPA hazardous waste regulation and the code required by U.S. DOT regulation.

NOTE: All wastes which may be hazardous have not been included. The list is limited to examples of representative wastes from the most common operations. Operations not identified may also generate hazardous waste.

**WASTE DESIGNATIONS AND SHIPPING INFORMATION FOR
HAZARDOUS WASTES FROM VOCATIONAL SHOPS**

The table below provides information which may be useful in classifying your hazardous waste prior to shipment off site. The correct designation for a specific waste should be verified with your transporter prior to completion of the hazardous waste manifest. Materials listed are to provide examples only.

PROCESS DESCRIPTION		WASTE DESCRIPTION			
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
AUTO ENGINE REPAIR AND EQUIPMENT MAINTENANCE					
oil and grease removal parts cleaning	Stoddard Solvent 105	D001	waste naphtha	flammable liquid	UN2553
	Carburetor cleaner	F002	hazardous waste liquid N.O.S.	ORM-E	NA9189
	caustic sodium hydroxide	D002	waste sodium hydroxide solution	corrosive material	UN1824
AUTO BODY REPAIR					
painting	enamels, laquers	D001	waste paint or enamel, liquid	flammable liquid combustible liquid	UN1263 UN1263
	paint thinner or lacquer reducer	F003	thinning compound, liquid	flammable liquid	UN1307

GRAPHIC ARTS, PAINTING, PHOTOGRAPHY

press wash up	xylene, xylol	D001	waste xylene	flammable liquid	UN1307
	naphtha	D001	waste naphtha	flammable liquid	UN2553
	press wash	D001	waste flammable liquid,, N.O.S.	flammable liquid	UN1993
printing	solvent-based ink	D001	hazardous waste liquid	ORM-E	NA9189

NOTE: Flammable liquid (DOT definition) has a flashpoint below 100°F.

Hazardous Waste Fact Sheet for Maine Generators

FURNITURE/WOOD MANUFACTURING AND REFINISHING

If your business is manufacturing or refinishing:

- wooden kitchen or bathroom cabinets
- softwood veneer and plywood
- hardwood veneer and plywood
- household or office furniture
- furniture (including reupholstery and repair)

then your business may generate hazardous wastes.

If you use any solvents, flammable or combustible liquids, combustible solids or ignitable paints containing flammable solvents in furniture wood manufacturing or refinishing, the wastes generated from using these materials may be hazardous and you may be subject to the provisions of the Maine Hazardous Waste Management Rules.

REGULATORY REQUIREMENTS

A business in Maine that generates any waste classified as hazardous is subject to rules affecting how the waste is stored and handled. In Maine there is no exemption for generating only small quantities of waste.

The table below lists typical hazardous wastes produced from wood manufacturing and furniture manufacturing and repair. The management of the wastes generated by these operations may include reuse or licensed reclamation on-site, off-site treatment or disposal.

If hazardous waste is shipped off-site, it is required to be accompanied by a hazardous waste manifest. A manifest must be completed correctly with the required Department of Transportation shipping information. Therefore, the table includes two identification codes: the code required according to U.S. EPA hazardous waste regulations and the code required by the U.S. DOT regulations.

NOTE: All wastes which may be hazardous have not been included. The list is limited to examples of representative wastes from the most common operations. Operations not identified may generate hazardous waste.

**WASTE DESIGNATIONS AND SHIPPING INFORMATION FOR HAZARDOUS
WASTES FROM FURNITURE/WOOD MANUFACTURING AND REPAIR**

The table below provides information which may be useful in classifying your hazardous waste prior to shipment off-site. The correct designation for a specific waste should be verified with your transporter prior to completion of the hazardous waste manifest. Materials listed are to provide examples only.

