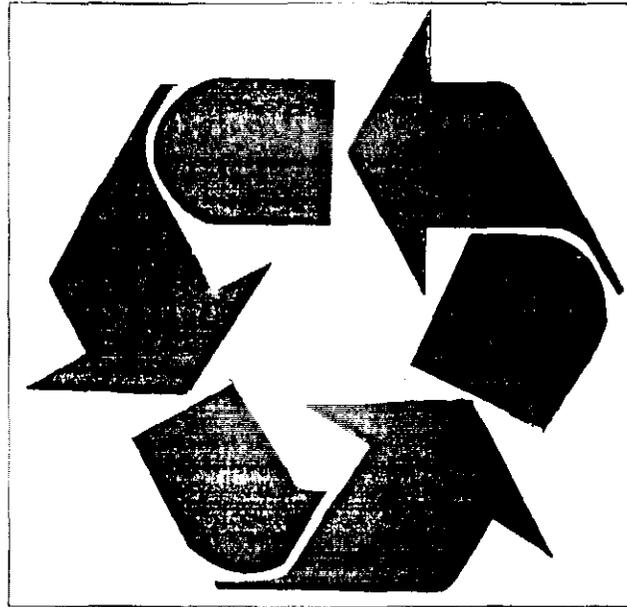


BLACK ROCK LAKE  
FLOOD CONTROL PROJECT  
NAUGATUCK RIVER BASIN, CONNECTICUT

---

## Solid Waste Management Plan

*RECYCLE CONSERVE RESOURCES*



October 1997



US Army Corps  
of Engineers  
New England District

The original hardcopy version of this report contains color photographs and/or drawings. For additional information on this report please email

U.S. Army Corps of Engineers  
New England District

Email: [Library@nae02.usace.army.mil](mailto:Library@nae02.usace.army.mil)

REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

Public reporting for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information, Observation and Reports, 1215 Jefferson Avenue Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (LEAVE BLANK)		2. REPORT DATE <b>October 1997</b>	3. REPORT TYPE AND DATES COVERED <b>Solid Waste Management Plan</b>	
4. TITLE AND SUBTITLE <b>Solid Waste Management Plan Black Rock Lake, Flood Control Project, Naugatuck River Basin, Connecticut</b>			5. FUNDING NUMBERS	
6. AUTHOR(S) <b>US Army Corps of Engineers New England District</b>			8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>US Army Corps of Engineers New England District 424 Trapelo Road Waltham, Mass. 02254</b>			10. SPONSORING/ MONITORING AGENCY REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) <b>US Army Corps of Engineers New England District 424 Trapelo Road Waltham, Mass. 02254</b>			11. SUPPLEMENTARY NOTES	
12a. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release, distribution unlimited</b>			12b. DISTRIBUTION CODE	
13. ABSTRACT (MAXIMUM 200 WORDS)  <p>There are a number of Federal, state, and local laws and regulations relating to solid waste management. This plan provides guidance to establish policies, and responsibilities, procedures, and instructions for proper handling, storage, disposal and recycling of solid waste generated at the flood control project. Solid wastes include petroleum, oil and lubricants, hazardous waste, paper, beverage and food containers, woody debris, and various other wastes.</p> <p>Information was developed from a literature search and review of Federal, state, and local requirements and existing and anticipated waste streams. This plan is not a complete treatise on environmental laws and regulations. It is a list of solid waste regulations, policies, and references that may apply to the flood control project and a codification of existing and enhanced procedures for solid waste management.</p>				
14. SUBJECT TERMS <b>Recycle, Hazardous Waste, Solid Waste Management</b>			15. NUMBER OF PAGES	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT <b>Unclassified</b>	18. SECURITY CLASSIFICATION OF THIS PAGE <b>Unclassified</b>	19. SECURITY CLASSIFICATION OF ABSTRACT <b>Unclassified</b>	20. LIMITATION OF ABSTRACT	

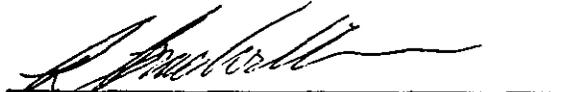
SOLID WASTE MANAGEMENT PLAN

BLACK ROCK LAKE,  
FLOOD CONTROL PROJECT

NAUGATUCK RIVER BASIN,  
CONNECTICUT

Prepared By:  
Engineering/Planning Division  
for  
Construction/Operations Division

Approved by:



R. Bruce Williams  
District Environmental  
Compliance Coordinator



Richard C. Carlson  
Chief, Construction/Operations

October 1997

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NEW ENGLAND DISTRICT  
WALTHAM, MASSACHUSETTS 02254

## TABLE OF CONTENTS

		<b>Page</b>
Chapter 1	General	
	1-1 Introduction	1
	1-2 Purpose	1
	1-3 Flood Control Project Description	1
	1-4 Overview of Solid Waste Generation	2
Chapter 2	Laws, Regulations, and Directives	
	2-1 Federal	5
	2-2 State of Connecticut	8
	2-3 Local	8
	2-4 Applicability	8
	2-5 Suggested Policy Guidelines	10
Chapter 3	Waste Definitions	
	3-1 Solid Waste	11
	3-2 Hazardous Waste	11
	3-3 Non-Hazardous Waste	13
	3-4 Classification of Hazardous Waste Generators	14
Chapter 4	Management of Waste Streams	
	4-1 Hierarchy of Solid Waste Management Options	19
	4-2 Solid Waste Generators at Black Rock Lake	19
Chapter 5	Management of Hazardous Waste	
	5-1 General Requirements	21
	5-2 Specific Wastes	23
Chapter 6	Management of Non-Hazardous Waste	
	6-1 General Requirements	27
	6-2 Recyclable Waste	27
	6-3 Compostable Waste	28
	6-4 Non-recyclable Wastes	28
	6-5 Difficult to Manage Wastes	28

## TABLE OF CONTENTS (continued)

	<b>Page</b>
Chapter 7	Responsibilities
7-1	District Environmental Coordinator 31
7-2	Project Manager 31
Chapter 8	Training
8-1	Hazardous Waste Training 33
8-2	Other Training 33
GLOSSARY 35	
REFERENCES 38	
Appendix A	Town Ordinances
Appendix B	EPA Identification Numbers for the Flood Control Projects
Appendix C	State Hazardous Waste Program, Small Quantify Generator
Appendix D	Hazardous Waste Manifest Designations and Signature Policies
Appendix E	Recycling Information
Appendix F	Management of Ozone Depleting Substances
Appendix G	Recent CECW-OA Guidance

## LIST OF FIGURES

	<u>Follows Page</u>
Figure 1	Flood Control Project - Reservoir Map 1

## GENERAL

### 1-1 Introduction

This is the Solid Waste Management Plan including, hazardous waste, petroleum, oil, and lubricants (POLs), and recycling for the Black Rock Lake Flood Control Project located in Thomaston and Watertown, Connecticut. (See Figure 1.)

### 1-2 Purpose

The plan provides guidance to establish policies, responsibilities, procedures, and instructions for the proper handling, storage, disposal and recycling of all solid waste generated at the project. Solid wastes include petroleum, oil and lubricants (POLs), hazardous waste, paper, beverage containers, woody debris, and various other wastes.

The plan was developed from a literature search and review of federal, state, and local requirements and existing and anticipated waste streams. The plan is not a complete treatise on environmental laws and regulations. It is a list of solid waste regulations, policies, and references that may apply to the flood control project and a codification of existing and enhanced procedures for solid waste management.

### 1-3 Flood Control Project Description

Black Rock Lake, constructed in 1970, is owned and operated by the Corps as one of seven flood control reservoirs in the Naugatuck River Basin. The project's purpose is regulation to reduce flood stages at downstream communities and aid in reducing flood levels along the Naugatuck River.

The dam embankment consists of a rolled earth fill and rock-faced dam 933 feet in length, with a maximum height of 155 feet above the streambed. Top width of the dam is 25 feet with a paved roadway. The top elevation is 540 feet NGVD, providing for 15 feet of spillway surcharge and 5 feet of freeboard.

The chute spillway is located in rock cut along the right bank. The spillway weir is a low concrete ogee section, 150 feet in length at elevation 520 feet NGVD, which is eight feet above the approach channel.

The outlet works, located on the right bank, consist of an intake channel, a concrete weir to maintain a permanent pool, a control tower on the upstream side of the dam, a 704-foot long, 4-foot wide by 5-foot high rectangular conduit, and an outlet channel. The lower part of the control tower contains the gate chamber with two 3- by 4-foot high slide gates at invert elevation 410 feet NGVD.

The lake contains storage for flood control and recreation. The recreation pool at elevation 437 feet NGVD contains 305 acre-feet, equal to 0.28 inch of runoff. The flood control storage contains 8,430 acre-feet, which equals 7.75 inches of runoff from 20.4 square miles of drainage area.

The project lands are comprised of 141 acres in flowage easements and 173 acres owned in fee. At present, the only recreation development has been a permanent pool. The area is being managed for fish and wildlife conservation with no facility developments.