PROCESS DESCRIPTION		WASTE DESCRIPTION			
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/ NA Number
wood cleaning and wax removal	petroleum distillates	D001	waste flammable liquid N.O.S.	flammable liquid	UN1993
refinishing/ stripping	paint removers (containing methylene chloride)	F002	hazardous waste liquid or waste methylene chloride	ORM-E	UN1593
	paint removers (containing distillates, acetone, toluene)	D001	waste flammable liquid N.O.S.	flammable liquid	UN1993
	paint removers containing caustic	D002	corrosive material	corrosive	NA1760
painting	enamels lacquers, epoxy	D001	waste paint or enamel liquid	flammable liquid	UN1263
finishing	varnish, shellac, lacquer	D001	waste flammable liquid N.O.S.	flammable liquid	UN1993

NOTE: N.O.S. - not otherwise specified.
 Flammable liquid (D.O.T. definition) has a flashpoint below 100°F.
 Combustible liquid (D.O.T. definition) has a flashpoint between 100° and 200°F.
 Ignitable waste (EPA definition) has a flashpoint below 140°F.

Hazardous Waste Fact Sheet for Maine Generators

HEAVY METALS SLUDGES

THESE SLUDGES ARE HAZARDOUS!

A metals solution considered weak by a plater typically represents a toxic waste stream to the environment. Metals wastes are hazardous because of their toxicity to organisms and their ability to substitute for other elements in the body and disrupt metabolism. Metals sludges result in a concentration of metal or metals resulting in an even more hazardous waste. Many metal-containing sludges are in fact listed as hazardous wastes, and therefore no further evaluation is necessary. Other metal sludges require that an extraction procedure toxicity test (EP Toxicity) be conducted by a reputable laboratory to determine the leachable metals content. Plating processes which use cyanide baths produce high reactive as well as toxic wastes. NOTE: Many plating baths are also listed as hazardous waste if they are discarded.

INDUSTRY SOURCES

Heavy metal sludges primarily are generated by the electroplating and metal finishing industries. However, metal sludges may also be generated from paint manufacture and application, the printing industry, and petroleum refining operations. Some common examples of heavy metals solutions and sludges include:

Source	Waste Stream
Electroplating	sludges from brighteners, etching, or plating baths; pretreatment sludges (i.e. cadmium, chromium)
Painting/paint manufacture	lead, barium or chromium-based paint sludges
Petroleum refining operations	leaded tank bottoms; API separator sludge, process catalysts; oil spill cleanups
Bulk storage of petroleum products	unleaded tank bottoms
Printing processes/ink formulation	metal-containing ink sludge (lead, barium, chromium)

WASTE MANAGEMENT OPTIONS

Despite the large amount of metal sludges produced by metal finishing and plating processes, these wastes can be effectively managed on site.

Storage:

- Segregation of metals waste streams
- Sturdy, leakproof, closed containers

Labeling:

- Hazardous waste label indicating type of metals sludge

Treatment/Disposal (only if licensed to do so by DEP):

- Cyanide destruction (oxidation)
- Metals recovery via ion exchange, electrolyte recovery, reverse osmosis, etc.
- Conventional wastewater treatment (pH adjustment, precipitation)
- Sludge dewatering
- Hazardous waste landfill
- Incineration (application for ink, paint, some oil refinery sludges)

DON'T

Don't sewer electroplating wastes or cyanides!

Don't mix metals waste streams unless:

- Waste is designated for a hazardous waste landfill
- There is no danger of reaction of cyanides in the waste

WASTE REDUCTION OPTIONS

The electroplating industry generates large volumes of wastes for which few disposal options are available other than landfilling. However, the potential for water and metal resource recovery in the electroplating field is great. The key to waste reduction in the electroplating industry is process modification to avoid the generation of metals sludges at the source. Waste reduction can be achieved through:

Product Substitution

- Substitute nitric or hydrochloric acid for cyanide in certain plating baths, making the baths and any sludges produced less hazardous
- Substitute zinc chloride for zinc cyanide

Filtration/Recycling of metals baths

Metals Recovery

- Ion exchange
- Electrolytic recovery
- Reverse osmosis

Dewatering

- Filter press
- Belt filter
- Centrifugation
- Sludge drying

Hazardous Waste Fact Sheet for Maine Generators

LABORATORIES

Laboratories that use chemicals are likely to generate hazardous waste.