The project includes a project office/utility building with garage for administration, maintenance, and storage. These structures were built circa 1967.

#### **1-4 Overview of Solid Waste Generation**

Facilities at the project that are waste generators or waste storage areas include the project office/utility building, boat house, control tower at the dam, log boom and project lands where there can be illegal dumping of trash. The log boom captures woody debris and other debris primarily during the spring.

There are no active on-site landfills. The burial of solid waste is not permitted. Solid waste generated in the project area is either carried out under the provision of service, maintenance and disposal contracts (the contractor is responsible for assuring that all materials are disposed of in a manner consistent with local, state and federal laws), brought to the local transfer station in Thomaston, or composted onsite.

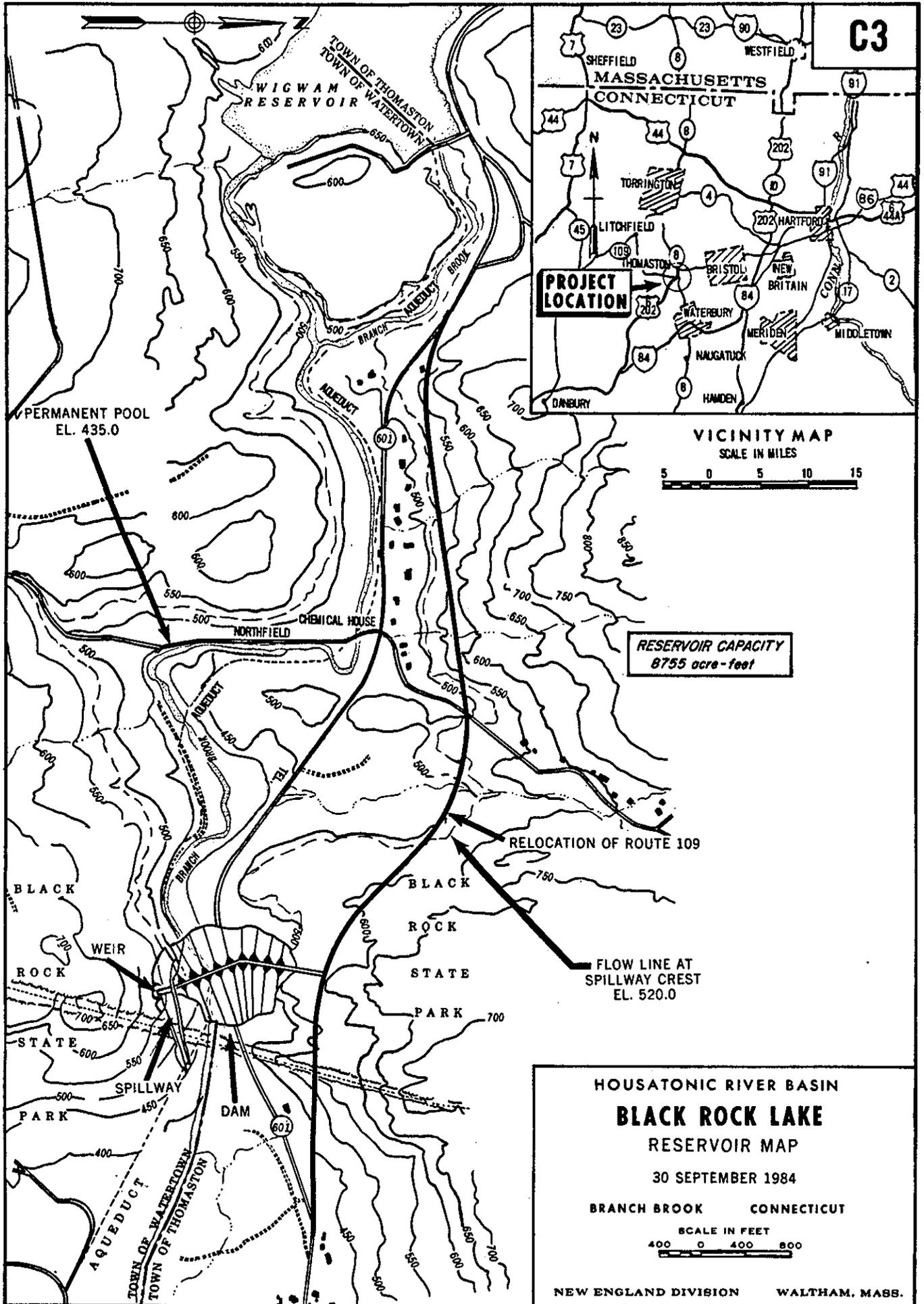


FIGURE 1

Activities such as automobile maintenance are usually conducted off-site by a licensed service station. Minimal hazardous wastes are generated at the project.

(This page intentionally left blank.)

## LAWS, REGULATIONS, and DIRECTIVES

### 2-1 Federal

The following is a list of pertinent Federal Statutes and Regulations, Executive Orders, Department of Defense Directives, Department of the Army Regulations, and Corps of Engineers Engineering Regulations. This list should be updated periodically as laws and regulations are modified and reviewed by legal counsel, as appropriate, to determine the completeness and applicability of the list.

#### Statutes

Resource Conservation and Recovery Act (RCRA) of 1976, PL94-580, as amended  
    Subtitle C - Hazardous Waste Management  
    Subtitle D - State or Regional Solid Waste Management Plans

Toxic Substance Control Act (TSCA) of 1976, Public Law 94-469, as amended.

Federal Facilities Compliance Act (FFCA) of 1992, P.L. 102-386.

#### Code of Federal Regulations

U.S. Department of Transportation (DOT) Hazardous Materials Regulations including Registration of Persons Who offer for Transport Hazardous Materials (Title 49 CFR, Part 107) Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements (Title 49 CFR, Part 172, 173) Segregation and Separation Chart of Hazardous Materials (Title 49 CFR, Part 177), and Packaging Standards (Title 49 CFR, Part 178).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Hazardous Waste Management Regulations (Title 40 CFR, 260-266).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Solid Waste Management Regulations (Title 40 CFR, 240-258)).

Department of Defense Directives

DoD 4160.21-M, Defense Utilization and Disposal Manual, September 1982, as amended.

DoD Directive Number 4165.60, Solid Waste Management, dated 4 Oct 74.

Department of the Army Regulations

AR 200-1, Environmental Protection and Enhancement, Chapter 5, Hazardous and Solid Waste Management; Chapter 10, Pollution Prevention, 21 February 1997

AR 420-47, Solid and Hazardous Waste Management, 1 December 1984.

US Army Corps of Engineers Regulations

EP-200-1-2, Process and Procedures for RCRA Manifesting, 31 March 1994.

ER 200-2-3, Environmental Compliance Policies, 30 October 1996.

EP 200-2-3, Environmental Compliance Guidance and Procedures, 30 October 1996

Executive Orders

Executive Order 12088, Federal Compliance with Pollution Standards

Executive Order 12780, Federal Agency Recycling and the Council of Federal Recycling and Procurement Policy, Nov 4, 1991.

Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention, Oct 22, 1993.

Executive Order 12843, Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances, April 21, 1993.

Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993.

Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, March 8, 1994.

### Memoranda

Memorandum, CECC-ZA, dated 30 October 1992, Subject: Federal facilities Compliance Act (FFCA).

Memorandum, CECW-OA, dated 24 Nov 1992, Subject: USACE Facilities Environmental Compliance Letter No. 1, Solid Waste Recycling. (Superseded by memo dated April 1997, see below.)

Memorandum, CECW-OA, dated 25 August 1993, Subject: Hazardous Waste Manifest Policy and Procedures

Memorandum, CEMP-CP, dated 4 May 1993, Subject Hazardous Waste Manifest Signature Policy and Procedures (Construction Bulletin 93-6)

Memorandum, CECW-OA, dated 22 February 1995, USACE Facilities Environmental Compliance Guidance Letter No. 2 Federal facilities Compliance Act (FFCA) of 1992, Fines and Penalties at Civil Works Funded Projects, Facilities and Activities.

Memorandum. CECW-OA, dated January 1997, Commander's Policy Memorandum #3, Waste Reduction, Recycling and Priority Purchase of Environmentally Preferable and Recycled Products.

Memorandum, CECW-OA, dated April 1997, USACOE Facilities Environmental Compliance Letter No. 1, Waste Reduction and Recycling.

### Reports

USACERL Special Report - EC 95/05, dated Nov 94, titled "Environmental Assessment and Management Team Guide (ERGO)".

USACERL Special Report - EC 95/07, dated Nov 94, titled "Environmental Review Guide for Operations (ERGO), Supplement for the Environmental Assessment and Management Team Guide".

## **2-2 State of Connecticut**

The Federal government sets minimum national standards for solid waste disposal, but state and local governments are responsible for implementing and enforcing programs. The following is a list of pertinent State of Connecticut Statutes, Regulations, and Reports.

### Connecticut Statutes

General Statutes, Title 22a -- Environmental Protection, Chapter 446d -- Solid Waste Management

General Statute, Title 22a -- Environmental Protection, Chapter 445 -- Hazardous Waste

### Connecticut Regulations

Title 22a -- Solid Waste Management Regulation 22a-209 --, February 21, 1985, as amended.

Title 22a--Hazardous Waste Management Regulation 22a-449(c)-100 through 110 and 22(a)-449(c)-11, Revised July 17, 1990.

Title 22a -- Mandatory Recycling Regulation 22a-241b, February 28, 1989.

## **2-3 Local**

The towns and municipalities in Connecticut have adopted ordinances to ensure compliance by residents and solid waste collectors with the requirements of Connecticut General Statutes, Chapter 446d, providing for the separation, collection, and processing and marketing of recyclable solid waste. The town ordinances are included as Appendix A.

## **2-4 Applicability**

Federal Facilities Compliance Act of 1992. (P.L.- 102-386) This act provides for a waiver of sovereign immunity with respect to federal, state, and local procedural and substantive requirements relating to RCRA solid and hazardous waste laws and regulations. Additionally in

its passage of the Act, Congress clearly intended to subject Federal facilities to penalties and fines arising from violation of these laws.

Army Regulation 200-1, 21 February 1997. This regulation applies to Civil Works activities that are under the jurisdiction of the U.S. Army Corps of Engineers. Chapter 5, "Hazardous and Solid Waste Management" defines Army policy for managing hazardous and solid wastes. Some of the major program requirements are listed below.

- o Civil Works activities are to comply with legally applicable and appropriate Federal, state and local regulations for managing, generating, treating, storing, disposing, and transporting hazardous and solid waste. [Section 5-2]
- o Each installation generating hazardous waste will maintain an inventory of hazardous waste that is generated treated, stored, disposed of, or transported off-site.[Section 5-3b]
- o Integrated solid waste management procedures, techniques and practices will be used to manage solid waste and will be documented in the installation Integrated Solid Waste Management Plan. [Section 5-10]
- o Where feasible, installations will obtain solid waste service from municipal utility systems, regional and cooperative systems, private utility companies and the private sector. [Section 5-10]
- o Installations are encouraged to cooperate to the extent practicable, in recycling programs conducted by the local civilian community. [Section 5-10]

Federal Recycling Requirements. (40 CFR 246.200-1 and 246.202-1, DoD 4165.60, Executive Order 12873, CECW-OA-memorandum 15 January 1997, CECW-OA-memorandum 21 April 1997.) According to direction provided in these documents, Corps facilities should reduce the volume of waste materials at the source and participate in any state or local recycling program, whenever practicable. Agencies are also required to set goals for increasing the purchase of recycled and environmentally preferable products. Furthermore, the Commander's Policy Memorandum #3 dated January 1997 referenced above, requires that Corps Districts initiate and/or maintain cost-effective waste reduction and recycling programs. (See Appendix G.)

Connecticut Regulations. RCRA, like most federal environmental legislation, encourages states to develop and manage its own solid waste program. The state program must be at least as stringent as the EPA program. Connecticut has been authorized by EPA to run their own solid waste program. Connecticut regulations are listed above. In Connecticut, all Corps facilities are required to recycle as mandated in the state recycling law and in local ordinances. Materials to be recycled include cardboard, glass food and beverage containers, leaves, metal food and beverage containers, newspaper, office paper, scrap metal, vehicle batteries, nickel-cadmium batteries, and waste oil.

## **2-5 Suggested Policy Guidelines**

Suggested policy guidelines for management of solid wastes including Petroleum, Oil, and Lubricants (POLs), waste liquid, and hazardous wastes are as follows:

- a. The quantity of solid waste should be reduced at the source whenever possible. (Memorandum CECW-OA, 21 April 1997, 6a)
- b. The projects shall initiate and/or maintain cost-effective waste reduction and recycling programs if they have not already done so. (Memorandum CECW-OA, 15 January 1997)
- c. Non-hazardous and non-toxic materials should be used in facility and activity operations and procedures, when practicable. (Memorandum CECW-OA, 21 April 1997, 6d and 6e.)
- d. To the extent possible, environmentally friendly products and products made from recycled materials should be purchased for use at the project. (Memorandum CECW-OA, 21 April 1997, 6d and 6e, Executive Order 12873.)
- e. Hazardous wastes should be safely controlled, accounted for with an audit trail and chain of custody, and handled in accordance with legal requirements. (Federal Facilities Compliance Act of 1992.)
- f. The project should not establish or maintain a landfill at the project. (Connecticut State Law, Section 22a-209-2. Prohibits open dumps.)

## WASTE DEFINITIONS <sup>1</sup>

### 3-1 Solid Waste

Solid waste includes garbage, refuse, and sludge as well as any solid, semi-solid, liquid, or contained gaseous material that is discarded. A discarded material is one that has been determined to be an inherently waste-like material by the Environmental Protection Agency (EPA) Regional Administrator. Under certain circumstances, recycled materials are considered discarded materials (and therefore solid wastes) if they are used in a manner constituting disposal, burned for energy recovery, reclaimed, or accumulated speculatively. Certain wastes have been excluded from the definition of solid waste: domestic sewage; point-source discharges regulated under the Clean Water Act (CWA); irrigation return flows; source, special nuclear, or by-product material regulated under the Atomic Energy Act; *in situ* mining waste; pulping liquors that are reclaimed; spent sulfuric acid used to produce virgin sulfuric acid; and secondary materials reclaimed and returned to the original generation process for reuse. The regulatory definition of solid waste may be found in 40 CFR 261.2.

### 3-2 Hazardous Waste

The Resource Conservation and Recovery Act (RCRA) was passed by Congress in 1976 to address the problem of how to safely manage and dispose of municipal and industrial waste generated nationwide. RCRA creates a framework for the proper management of hazardous and non-hazardous waste. Federal regulations set a baseline standard with which everyone involved with hazardous wastes must comply. Frequently, states choose to adopt more stringent regulations than federal regulations.

RCRA addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. RCRA defines hazardous waste as a solid waste (including liquids and gases), or a combination of

---

<sup>1</sup> Some of the wording in this section was adapted from a publication prepared by ENSR Consulting and Engineering, Acton, Massachusetts, entitled "A guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act", dated October 1990.

solid wastes which may, because of its quantity, concentration, or physical, chemical or infectious characteristics:

- o cause or significantly contribute to an increase in mortality or in serious irreversible, or incapacitating illness; or
- o pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Certain types of solid waste are excluded from regulation as hazardous waste. These include:

- o household waste;
- o solid wastes generated by growing crops or raising animals, and which are returned to the soil as fertilizers;
- o mining overburden returned to the mine site;
- o ash waste produced from the combustion of fossil fuels;
- o wastes from oil, gas, and geothermal exploration, development, or production;
- o certain wastes failing the toxicity characteristic test including discarded wood or wood products, and petroleum-contaminated media or debris;
- o specific wastes from the extraction, beneficiation, and processing of ores and minerals; and
- o cement kiln dust waste.

See 40 CFR 261.4 for the complete listing of exclusions.

Listed and Characteristic Hazardous Wastes. Under the current federal regulatory framework, a solid waste is considered a hazardous waste (and therefore subject to requirements of RCRA) if it is either a "listed" waste under 40 CFR Part 261 Subpart D , or a "characteristic" waste under 40 CFR part 261 Subpart C.

A waste is a listed waste if it comes from a process that was found to generate a "hazardous" waste (non-specific source wastes and specific source wastes), or if the waste is a commercial chemical product that has been discarded. Non-specific source wastes are generic wastes commonly produced by manufacturing and industrial processes and specific source wastes consist of wastes from identified industries such as wood preserving, petroleum refining, and organic chemical manufacturing. Commercial chemical products include such items as acetone, creosote, dichlorodiphenyltrichloroethane (DDT), methanol, and toluene. (Refer to 40 CFR Subpart D, Section 261.30-261.33 for listed wastes.

A characteristic waste exhibits any one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. The regulatory definition of hazardous waste appears in 40 CFR 261.20-261.24.

Special Wastes. Non-hazardous solid wastes require handling other than normally used (see 40 CFR 240.101). Special wastes are waste streams that do not come under RCRA, but may come under state hazardous waste requirements or under the Toxic Substance Control Act. States may choose to include items in their state hazardous waste regulations which are not considered hazardous wastes under RCRA.

State Identification and Listing of Hazardous Wastes. In addition to the RCRA hazardous wastes described in the Federal regulations, the Connecticut Department of Environmental Protection (DEP) added or modified the definition of certain hazardous wastes. (See CT Hazardous Waste Regulations 22a-449(c), Section 101.) Connecticut has also identified a number of non-hazardous regulated wastes. These include waste oil and waste polychlorinated biphenyls management.

### **3-3 Non-Hazardous Waste**

For purposes of this plan non-hazardous wastes are wastes that are not considered

hazardous waste under Federal or state regulation. This would include such items as paper, cardboard, beverage containers, scrap metal (free of any residues), and woody debris.