- research and development laboratories
- commercial testing laboratories
- academic laboratories
- medical laboratories
- quality control labs

HAZARDOUS WASTE FROM LABORATORIES

There is a great variety of waste generated by laboratories and therefore it is difficult to identify each possible specific waste. Instead, general sources of the wastes will be identified and examples given of wastes produced by that source. Spent solvents and unused reagents constitute a large proportion of laboratory waste.

Acid Cleaners - used for cleaning and rinsing glassware. Nitric acid is commonly used for analytical glassware cleaning. Chromic acid is used for general glassware cleaning, and requires special treatment before disposal.

Spent Solvents - used in cleaning, extraction, or other processes. Hexane, freons, acetone, alcohols, plus many other solvents are frequently used.

Reaction Residuals - these may be of a known or unknown composition, often produced by research, academic and testing laboratories. To facilitate disposal, labs should try to identify or characterize reaction products and label them with this information. Sometimes what remains as a residue following a reaction is the hazardous waste portion. Label wastes as heavy metal waste, toxic waste, or flammable waste as the exact composition is not needed.

Contaminated Material - glassware, paper, and plastic products. Filter paper may be contaminated with heavy metals or toxic chemicals during filtration.

Outdated/Contaminated Chemicals - chemicals on the shelf that are no longer usable. Chemicals that are listed as hazardous due to any of the hazardous characteristics must be handled as hazardous waste when disposed of. Disposal for random small containers of hazardous waste usually requires use of a "lab pack." A "lab pack" is a 55-gallon DOT approved drum filled with waste materials in their purchased containers. Inert packing material is used to keep each container separate and must be able to absorb liquid released from broken containers.

Testing Samples - that are not entirely consumed by the test. Usually excess sample is received by the laboratory; if hazardous, treat as a hazardous waste on disposal. You can return the samples to the client when analysis is complete; you may wish to make it a matter of policy to return all samples to the client.

REGULATORY REQUIREMENTS

A business in Maine that generates any waste classified as hazardous is subject to rules affecting how the waste is stored and handled. In Maine there is no exemption when generating only small quantities of wastes.

The table below lists some typical operations found in various chemical laboratories. Examples of some waste generated by these laboratories are identified. Hazardous waste shipped off site is required to be accompanied by a hazardous waste manifest. A manifest must be completed correctly with the required Department of Transportation shipping information. Therefore, the table includes two identification codes: the code required by the U.S. EPA hazardous waste regulations and the code required by the U.S. DOT regulations.

However, the management of the wastes generated by laboratories is not limited to off site shipment. Proper management may include reuse or reclamation on site if licensed to do so by DEP and off site treatment or disposal.

NOTE: All wastes which may be hazardous have not been included. The list is limited to the most common waste from the most common operations. Operations not identified may generate hazardous waste.

**EXAMPLES OF OPERATIONS USING MATERIALS WHICH MAY
GENERATE HAZARDOUS WASTE REQUIRING SHIPMENT**

The table provides information which may be useful in classifying your hazardous waste prior to shipment off site. The correct designation for a specific waste should be verified with your transporter prior to completion of the hazardous waste manifest. Materials listed are to provide examples only.

PROCESS DESCRIPTION		WASTE DESCRIPTION			
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
organic extractions	non-chlorinated solvent	F003	waste flammable liquid, N.O.S.	flammable liquid	UN1993
organic extractions	chlorinated solvent	F002	hazardous waste liquid, N.O.S.	ORM-E	NA9189
general laboratory	lab chemicals	Variable	hazardous waste liquid N.O.S.	ORM-E	NA9189
Kjeldahl nitrogen	mercury catalyst	D009	hazardous waste solid N.O.S.	ORM-E	NA9189
hardness test	cyanide	D003	waste cyanide solution N.O.S.	Poison E	UN1935

Hazardous Waste Fact Sheet for Maine Generator

PAINTS, INKS AND OTHER ORGANIC RESIDUALS

HAZARDOUS NATURE OF THESE WASTES

Waste paint and printing inks may be hazardous because of one or more characteristics. Not all waste streams from the painting/coating or printing industry would be classified as a hazardous waste. However, the use of paint or ink containing heavy metals or solvents, or both, may result in the generation of a hazardous waste due to **toxicity** or **ignitability** (flashpoint less than 140°F). Metals of concern are lead, chromium, cadmium, and barium, generally.