### 3-4 Classification of Hazardous Waste Generators

**Federal Definitions.** The first step in the waste cycle is the generator. Under RCRA regulations, generators must determine if their waste is hazardous and must oversee the management and ultimate fate of the waste. RCRA identifies three different categories of hazardous waste generators. The generator definition is important because applicable waste management regulations vary for each type of generator. These categories are conditionally exempt small quantity generator (CESQG), small quantity generator (SQG), and large quantity generator (LQG). For general information, a summary of key RCRA criteria for CESQGs [40 CFR 261.5] and SQGs [40 CFR 262] are:

	<u>Hazardous Waste Generation</u> amount/month	<u>Accumulation of Hazardous Waste</u> maximum amount
CESQG	max. 100 kg (220 lbs)(~26 gal.)	1,000 kg (2,200 lbs)(260 gal.)
SQG	max. 1,000 kg (2,200lbs)(~ 260gal.)	6,000 kg (13,200 lbs)(~ 1,560 gal.)
	<u>Acute Hazardous Waste Generation</u> amount/month	<u>Acute Hazardous Waste Generation</u> maximum amount
CESQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
SQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
	<u>Material from Cleanup of a Spill of</u> <u>Acute Hazardous Wastes</u> amount/month	<u>Material from Cleanup of a Spill of</u> <u>Acute Hazardous Wastes</u> maximum amount
CESQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)
SQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)

LQG criteria can be found in 40 CFR 262.

State Definitions. Connecticut uses the same three generator category titles as the RCRA regulations. RCRA and Connecticut Regulations define LQGs the same, however their are minor differences in how CESQGs and SQGs are defined. The state requirements are more stringent than the Federal requirements.

CESQGs - According to RCRA's definition, a CESQG may accumulate no more than 100 kilograms of material from the cleanup of a spill of acute hazardous waste. Connecticut's definition adds that the limit must include no more than a total of one kilogram of acute hazardous waste contained in that material; and if non-hazardous waste is mixed and the mixture exceeds the quantity limitations established for CESQGs, the mixture will be subject to the full regulations of a SQG or LQG as applicable. [CT 22a-449(c)-101(a)(2)]

SQGs - As with the CESQGS, the limit on the accumulation of no more than 100 kilograms of material from the cleanup of a spill of acute hazardous waste must include no more than a total of one kilogram of acute hazardous waste contained in that material; and SQGs may accumulate no more than 1,000 kilograms of hazardous waste on site at any one time. [CT22a-449(c)-102(c)]

EPA Identification Number. Each project has been assigned an EPA federal facility identification number for reporting purposes. (See Appendix B.) These numbers were assigned to the projects in 1981. At that time the projects were identified as SQGs (federal generator definition). These numbers were issued by EPA to the Corps prior to the Federal Facilities Compliance Act, which was promulgated in 1992. Since the Federal Facilities Compliance Act, the federal projects in Connecticut are also required to meet Connecticut requirements relating to hazardous waste laws and regulations.

Generator Category. Each project should be tracking and documenting, on an annual basis, the amount of hazardous waste generated per month. This data can be used to document the project generator type. The determination should be redocumented each year. If the generator category changes or if other information regarding the facility requires updating, EPA and the state should be notified. Any actions to modify the generator status or facility information should be approved through the District office. When the EPA ID numbers were issued in 1981 all the projects were registered as SQGs.

Rules on Storing and Disposal of Hazardous Wastes. The project manager should ensure that the project is in compliance with both state and federal requirements for hazardous waste generators. In general, these requirements include properly storing and labeling hazardous waste, not exceeding accumulation time criteria, and using the manifest system to ensure that waste is sent by a licensed hauler to an EPA and state approved/permitted disposal facility, meeting record keeping and reporting regulations, and providing training to staff.

A comparison of RCRA generator requirements are included in the Environmental Assessment and Management (Team) Guide EC-95/05, page 4-3 and are detailed in the Code of Federal Regulations Title 40, Parts 260-266. Connecticut requirements are detailed in CT Hazardous Waste Regulations 22a-449(c)-100 through 110 and 22a-449(c)-11. For informational purposes the RCRA and state generator requirements are summarized on the following pages. For specific information of the generator requirements the project manager should refer to state and federal regulations.

**Comparison of RCRA - CESQG and SQG Generator Requirements (Source: EC/95/05)<sup>2</sup>**

<b>Requirement</b>	<b>RCRA CESQG</b>	<b>RCRA SQG</b>
Identify Hazardous Waste	yes	yes
Facility Receiving Waste	State approved or RCRA permitted	RCRA permitted
EPA ID Number	Not Required	Required
RCRA personnel Training	Not Required	Required
DOT Training	Required	Required
Exception Report	Not Required	Required > 60 days
Biennial Report	Not Required	Not Required
Accumulation Time Limits	None	180 days
Use Manifests	No <sup>3</sup>	Yes
Storage Requirements	None	Comply with regulations

---

<sup>2</sup> For LQG requirements see EC/95/05 or CFR Title 40, Parts 260-266.

<sup>3</sup> It is NAE policy that all hazardous waste be manifested regardless of the generator status.

**Comparison of Connecticut Regulations - CESQG and SQG Generator Requirements  
 (Source: Summary prepared from Guidance For Hazardous Waste Handlers, CT DEP.  
 For full listing of generator requirements see Connecticut Hazardous Waste Regulations.)**

Requirement	CT CESQG	CT SQG
Identify Hazardous Waste	yes	yes
Facility Receiving Waste	RCRA permitted	RCRA permitted
EPA ID Number	Suggested	Required
RCRA personnel Training	Suggested	Required
DOT Training	Required	Required
Exception Report	Not Required	Required > 60 days
Biennial Report	Not Required	Yes
Accumulation Time Limits	None	180 days
Use Manifests	Suggested <sup>4</sup>	Yes
Storage Requirements	Best Management Practices	Comply with regulations

---

<sup>4</sup> It is NAE policy that all hazardous waste be manifested regardless of the generator status.

## MANAGEMENT OF WASTE STREAMS

### 4-1 Hierarchy of Solid Waste Management Options

The following is the hierarchy of solid waste management options for disposal of solid wastes as provided in the April 21 Memorandum from CECW-OA, SUBJECT: U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling.

- a. Source Reduction.
- b. Recycling.
- c. Disposal after treatment.

Although this Memorandum states that "Products of clearing, snagging, and debris removal from waterways and woody debris removal from land areas are not considered solid waste; therefore, USACE lands can be used for storage or disposal of such material", Connecticut Solid Waste Rules, Section 22a-209-2, prohibit open dumps. Thus NAE project lands in Connecticut should not be used for storage or disposal of such material.

### 4-2 Solid Waste Generators at Black Rock Lake

There are several different potential waste generation locations. The following is a list of these sites and the potential wastes generated at each site.

Project Office. Generates high grade office paper, other recyclable paper (e.g. newspaper), containers (plastic, glass, metal), fluorescent lights and light ballasts (check for PCB in ballasts, bulbs contain mercury), household batteries, cardboard and miscellaneous refuse.

Garage attached to Project Office. The specialized storage room stores paint, oil and hazardous materials. (Approved flammable storage cabinets installed in 1994.)

Boat House. Stores beach buoys, log boom chains, boundary monuments, supply of wood and

other building materials.

Control Tower/Dam. Antifreeze, fuel oil and lubricants (hydraulic oil) used for the operation and maintenance of the emergency generator, the heating unit, and the flood control gates. Equipment servicing is conducted by a contractor and residues are carried off-site by the contractor.

Log Boom. Collects woody debris, and other debris.

Project Lands. Generates trash illegally dumped at project - old tires, yard waste, furniture, medical waste, etc. (access and reservoir roads are gated to prevent dumping of trash on project lands.)

Maintenance/Rehabilitation/Construction at Project. Generates asphalt and building construction debris.

## MANAGEMENT OF HAZARDOUS WASTE

### 5-1 General Requirements

The following is a general outline of hazardous waste management practices. For specific information please refer to the Connecticut Hazardous Waste Management Regulations or to the Connecticut Small Quantity Generator Guidance booklet included in Appendix C.

A separate collection, packaging and storage system should be established, so that all wastes are properly segregated, identified and labeled to facilitate disposal through a licensed contractor.

The use of materials which generate hazardous waste should be minimized. Hazardous materials should be purchased in minimal quantities for completion of the task at hand.

The hazardous waste should be stored in a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored in the container. The container must be Department of Transportation approved for highway transportation.

The hazardous waste storage area must meet the requirements of federal and state hazardous waste regulations. In general, the area must be identified by appropriate signs. The storage area floor must be impermeable, safety and emergency equipment must be available, and there must be adequate aisle space.

Throughout the period of storage or treatment, each container should be clearly marked and labeled in a manner which identifies, in words, the hazardous waste(s) being stored or treated in the container and the hazard(s) associated with the hazardous waste (e.g., ignitable, toxic, dangerous when wet). Each container should also be marked clearly with the words "Hazardous Waste". The period of storage should not exceed that allowed by the CT DEP.

The generating activity is responsible for preparation of containers and documentation for disposal and should comply with Department of Transportation (DOT) Regulations for Transportation of Hazardous materials. Containers must be accompanied by proper

documentation and any other information required by the contractor, such as Material Safety Data Sheets (MSDSs), laboratory analysis results, or waste profile data.