INDUSTRY SOURCES

The application of paints and coatings involves the use of solvents, thinners and various paint products containing solvents and some heavy metals. In addition, printing processes utilize solvents and ink products that may contain solvents and possibly heavy metals. Hazardous waste streams containing solvents and heavy metals are generated as a results of these activities:

Source	Waste Stream
Printing/Publishing	waste inks; spent solvents; press clean-up
Painting/Coating	waste paint; overspray; overrun paints; paint filters; paint booth stripping materials; paint sludges from water wash curtains

WASTE MANAGEMENT OPTION

Proper handling, storage, labeling and disposal/treatment of waste paints and inks will differ depending on their characteristics. Solvent-based waste should be managed differently from water-based wastes. Metal-based wastes should be stored and handled separately.

Storage	Labeling	Disposal*
Hazardous (solvent and/or metal-containing)		
- segregate from water-based products - store in closed, leakproof containers	- label as hazardous waste and other appropriate handling	- reformulation - incineration - fuel blending (except chlorinated solvents)
Non-Hazardous (water-based with no metals)		
- segregate from solvent-based - store in closed, leakproof container	- appropriate labeling, if any	- reuse on site - reformulation - fuel blending or incineration (ink)

* Only at a licensed disposal facility

DON'TS

- Don't sewer waste paints or inks without approval of DEP and local sewer authority.
- Don't mix paint or ink types.
- Don't throw in dumpster.
- Don't evaporate solvents.
- Don't offer chlorinated solvent-based paints to a waste oil hauler.

WASTE REDUCTION OPTIONS

High raw material costs for paints and inks in conjunction with increased waste disposal costs have changed the way painters/coaters and printers look and their operations. Practicing waste reduction in these industries can significantly reduce these costs by reducing generated wastes. Several waste reduction options exist depending on the characteristics of the wastes.

Improve housekeeping and quality control.

Recycling

- on site (only if licensed to do so by DEP): paint recycling for electrostatic or water-wash curtain; ink: reformulation
- off site at a licensed facility: reformulation and pigment/metal recovery

Product substitution

- water-based products for solvent-based products
- non-metals-based products for metals-based products
- use of high solids inks or paints

More efficient equipment

- install electrostatic or powder coating equipment for painting/coating

Hazardous Waste Fact Sheet for Maine Generators

PCBs - POLYCHLORINATED BIPHENYLS

THESE WASTES ARE HAZARDOUS!

PCBs are hazardous primarily because of their toxicity. Some evidence exists of carcinogenic risk upon exposure. Several potential health effects exist including toxicity to liver, adverse reproductive effects, and irritation to eyes, nose, and throat.

SOURCES OF PCBs

Polychlorinated biphenyls (PCBs) are a class of chlorinated compounds used in transformers and capacitors manufactured prior to July 1, 1979. PCBs have been used in electrical equipment since the 1930s because of their highly desirable flame resistant and heat transfer properties. PCB contaminated wastes are "generated" when the electrical equipment leaks or breaks. The following types of PCB wastes may be generated:

- low concentration PCB-containing wastewaters
- PCB-contaminated liquids (i.e. oil, solvents)
- PCB-containing or contaminated transformer oils
- PCB-contaminated soils and containers
- PCB clean-up equipment and debris
- PCB-containing capacitors removed from scrapped equipment (i.e. computers)

NOTE: PCB-containing waste is a hazardous waste if PCB concentration exceeds 50 parts per million (ppm).

PCB MANAGEMENT OPTIONS

Proper management of PCBs includes special precautions in handling, storage, and disposal.

Storage

- Store in sturdy, leakproof, closed containers
- Segregate from any incompatible waste streams

Labeling

- Label as hazardous waste if over 50 ppm PCBs
- Label as PCBs if:
 - PCB contaminated material in containers (liquid or solid) with PCB concentration exceeding 50 ppm
 - Equipment containing PCBs with PCB concentration exceeding 50 ppm.

Treatment/Disposal

- Carbon adsorption (for low concentration wastes)
- Incineration in a hazardous waste incinerator approved for PCBs

DON'TS

Don't dispose of PCBs in a landfill.

Don't sewer PCBs.

Don't send PCB-containing oils to fuel blender.

WASTE REDUCTION OPTIONS

Because of the toxicity of PCBs, few options exist for waste reduction. Phasing out of PCBs for use in electrical equipment is one method of waste reduction. Others may include:

- Proper care and maintenance of transformers still containing PCBs.
- Retrofilling or complete replacement of PCB-containing transformers with a substitute.

Additional Information

The Maine Waste Code for PCBs is M002

Hazardous Waste Fact Sheet for Maine Generators

PESTICIDES AND HERBICIDES

HAZARDOUS NATURE OF THESE WASTES

Pesticides and herbicides may be hazardous due to their toxicity. The type of waste will determine the degree of toxicity.

SOURCES OF PESTICIDES/HERBICIDES AND OTHER ORGANIC CHEMICALS

Use of pesticides and herbicides may generate a hazardous waste. These chemicals are commonly used by households, farms, and commercial applicators.

Exemptions

Households - exempt from hazardous waste regulations if they follow the pesticide label directions.

Farmers - exempt from hazardous waste regulations if:

- empty pesticide containers are triple rinsed before disposal.
- pesticide residues are disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the label.

INDUSTRY SOURCES

- Agricultural pesticide/herbicide application
- Lawn, garden, and tree services
- Arboretums, botanical, and zoological gardens
- Golf courses and other businesses managing grounds surrounding the business
- Disinfecting and exterminating services
- Veterinary services that treat animals with pesticides
- Companies that apply wood preservatives

Wastes that are generated by the above activities which may be subject to hazardous waste regulations:

- Rinsewaters generated in rinsing application equipment and product containers
- Solutions left in application equipment
- Containers that held pesticide residue
- Virgin pesticides - Pesticide which is unusable because it is very old, banned, or unidentifiable
- Contaminated soil, water or other material where a spill of pesticide material has occurred.

MANAGEMENT OF PESTICIDES/HERBICIDES

Pesticides, herbicides and other organic chemicals should be handled and managed to prevent future health and environmental problems. Proper management of these wastes would include:

Storage

- Sturdy, leakproof, closed containers with clear labels
- If hazardous waste, then hazardous waste labels must be added

Treatment/Disposal

- Detoxification by an oxidizing agent at licensed facility
- Incineration at licensed facility
- Carbon adsorption at licensed facility
- Disposal in trash for empty containers **which have been triple rinsed.**
- Land treatment under controlled conditions for biological breakdown.

DON'TS

Don't sewer or put in septic tank
Don't landfill or put in isolated pit
Don't apply to land in concentrated form
Don't burn

WASTE REDUCTION OPTIONS

Opportunities for waste reduction of pesticides and herbicides are not as widespread as for other waste streams. However, good waste management practices can be employed which reduce waste generation as much as possible. The following steps should be followed:

1. Buy wisely. Buy only the amount needed for the current season.
2. Store the material under proper conditions so it remains usable.
3. Determine if unused pesticide should be returned to supplier.
4. Prepare only the amount needed.
5. Triple rinse the original container immediately after emptying. Use this rinsewater for subsequent batches.
6. Rinsate, if applied to ground, should be applied at same rate as pesticide. If possible, save rinsate for use at a later time.
7. Store, transport, and apply pesticides carefully to avoid leaking or spilling.

If you cannot use pesticide and rinsates according to the label direction and you want to discard them, these wastes must be evaluated to determine if they are hazardous. Those wastes determined to be hazardous must be managed according to Maine Hazardous Waste Management Rules. Abandoning or discarding hazardous waste in an improper manner can result in enforcement actions and possible monetary penalties. Other laws may apply if improper disposal of pesticides and pesticide residues occurs.

For more information, contact: Maine Board of Pesticides Control, State House Station #28, Augusta, Maine (289-2731) or Maine DEP.