Hazardous waste should be disposed of through a licensed hauler and sent to a permitted facility. A hazardous waste manifest should accompany any materials and appropriate record keeping should be utilized. All records regarding hazardous wastes should be maintained for a minimum of 3 years.

Only those trained and formally authorized and designated by the District Commander are allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and must state that the employee is within their scope of employment when executing such documents. Record of the authorization should be kept on file. DOT manifest training must be current. Expiration of training will void formal designation authority. (See Appendix D.)

Inspections should be conducted at hazardous waste storage areas to monitor any spills and leaks.

Specific petroleum, oil, and lubricant handling requirements are included in the Spill Prevention, Control and Countermeasures Plan (SPCCP), and Spill Contingency Plan (SCP) for the project.

Medical wastes are covered under the State of Connecticut Solid Waste Management regulations, Section 22a-209-15, Biomedical Waste. These regulations apply to generators of biomedical waste. Any medical wastes at the project would have to be the result of illegal dumping. It is suggested that the following steps be taken if medical wastes are found on the project lands. Contact the local police department, the local board of health, and the CT DEP to determine the appropriate action to be taken. The Safety Officer at the District Office should also be notified regarding any medical wastes found on project lands. The area where the waste is located should be secured and posted as to the hazard. If determined to be appropriate by the officials, a state approved contractor should be retained to remove the waste from the site. The contractor should be someone with experience in dealing with medical wastes such as an ambulance service or a hospital. The medical waste may also be a RCRA listed or characteristic hazardous waste.

## 5-2 Specific Wastes.

Waste Oil. Waste oil is a “non-hazardous regulated waste” in Connecticut. However, if the waste oil has hazardous waste characteristics or has been mixed with a listed hazardous waste, then it is classified as a hazardous waste. Connecticut “non-hazardous regulated wastes” must be transported by a hazardous waste transporter licensed in Connecticut and it is suggested it be accompanied by a hazardous waste manifest.

Project automobiles are serviced off-site including oil changes. Any other services generating used oil conducted on-site are done by contractor and the contractor is responsible for waste oil disposal consistent with local, state, and federal regulations. (Information on proper handling of waste oil is also included in the Spill Prevention, Control, and Countermeasure Plan & Spill Contingency Plan.)

Used Oil Filters. Under the hazardous waste regulations, if a generator intends to dispose of used oil filters, the generator is required to determine whether the filter is hazardous waste and to dispose of it properly in accordance with regulations. There is an exception from hazardous waste requirements if the oil is removed from the filter and the filter is not lead plated.

Project automobiles are serviced off-site.

Cleaning Solvent. Degreasing solvents when disposed of are hazardous wastes. All degreasing of equipment at the project is done by a contractor.

Lead-Acid Batteries. Spent lead-acid batteries are considered a recyclable material under RCRA [40 CFR 261.6 and 266] and are not subject to hazardous waste regulations if they are recycled. In Connecticut, spent lead acid batteries are required to be recycled. Connecticut hazardous waste regulations have additional requirements for spent lead acid batteries awaiting recycling. [CT 22a-449(c)-106(c)] These are:

- (1) Do not open, handle or store spent batteries in a manner which may rupture the battery case, cause it to leak or produce short circuits.
- (2) Do not store spent batteries near incompatible materials unless they are protected from the other materials by means of a dike, berm, wall.

(3) Store spent batteries on an impervious surface and inspect weekly for leaks.

In Connecticut retailers who sell lead-acid batteries must accept a used battery for recycling in exchange for the purchase of a new battery.

Other Batteries. Eight metals are commonly used in batteries: mercury, cadmium, lead, zinc, manganese, nickel, silver, and lithium. Batteries should not be disposed of as miscellaneous refuse as they may be a hazardous waste. Some of the newly manufactured batteries may be below toxicity levels for hazardous waste.

Federal regulations provide for batteries to be recycled in compliance with the EPA standards for Universal Waste Management [40 CFR 273]. However, Connecticut has not yet adopted the Universal Waste Management option.

Antifreeze. According to Connecticut regulations, antifreeze is a recyclable non-RCRA hazardous waste if not contaminated with other hazardous constituents such as lead or benzene. A determination should be made as to whether or not any waste antifreeze generated at the project is considered a hazardous waste. If it is, the storage and disposal must comply with all state and federal hazardous waste regulations. In general, all vehicle or equipment maintenance is done off-site by a service garage or on-site by a contractor.

Surplus Paint and Allied Products. These may include oil-based paint, paint thinners, turpentine, varnishes, shellacs or polyurethane. Purchase of these products should be on an as needed basis. Any residues should be disposed of in accordance with state and federal hazardous waste regulations.

Pesticides/Herbicides. Careful selection, inventory and control of materials will help to reduce or eliminate their disposal. Any residues should be disposed of in accordance with state and federal hazardous waste regulations.

Treated Wood. Some wood is chemically treated to enhance its resistance to rot and insect damage. Treatment extends use from 3-5 years to 20-50 years or longer. The four most common mediums to treat wood are creosote, inorganic arsenical, pentachlorophenol (PC), and Copper Napthenate. Treated wood is not a "listed" hazardous waste under Federal

Regulations. However, it is subject to the Toxicity Characteristics Leaching Procedure (TCLP) to determine if the wood is a "characteristic" hazardous waste (40 CFR 261.24).

If the treated wood is determined to be a hazardous waste, it should be stored and disposed of in accordance with state and federal regulations.

Fluorescent Lights and Ballasts. These items are known to contain hazardous materials. They should not be disposed of as miscellaneous refuse. Light ballast may contain polychlorinated biphenyls (PCBs) and fluorescent lamps contain varying levels of mercury.

Ballasts containing PCBs are subject to the federal U.S. Toxic Substances Control Act and the federal regulations in Title 40 of the CFR part 761. Determine if the ballasts contain PCBs and if so comply with these regulations.

The EPA has not yet finalized disposal regulations associated with fluorescent lamps, although lamp disposal regulations have been proposed. Although not all light tubes will cause exceedences of the 0.2 mg/l mercury threshold value, the difficulty associated with obtaining a representative sample, variability of sampling data and cost of testing make it easier to discard used lights as hazardous waste rather than perform the analysis. (HTRW Fact Sheet No. 97-06 dated 14 April 1997.)

Similarly, Connecticut considers spent fluorescent lamps to be hazardous waste and subject to Hazardous Waste Regulations. Connecticut requires that generators ensure their lamps are transported to a facility permitted to accept such waste.<sup>5</sup>

Empty Containers. The federal regulations regarding residues of Hazardous Wastes is based on the definition of "empty". If the container is "empty", then the container is not subject to the hazardous waste regulations. However, a container is only considered empty if it meets the criteria in 40 CFR 661.7. The Connecticut definition of empty is the same as the Federal definition. The Federal criteria is summarized below.

---

<sup>5</sup> Two lamp recycling facilities are Northeast Lamp Recycling, East Windsor, CT and Global Recycling Technologies, Stoughton, MA.

(1-I) All waste has been removed, that can be, using the practices commonly employed to remove materials from that type of container,

(1-ii) and no more than 2.5 centimeters of residue remain at the bottom of the container,

(1-iii) or no more than 3 percent by weight of the total capacity of the container remains in the container if the container is less than 110 gallons in size and no more than 0.3 percent by weight of the total capacity if the container is greater than 110 gallons in size.

(2) A compressed gas container that held a hazardous waste that is empty when the pressure in the container approaches atmospheric.

(3) If the container has held an acute hazardous waste then the container must be cleaned by triple rinsing, using a solvent capable of removing the product; or the container must be cleaned by another method that has been shown in the scientific literature to achieve equivalent removal.

## MANAGEMENT OF NON-HAZARDOUS WASTE

### 6-1 General Requirements

There is a mandatory recycling regulation in the State of Connecticut (Titles 23a Regulation 22a-241b). All persons, businesses or institutions who generate solid waste are required to separate recyclable from non-recyclable material. A municipally registered hauler should be used to collect materials for delivery to a designated and approved recycling center. A hauler must inform municipalities when recyclable materials are found in the trash. A municipality may impose a fine up to \$500 for each violation.

Items to be recycled include glass beverage and food containers, metal food and beverage containers, newspaper, corrugated cardboard, white office paper, leaves, scrap metal, waste motor oil, lead-acid batteries, and nickel-cadmium batteries. The last items listed are discussed in the hazardous waste section of this plan.

Miscellaneous Waste Collection. The Black Rock Project has one dumpster that is located on the utility building grounds. The dumpster is emptied weekly by a licensed waste hauler.

Recreational Waste Collection. There are no developed recreational facilities at the project. Visitors to the project are expected to carry out their waste.

### 6-2 Recyclable Waste

Beverage and Food Containers (glass and plastic bottles, aluminum cans). These items should be collected separately from miscellaneous refuse. Deposit and non-deposit containers should be recycled. See Appendix E for recycling information.

High Grade Office Paper/Newspapers/Cardboard/Mixed Paper. High grade paper is recyclable and should be collected in separate containers for recycling. Cardboard should also be recycled. See Appendix E for information and locations for recycling.

Scrap Metal. Scrap metal should be disposed of at a recycling center. See fact sheet in

Appendix E for information.

Toner/Ink Jet Cartridges and Printer Ribbons. These items can also be recycled. Two companies in Connecticut are Inkwell, in Newington, CT and Flo-tech at 800-213-1112 ext.110. Flo-tech is a mail order company and deals primarily with purchase and recycling of toner cartridges for Hewlett Packard printers. Also consult the yellow pages for other possible recyclers.

### **6-3 Compostable Waste**

Leaves/woody debris (yard waste)/woody log boom debris. Connecticut prohibits the landfill of yard waste or leaves. This waste should be composted on or off-site. Some woody debris may be relegated to the burn pile for burning when conditions permit. (This is to be coordinated with the local fire department.)

### **6-4 Non-recyclable Wastes**

Miscellaneous refuse and non-recyclable paper. This waste should be picked up by a permitted contractor and disposed of properly by the contractor.

### **6-5 Difficult to Manage Wastes.**

Construction and Demolition. Construction and demolition (C&D) waste is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. These wastes have a number of beneficial uses, e.g. crushing asphalt and concrete/brick separately or in conjunction with virgin materials to produce recycled asphalt paving; process gravel, road base, and solid fill. Chipping and grinding wood treated with preservatives produces boiler fuel, a bulking agent for sludge composting; wood fiber, and erosion control for landfills. Untreated wood can be chipped for landscape and trail mulch.

At the project, the disposal of this material should be the responsibility of the construction contractor for any renovation project. The material should be required to be disposed of at a state approved C&D disposal facility. See Fact Sheet in Appendix E.

Tires. In Connecticut, used tires are generally burned for energy recovery. The recovery facility in Connecticut is called Exter Energy Limited Partnership located in Sterling.

Log Boom Debris. Items that float in the river, to the project area, are trapped by the log boom above the dam, so that the outlet at the dam will not be blocked. Items include tires, woody debris, sometimes 55 gallon drums with waste of unknown origin, and various other types of floating refuse. These items should be properly handled and disposed of or recycled, as appropriate.

White Metal Goods. White metal goods are household appliances which include refrigerators, water heaters, electric ranges, etc. The preparation of discarded white metal goods for bulking may be done by a municipality, an appliance dealer or a processor.

Be aware that refrigerators and air conditioners are likely to contain Chlorofluorocarbons (CFCs). CFCs are regulated under air pollution regulations. Also, white metal goods contain small capacitors which may contain PCBs. PCBs are regulated under TSCA regulations.

Ozone Depleting Substances (ODSs). It is the policy of the Corps to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and give preference to the procurement of alternative chemicals and products that reduce the overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere. In addition, ODS "Elimination Plans" are to be developed for each project. ER-200-2-3 and EP 200-2-3 outlining this policy and program requirements are included in Appendix F.

Chlorofluorocarbons may be contained in air conditioners, water coolers, dehumidifiers, refrigerators and automobile air conditioners. CFCs are regulated under air pollution regulations. Individuals servicing and disposing of air conditioning and refrigeration equipment are prohibited from knowingly venting refrigerant into the atmosphere. At the flood control project these units are serviced off-site. The service contractor is required to provide documentation indicating that they are certified by EPA to deal with this material. Any new equipment purchased should maximize the use of safe alternatives to these ozone depleting substances.

(This page intentionally left blank.)

## RESPONSIBILITIES

### 7-1 The District Environmental Coordinator

The Environmental Coordinator is responsible for the following items.

- o Provide technical assistance and guidance to the project manager in developing *environmentally safe procedures for solid waste management*.
- o Provide oversight of required permits and renewals and EPA hazardous waste generator application numbers.
- o Review and approve Solid Waste Management Plan, revisions, and amendments.

### 7-2 The Project Manager<sup>6</sup>

The project manager is responsible for the following items.

- o Program sufficient funds to insure compliance with solid waste management requirements.
- o Maintain a complete and current inventory of stored materials and hazardous waste materials at the project.
- o Assure that only those properly trained and designated by the District Commander will handle hazardous wastes at the project and sign hazardous waste manifests.
- o Monitor facility compliance with hazardous waste manifest procedures and make recommendations for corrective actions or procedural changes when necessary or advisable.

---

<sup>6</sup> Environmental Compliance Coordinators are being hired for each river basin. One of their functions is to support field management of solid (including hazardous) wastes.

- o Maintain copies of all relevant regulations, directives, and guidance on hazardous materials and wastes and petroleum, oil and lubricants at the project and keep these materials in an organized highly visible manner.
- o Arrange for any testing of materials suspected of being hazardous wastes.
- o Inspect storage areas for malfunctions and deterioration, operator errors, and discharges which may be causing, or may lead to the release of waste constituents into the environment or are a threat to human health. Inspections must be conducted to identify potential problems in time to correct them before a problem occurs.
- o Assure reuse of recycled materials when possible and feasible. Appropriate disposal and recycling specifications should be included in purchase requests or contracts.
- o Maintain material safety data sheets in the project office for staff to review.
- o Review this Solid Waste Management Plan and make any necessary revisions to the Plan.
- o Ensure there is a recycling program at the project.

## TRAINING

### **8-1 Hazardous Waste Training**

Training is an important component of regulatory compliance. Training should be carried out to ensure that all personnel working in facilities with hazardous wastes are knowledgeable of hazardous waste management requirements, emergency procedures, and spill reporting requirements.

Department of Transportation regulation 49 CFR 172.700 (Subpart H-training) requires the training of employees who load, unload or handle hazardous materials for transportation, assure the safety of the shipment, or operate a motor vehicle used to transport hazardous materials.

Only employees formally trained, designated, and authorized by the District Commander are allowed to execute hazardous waste manifests and related documents. Records of the designation should be kept on file. DOT manifest training must be current. Expiration of training will void formal designation authority. The formal designation and authorization must be in writing and must state the member is within their scope of employment when executing such documents. Each project unit should have at least one person formally designated, authorized and trained for this function.

All hazardous waste management training should be coordinated with the District Environmental Coordinator and Safety Officer.

### **8-2 Other Training**

Although there is no specific training requirements for non-hazardous solid waste management, the project manager is encouraged to provide educational recycling information to employees for their information.

**(This page intentionally left blank.)**

## GLOSSARY TERMS AND ACRONYMS

**CER** - Code of Federal Regulations

**Certification** - A statement of professional opinion based upon knowledge and belief.

**CFCs** - Chlorofluorocarbons

**Construction and Demolition Waste (C&D)** - Construction and demolition waste (C&D) is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. These wastes have a number of beneficial uses, e.g. crushing asphalt and concrete/brick separately or in conjunction with virgin materials to produce recycled asphalt paving; process gravel, road base, and solid fill. Chipping and grinding wood treated with preservatives produces boiler fuel, a bulking agent for sludge composting; wood fiber, and erosion control for landfills. Untreated wood can be chipped for landscape mulch.

**Container** - A portable device in which a material or waste is stored, transported, treated, disposed of, or otherwise handled.

**CWA** - Clean Water Act

**Disposal** - The discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such waste (or any constituent thereof) may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

**DoD** - Department of Defense

**DOT** - The United States Department of Transportation

**ECC** - Environmental Compliance Coordinator

**EPA** - The United States Environmental Protection Agency

**Generator** - A person who produces or creates hazardous waste identified or listed under RCRA (relating to criteria, identification, and listing of hazardous waste).

**HSWA** - Hazardous and Solid Waste Amendments of 1984 (to RCRA)

**Hazardous Material** - (1) A substance or material which has been determined by the Secretary of the U.S. Department of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been designated.  
(2) Is listed in 49 CFR, Part 172.101, Hazardous Materials Table.

**High Grade Paper** - Includes letterhead, dry copy papers, miscellaneous business forms, stationery, typing paper, tablet sheets, and computer paper.

**Management** - The entire process, or any part, of storage, collection, transportation, treatment, and disposal of hazardous wastes by persons engaging in such process.

**Manifest** - The shipping document EPA Form 8700-22, and if necessary, EPA Form 8700-22A, originated, signed, and distributed in accordance with the instructions supplied with the manifest form and applicable state requirements.

**Manifest System** - The manifest, instructions supplied with the manifest, and distribution system for copies of the manifest which together identify the origin, routing, and destination of hazardous waste from the point of generation to the point of treatment, storage or disposal.

**NGVD** - National Geodetic Vertical Datum-MSL of 1929.

**ODSs** - Ozone depleting substances

**POL** - petroleum, oil and lubricants

**RCRA** - Resource Conservation and Recovery Act of 1976. (P.L.94-580, as amended)

**Resource Recovery** - The process of obtaining materials or energy from solid waste.

**Source Separation** - The separation of recyclable materials at their point of generation by the generator.

**Storage** - The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

**TCLP** - Toxicity Characteristics Leaching Procedure

**TSCA** - Toxic Substance Control Act.

## REFERENCES

Connecticut Department of Environmental Protection, Recycling Program. not dated. Business Recycling Fact Sheets.