Hazardous Waste Fact Sheet for Maine Generators

SOLVENTS

THESE WASTES ARE HAZARDOUS!

Most waste solvents are hazardous because of two common characteristics: **toxicity** and **ignitability**. Chlorinated solvents contain chlorine as part of their chemical structure and are hazardous by virtue of their toxicity to organisms. Some chlorinated compounds are also carcinogenic. Both chlorinated and flammable solvents may cause health hazards if not handled properly. Non-chlorinated compounds do not contain chlorine and are hazardous because they are ignitable (flash point less than 140°F).

SOLVENT WASTE SOURCES

Waste solvents used for cleaning, degreasing, formulation, and manufacturing may be broken into two primary solvent types: chlorinated and non-chlorinated. Examples of these waste solvents and their industry sources are listed below:

Industry Sources	Wastes	
	Chlorinated Solvents	Non-Chlorinated Solvents
Auto Body		thinners
Auto Service (parts cleaners)	methylene chloride trichloroethylene freon carburetor cleaner immersion cleaner	Stoddard Solvent safety solvent "Solvent 105"
Dry Cleaning	filter cartridges perchloroethylene still bottoms muck (powder residues) freon	Stoddard Solvent
Electronics	trichloroethane freon	alcohol
Fiberglass Manufacture		acetone
Commercial floor stripping	methylene chloride	
Printing	press wash	press wash plate developers naphtha
Furniture stripping/ refinishing	methylene chloride	mineral spirits
Metal finishing (painting, plating)	trichloroethylene cold stripper trichloroethane	Stoddard Solvent MEK, MIBK xylol
Commercial painting		mineral spirits, thinners
Paint manufacture	methylene chloride cold stripper	xylol, MIBK, alcohols, toluene
Plastics manufacture	methylene chloride	acetone

SOLVENT MANAGEMENT OPTIONS

Chlorinated and non-chlorinated solvents should be handled differently in terms of their storage, labeling, and disposal: Solvent mixtures which contain ten percent or more of at least one of several toxic solvents listed in the hazardous waste rules are regulated as hazardous waste.

CHLORINATED

Storage

collect separately from non-chlorinated solvents
liquids stored in diked, impermeable surface

Labeling

label as hazardous waste

Disposal

licensed recycling/reuse
incineration (at licensed TSD facility)
no fuel blending!

NON-CHLORINATED

collect separately from chlorinated solvents
store ignitables out of direct sunlight
store ignitables separate from acids/bases or oxidizers

label as hazardous waste; flammable label if waste has a flashpoint less than 100°F, combustible labels if waste has flashpoint greater than 100°F.

licensed recycling/reuse
incineration (off-site)

DON'TS

Don't store incompatible wastes together.
Don't mix chlorinated and non-chlorinated solvents.
Don't send liquids/sludges or still bottoms to sanitary landfills.
Don't evaporate solvents.
Don't sewer solvents.
Don't send chlorinated solvents to fuel blender.
Don't disregard fire safety and health precautions on MSDS.

SOLVENT REDUCTION OPTIONS

Solvent reduction option may include any reuse, recycling, or other activity which serves as an alternative to landfilling of wastes. Segregation of chlorinated solvents from non-chlorinated solvents will enhance waste reduction opportunities. Waste reduction opportunities may include, but are not limited to the following:

Industry	Options
Auto Body	On site distillation and reuse if licensed to do so by DEP, product substitution
Auto Service	Solvent filtration/reuse/recycling if licensed to do so by DEP or by a licensed TSD facility
Dry Cleaning	Solvent cartridge recycling
Electronics	Recycling if licensed to do so by DEP or at a licensed TSD facility
Metal Finishing/Coating	Solvent recycling from filters, licensed recycling (on or off site), fuel blending
Commercial painting	Product substitution
Plastics manufacture	Product substitution, reuse
Printing,	Product substitution

Hazardous Waste Fact Sheet for Maine Generators

VEHICLE MAINTENANCE/EQUIPMENT REPAIR

IF YOU MAINTAIN OR REPAIR

buses, cars, farm or heavy equipment, motorcycles, trucks, vans

OR IF YOU

- remove dirt, grease, oil, paint or rust from these vehicles
- paint, rebuild or repair these vehicles
- replace lead-acid batteries

the products you use (on the vehicles, on your tools and equipment or on your floors) probably contain hazardous chemicals. Any wastes produced from your activities may be hazardous wastes.