ENSR Consulting and Engineering, Acton, Massachusetts. October 1990. "A guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act."

U.S. Army Corps of Engineers, Baltimore District. July 1993. POL Waste Liquid and Hazardous Waste Management Plan for Baltimore District, Project Operations Branch.

U. S. Army Corps of Engineers. February 1995. Hazardous Waste Management Manuals for U.S. Army Reserve Centers in the State of Connecticut, prepared with technical assistance from ENSR Consulting and Engineering.

**APPENDIX A**

**TOWN ORDINANCES**

AN ORDINANCE IMPLEMENTING RECYCLING  
WITHIN THE TOWN OF THOMASTON

IT IS HEREBY ORDAINED, by the Town of Thomaston, in town meeting duly assembled:

SECTION I. STATEMENT OF PURPOSE. This Ordinance is adopted by the Town of Thomaston as part of a comprehensive program to provide for the safe and sanitary disposal of solid waste generated within the Town, to ensure compliance by the Town's residents and solid waste collectors with the requirements of Connecticut General Statutes, Chapter 446d, providing for the separation, collection, processing and marketing of recyclable solid waste, and is adopted pursuant to Connecticut General Statutes, Sections 7-148(c)(4)(H), 22a-220, 22a-220a and 22a-241c, as amended.

SECTION II. DEFINITIONS. For the purpose of this Ordinance the following words and phrases have the following meanings:

- (a) "Recyclable materials" means those items designated by the Board of Selectmen for segregation from the municipal solid waste stream which shall include but not be limited to cardboard, glass food and beverage containers, leaves, metal food and beverage containers, office paper, newspapers, storage batteries, waste oil, plastic food and beverage containers, and scrap metal.
- (b) "Apartment complex" means a multi-family structure of four (4) or more dwelling units grouped into one (1) or more buildings.
- (c) "Commercial establishment" means any enterprise engaged in a non-manufacturing or non-processing business including but not limited to stores, markets, office buildings, restaurants, shopping centers and theaters.

(d) "Condominium complex" means any group of dwelling units which are covered by Connecticut General Statutes, Chapter 825, as amended.

(e) "Industrial establishment" means any establishment engaged in manufacturing or processing, including but not limited to factories, foundries, mills, processing plant, refineries and the like.

(f) "Institutional establishment" means any establishment engaged in service to persons, including but not limited to hospitals, nursing homes, group homes, schools and universities.

(g) "Residential establishment" means any premises used primarily as a domestic dwelling, including, but not limited to single and multiple family homes, apartments and condominiums.

(h) "Town" means the Town of Thomaston.

(i) "First Selectman" means the First Selectman of the Town or his duly appointed designee.

### SECTION III. SOURCE SEPARATION AND RECYCLING.

(a) Each person, business or institution that generates solid waste shall separate from other solid waste designated recyclable materials as defined above and by such rules as may be adopted by the Board of Selectmen.

(1) All persons, businesses or institutions who generate solid waste within the Town are required to separate recyclable materials from solid waste.

(2) Solid waste placed for collection which contains recyclable materials shall neither be collected by refuse collectors, nor accepted for disposal at any refuse processing facility.

(3) For premises serviced by private or municipal refuse collection, recyclable materials shall be separated from refuse

and placed for collection in a separate container on the designated day.

(4) Apartment and condominium complexes as well as commercial, industrial, and institutional establishments shall provide, or require, their refuse collector to provide for the separation of municipal solid waste and each recyclable material accumulated on the premises.

(b) Except as otherwise provided in Section VII, residents shall use a municipally registered hauler to collect materials for delivery to the municipally designated and approved recycling facility for recycling in the following manner.

(1) Clean, unsoiled newspaper, magazines, cardboard and white paper shall be packed in paper grocery or shopping bags, or securely tied in flat bundles.

(2) Glass and plastic food containers, as well as all types of metal food containers shall be rinsed ~~out~~<sup>clean</sup> and placed in the recycling container.

(3) Leaves, waste oil, storage batteries, and any other recyclables designated by the Board of Selectmen, shall be separated from solid waste and other recyclables and delivered to the municipal drop off center or other designated area, so as to not constitute a nuisance or otherwise be objectionable. Leaves and grass clippings may be bagged and placed on the curbside on designated municipal leaf collection days.

(c) Except as otherwise provided in Section VII, businesses shall use a municipally registered hauler to collect said designated materials for recycling or shall be required to deliver designated materials as

defined by the Board of Selectmen to any municipal drop off center.

(1) It shall be the responsibility of the owners or operators of all Commercial, Industrial and Institutional establishments, and Apartment and Condominium complexes to provide, at their own expense, for the storage, collection and transportation of recyclables. In the case of Condominium complexes, the Board of Selectmen may provide for municipal collection of solid waste and recyclables on terms and conditions no less favorable than those afforded to other Residential establishments. Such operations shall be carried out in such a manner as to avoid the creation of a public nuisance.

(2) Persons or establishments whose solid waste is not collected by contractors are responsible for the compliance with the recycling provisions of Connecticut General Statutes, Section 22a-241b, as amended. Compliance shall be monitored by all Refuse Collectors and Refuse Facility operators. Suspected violators shall be reported to the First Selectman's office for appropriate action.

(3) The quantities and destination of these designated recyclables (non-residential) not delivered to a municipal designated facility or drop-off shall be reported by the Contractor or responsible parties to the Town on a monthly basis as prescribed by the Board of Selectmen.

(4) It shall be a violation of this Ordinance for any person other than a municipally registered hauler or municipal employee to collect, pickup or cause to be collected or picked up, such materials from the curb or other designated point of collection

or municipal drop-off center. Each unauthorized collection in violation hereof shall constitute a separate and distinct offense. This subsection shall not apply to any non-profit, charitable organization who sponsors a municipal recycling collection (e.g. newspapers) with prior approval of the Board of Selectmen.

**SECTION IV. REGISTRATION OF REFUSE COLLECTORS.**

(a) Any hauler providing solid waste collection is hereby required to register with the First Selectman's office on or before January 15th of each year, and apply for a permit to haul solid wastes or to collect recyclables.

(b) Any hauler will be required to provide recycling collection to any customers receiving solid waste collection and is further required to register with the First Selectman's office as is prescribed by Connecticut General Statutes, Section 22a-241b, as amended. The Board of Selectmen shall be the licensing and registration authority of refuse collectors engaged in the collecting or transporting of municipal solid waste and recyclable materials within the Town. It shall administer the issuance and revocation or suspension of permits and registrations as set forth in this Ordinance.

(c) Additional rules may be adopted by the Board of Selectmen, from time to time, consistent with the provisions of this Ordinance.

(d) Following the filing of a proper application and payment of the prescribed fee, the First Selectman shall grant such license(s) as hereinafter set forth for refuse collectors, vehicles and dumpsters within a reasonable time unless he finds one or more of the following

conditions to exist:

(1) The applicant has been irresponsible in the conduct of solid waste collection and transportation operations based upon previous suspension of license or violations of state statutes or municipal ordinances, whether of this Town or any other municipality.

(2) The applicant lacks suitable equipment, personnel or liability insurance with which to collect solid waste in a safe, nuisance-free manner in compliance with this Ordinance.

(e) Each permitted refuse collector shall obtain a separate registration for each vehicle he operates with the Town of Thomaston. Registration shall not be transferrable from vehicle to vehicle.

(f) All permits shall be issued for a period not to exceed one (1) year, and shall be renewable on or before the fifteenth (15) day of January of each year. The permit fee shall be \$25.00 per vehicle.

(g) The permit issued shall be conspicuously displayed on the left front of the body of the vehicle or dumpster licensed, or as may otherwise be directed by the licensing authority.

(h) Each permittee shall display at all times on the doors of each vehicle his name and a local phone number.

(i) Permits are not transferrable. When any permittee shall sell or transfer all or part of his route to any other refuse collector, he shall first notify the First Selectman in writing of his intent to sell, and the transferee shall, simultaneously make application for the appropriate permits to operate in Town.

(j) As a prerequisite to the issuance of renewal of any permit, a refuse collector must, along with his permit/renewal application, furnish the First Selectman the number of customers within the Town that such refuse collector intends to service as well as the names of other municipalities serviced.

(k) Applicant must maintain public liability operations and motor vehicle insurance on each vehicle in an amount not less than One Million Dollars (\$1,000,000.00) combined single limit.

**SECTION V. REVOCAION OF PERMIT.**

(a) A permit to engage in refuse collection and to use any waste disposal and/or processing facilities provided by the Town is a privilege, not a right. Failure to comply with the provisions of this Ordinance shall be grounds for revocation or suspension by the First Selectman of any permit or registration issued hereunder, in addition to any other penalty imposed by law.

(b) Revocations or suspensions shall only become effective five (5) days after receipt of written notice from the First Selectman.