HAZARDOUS WASTE FROM VEHICLE MAINTENANCE

The following wastes may contain chemicals which are hazardous to human health and the environment:

- Acids (concrete floor cleaner waste) and/or caustics (hot dip tank solutions paint removers)
- Batteries from motor vehicles
- Carburetor cleaners
- Degreasing solvents (combustible or flammable)
- Fuel waters
- Paints and paint thinners/reducers (also combustible or flammable)
- Rags still soaked with cleaning/degreasing or paint thinning solvents

You must evaluate your company's wastes to determine whether they are hazardous or nonhazardous. If you use any of the products mentioned above, you probably "generate" hazardous waste.

REGULATORY REQUIREMENTS

A business in Maine that generates any hazardous waste is subject to rules affecting how the waste is handled and disposed of. In Maine there is no exemption for generating only small quantities of waste.

VEHICLE MAINTENANCE, HAZARDOUS WASTES AND THEIR PROPER OFF-SITE SHIPMENT

The table below lists some typical vehicle maintenance operations. The management of the wastes generated from these operations (also listed below) may include reuse or licensed reclamation on-site, off-site treatment or disposal. NOTE: This table is limited to the most common wastes from the most common vehicle maintenance operations. Those not identified may also generate hazardous waste. You may have additional hazardous wastes to consider.

Whenever ANY hazardous waste is shipped off-site, it MUST be accompanied by a hazardous waste manifest. This table provides information you will need in order to correctly fill out the manifest: the shipping name and number required by US DOT regulations, and the US EPA hazardous waste code. The correct designation for your specific waste should always be verified with your transporter.

PROCESS DESCRIPTION			WASTE DESCRIPTION		
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
oil/grease removal and	acids	D002	Depends on type of acid	Corrosive Material	Varies
	potash	D002	Waste potassium hydroxide solution	Corrosive material	UN1814
	caustic soda	D002	Waste sodium hydroxide solution	Corrosive material	UN1824
	carburetor cleaners	F002/F004	Waste Solvent N. O. S.	ORM-A	UN1591/3
	chlorinated solvents	F001	Waste (main ingredient)	ORM-A	Varies
	ignitable (flammable)	D001	Waste flammable liquid N. O. S.	Flammable liquid	UN1268
	Mineral spirit Solvents	D001	Waste naphtha	Flammable liquid	UN2553
	Petroleum Naphtha	D001	Waste naphtha	Flammable liquid	UN1255
	Petroleum distillates	D001	Waste petroleum distillate	Flammable liquid	UN1268
	1,1,1-trichloroethane (chloroethene)	F001	Waste 1,1,1-Trichloroethane	ORM-A	UN2831
Paint Preparation	White spirits, Varsol	D001	Waste naphtha	Flammable liquid	UN2553
	alcohols	D001	Waste flammable liquid N. O. S.	Flammable liquid	UN1993
	enamel reducers	D001	Waste flammable liquid N. O. S.	Flammable liquid	UN1993
	"MEK"	F005	Waste methyl ethyl ketone	Flammable liquid	UN1193
	mineral spirits	D001	Waste naphtha	Flammable liquid	UN2553
	paint thinners	Varies	Waste flammable liquid N. O. S.	Flammable liquid	UN1993
	Petroleum Distillates	D001	Waste petroleum Distillates	Flammable liquid	UN1268

PROCESS DESCRIPTION			WASTE DESCRIPTION		
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
Painting	Acrylic and Alkyd paints	D001	Hazardous waste liquid, N.O.S. or	Flammable liquid (if liquid)	UN1993
	enamels and epoxy paints	D001	Hazardous waste solid, N.O.S.	ORM-E (if solid)	UN9189
	most paints with toxic metals	D001/D007	Hazardous waste solid, N.O.S.	Same as above	
Spray booth/ spray gun	Acetone	F003	Waste acetone	Flammable liquid	UN1090
Brush cleaning, paint removal, stripping	alcohols	D001	Waste flammable liquid, N.O.S.	Flammable liquid	UN1993
	enamel reducers	D001	Waste flammable liquid, N.O.S.	Flammable liquid	UN1993
	"MEK"	F005	Waste methyl ethyl ketone	Flammable liquid	UN1193
	Methylene chloride	D001	Waste dichloromethane	ORM-A	UN2553
	mineral spirits	D001	Waste naphtha	Flammable liquid	UN2553
	paint thinners	Varies	Waste flammable liquid, N.O.S.	Flammable liquid	UN1993
	petroleum distillates	D001	Waste petroleum distillate	Flammable liquid	UN1268
	VM&P naphtha	D001	Compound, paint removing liquid	Flammable liquid	NA1142
	Toluene (Toluol) paint thinner	F005	Waste toluene	Flammable liquid	NA1294
	White spirits	D001	Waste Naphtha	Flammable liquid	UN2553
	Xylene (Xylol) paint thinner	F003	Waste Xylene	Flammable liquid	UN1307
Rust removal	Acids	D002	Depends on type of acid	Corrosive material	Varies
	Naval jelly	D002	Waste phosphoric acid	Corrosive material	UN1805
Used Lead-Acid Batteries	Sulfuric acid	D002	Waste sulfuric acid	Corrosive material	UN1830
	Lead dross/scrap	D008	Hazardous waste acid, N.O.S.	ORM-C	NA9189

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WOOD PRESERVING

A typical wood preserving operation may use any of the following wood conditioning processes: steaming, boultonizing, kiln, or air drying (either under pressure or vacuum) with one or more of the three principal wood preserving agents:

- creosote
- pentachlorophenol (PCP)
- inorganic arsenical compounds like CCA (chromated copper arsenate) or ACA (ammoniacal copper arsenate)

The wastewater treatment sludge that is generated from wood preserving processes that use Creosote and/or pentachlorophenol is listed as a hazardous waste. Other sludges may be classified as a hazardous waste. The waste from using inorganic arsenicals is frequently a hazardous waste for chromium and/or arsenic content.

REGULATORY REQUIREMENTS

A business in Maine that generates any waste classified as hazardous is subject to rules affecting how the waste is stored and handled. In Maine there is no exemption for generating only small quantities of waste.

The table below lists the typical hazardous wastes found in wood preserving operations. Hazardous waste shipped off-site is required to be accompanied by a hazardous waste manifest. A manifest must be completed with the correct Department of Transportation shipping information. The table below provides this information, as well as the U.S. Environmental Protection Agency hazardous waste code.

NOTE: This listing of hazardous wastes may not be complete. This list is limited to the most common waste for the most common operations. You may have other operations which generate hazardous waste.

**EXAMPLES OF HAZARDOUS WASTE FROM
WOOD PRESERVING OPERATIONS**

The table below provides information for classifying your hazardous waste prior to off-site shipment. The correct designation for a specific waste should be verified with your transporter or the appropriate regulatory authority prior to completion of the hazardous waste manifest. **ITEMS LISTED ARE EXAMPLES.** Other DOT descriptions and identification codes may be applicable in some circumstances.

PROCESS DESCRIPTION		WASTE DESCRIPTION			
Typical Process/ Operation	Material Used	EPA Waste Code	DOT Shipping Name	Hazard Class	UN/NA Number
wood preserving	creosote	K001	hazardous waste liquid or solid N.O.S.	ORM-E	NA9189
wood preserving	pentachlorophenol	K001	waste pentachlorophenol, liquid or solid	ORM-E	NA2020
wood preserving	chromated copper arsenate	D004 or D007	waste arsenical compounds, solids waste arsenical compounds, liquids	Poison B Poison B	UN1557
wood preserving	ammoniacal copper arsenate	D004	waste arsenical compounds, solids waste arsenical compounds, liquids	Poison B Poison B	UN1556

For more information contact:

Department of Environmental Protection
State House Station #17
Augusta, Maine 04333
(207) 289-2651