(c) If a refuse collector objects to the First Selectman's action described in this Ordinance to revoke or suspend his permit or registration, he may, within five (5) days of receipt of said notice, file a written request with the Town Clerk for review by the Board of Selectmen. Failure to file such request in a timely manner shall render the First Selectman's action final and binding upon the refuse collector.

(d) Timely filing of such request for review shall operate as an automatic stay of the First Selectman's action.

(e) The Board of Selectmen shall act as an appeals board, and said Board shall, within fifteen (15) days hear and decide the matter. The decision of such Board shall be final and binding upon the collector.

**SECTION VI. COLLECTION.**

It shall be a violation of this Ordinance for any person other than a Town registered refuse collector to pickup, collect or interfere with the picking up or collecting of recyclable materials placed for collection at the curbside or designated recycling center. Each act of scavenging shall constitute a separate violation of this Ordinance. All items which are designated for collection as stated in this Ordinance shall be set out for collection no earlier than 6:00 p.m. on the evening prior to the scheduled collection day. Emptied containers shall be removed from the curbside no later than 8:00 p.m. on the day of collection.

**SECTION VII. RESIDENTIAL PERMITS.**

Residents of the Town who wish to dispose directly of their own solid waste and recyclables must apply to the First Selectman's office for a sticker to be able to dispose of refuse or recyclable materials at municipal facilities. The sticker shall be displayed in such a manner as the First Selectman may prescribe. Such permit may be revoked or suspended as set forth in this Ordinance, and appeals therefrom may be taken in the manner set forth in said Ordinance.

**SECTION VIII. REFUSE COLLECTIONS.**

(a) Each refuse collector shall deliver all refuse collected within the territorial limits<sup>†</sup> of the Town at such place or places as the Board of Selectmen may from time to time designate and may not commingle such refuse with refuse collected in other Towns without the

prior consent of the Board of Selectmen.

(b) Each refuse collector must collect recyclable materials from each of its customers in the manner prescribed in this Ordinance.

(c) All vehicles registered to collect and transport refuse shall be maintained free of obnoxious odors and accumulated refuse.

(d) Refuse collectors shall furnish to his customers upon request, a list of rates for the various services provided.

(e) The provisions of this Ordinance concerning recyclables shall take effect as of January 1, 1991 in accordance with the requirements of Connecticut General Statutes, Section 22a-241b, as amended, but shall be implemented only after Notice to the Town of Thomaston by Connecticut Resource Recovery Authority of its accessibility to collectors of recyclables generated in the Town. All other provisions of this Ordinance shall take effect fifteen (15) days after publication of a summary of this Ordinance in accordance with Connecticut General Statutes, Section 7-157(b), as amended.

#### SECTION IX. SEVERABILITY.

In the event any provisions, sections, sentence, clause or part of this Ordinance shall be held invalid, illegal or unconstitutional, such invalidity, illegality or unconstitutionality shall not affect or impair any remaining part of this Ordinance, it being the intent that such remainder shall remain in full force and effect. Sections and captions contained herein are intended only for the purpose of convenient reference and do not convey the legislative intent of the Town.

#### SECTION X. INSPECTION.

The Town reserves the right to inspect solid waste placed at curbside

or delivered to the municipal drop off center to determine compliance with this Ordinance.

SECTION XI. VIOLATIONS.

The Town also requires registered collectors or haulers to report any violations of this Ordinance to the First Selectman.

SECTION XII. FINES.

Any person, business or institution who violates or neglects to comply with this Ordinance or any rules adopted pursuant hereto, shall upon conviction thereof, be punishable by a fine not to exceed \$100.00 (One Hundred Dollars), except that the maximum fine for failure to comply with Sections IV, V and VI hereof shall not exceed \$100.00 (One Hundred Dollars) for each violation.

Adopted:

Published:

Effective:

7 1-11

Ordinance No. 12-17-90-169  
TOWN OF WATERTOWN RECYCLING ORDINANCE

PURPOSE

Pursuant to Connecticut General Statutes Public Act 90-220 this Ordinance is adopted by the Town Council, Town of Watertown, Connecticut as part of a long term plan for safe and sanitary disposal of solid waste, and to establish measures to assure compliance of all persons and all collectors within the Town of Watertown, with the requirements of Connecticut General Statutes. Town of Watertown Ordinances and Regulations for separation, collection disposal and marketing of recyclable solid waste.

DEFINITIONS

As used in this ordinance, the following terms shall have the meanings herein defined:

**Town Council:**

The Town Council of the Town of Watertown, Connecticut. When used in reference to a voting body, it shall be taken to include the phrase "or a majority thereof".

**Cardboard:**

Corrugated boxes and similar material and kraft paper materials which are unwaxed and have a minimum of contamination by food or other material.

**Commercial Property:**

Any real property used for any purpose not included within the definition of Residential Property.

**Commingled:**

Mixed recyclables that are collected together.

**Collector:**

Any person who holds himself out for hire to collect recyclables from residential, commercial, industrial, or other sources.

**CRRA:**

Connecticut Resources Recovery Authority.

**Director:**

The Director of Public works of Watertown or his authorized representative.

**Dry Cell Battery:**

Any device used in generating electric current through a

chemical reaction including, but not limited to, nickelcadmium batteries, carbon batteries, and alkaline batteries.

**Glass Food Container:**

A glass bottle or jar of any size or shape used to package food products suitable for human or animal consumption with a minimum of contamination by food or other sources.

**Hauler:**

Any person, corporation, firm or entity of any nature which holds himself out for hire to pickup refuse (garbage) from residential, commercial, industrial, or other sources. (SEE DEFINITION - PERSON)

**HDPE Container:**

Any high-density polyethylene bottle or container of any size or shape used to store food, household laundry detergent, or other non-hazardous or non-toxic materials.

**IPC:**

Intermediate Processing Center which receives, processes, and markets recyclables.

**Leaves:**

Deciduous and coniferous seasonal deposition.

**Mandated Recyclables:**

Those recyclables which have been designated by the DEP and any additional items which have been designated by the Town Council that are mandated to be recycled within the municipality.

Those items currently designated as mandated are as follows:

1. Cardboard
2. Glass Food and Beverage Containers
3. Leaves
4. Metal Food and Beverage Containers
5. Newspapers
6. White Office Paper
7. Scrap Metal
8. Storage Batteries
9. Waste Oil

**Metal Food Container:**

An aluminum, bi-metal, tin plated steel, or other metallic can, plate, or tray of any size used to package food for human or animal consumption which has minimum of contamination by food or other materials.

**Municipality:**

The Town of Watertown, Connecticut.

**Municipal Agent:**

The person designated by the Town Council to administer the notice and enforcement provisions of this Ordinance. Town Manager or this authorized representative is hereby designated Municipal Agent for Watertown.

**Newspaper:**

Used or discarded newsprint (newspaper advertisements supplements, comics, and newsprint-type enclosures) which has a minimum of contamination by food or other material.

**Office Paper:**

Any used or discarded high grade white paper and Manila paper including, but not limited to paper used for file folders, tab cards, writing, typing, printing, computer printing, and photo-copying, which is suitable for recycling and which has a minimum of contamination. For purposes of this Ordinance, the foregoing definition of office paper shall exclude any such paper generated from residential sources.

**Optional Recyclables:**

Those recyclables which may be designated to be recycled by the DEP or Town Council to be recycled through a voluntary or mandatory pilot recycling program.

Those items currently designated as optional recyclables are as follows:

1. Dry-Cell Batteries
2. Grass Clippings
3. HDPE Plastic Containers
4. PET Plastic Containers
5. Magazines
6. Scrap Tires
7. Yard Waste

**Person:**

Any individual, corporation, partnership, association, or other entity or organization, either public or private, of any kind.

**PET:**

Polyethylene terephthalate container of any size or shape used to package beverages.

**Recyclables:**

Any item designated by the DEP or Town Council which can be separated or diverted as defined below under "Recycle".

**Recycle:**

To separate or divert an item or items from the Solid Waste stream for the purposes of processing it, causing it to be processed, or storing it for later processing into a material product, including the production of compost, in order to provide for disposition of the item or items in a manner, other than incineration or landfilling, which will best protect the environment. Nothing in this definition shall preclude the use of Waste Oil as a fuel in an oil burner, or Scrap Tires as fuel in an incinerator.

**Recycling Container:**

Any container designated by the Town Council for use as a residential (curbside) recycling container for the storage and (curbside) collection of recyclables.

**Recycling Center:**

The municipality's recycling drop-off facility, area or areas as designated by the Town Council.

**Residential Property:**

Real estate containing one or more dwelling units, but shall not include hospitals, motels, hotels, or nursing homes.

**Scrap Metal:**

Used or discarded items which consist predominantly of ferrous metals, aluminum, brass, lead chromium, iron, nickel, or alloys thereof including but not limited to, white goods and metal food containers.

**Scrap Tires:**

Discarded rubber or synthetic rubber tires used by or manufactured for vehicles including, but not limited to, automobiles, trucks, buses, tractors, and trailers.

**Storage Batteries:**

Lead acid batteries or other batteries used in motor vehicles such as automobiles, airplanes, boats, recreational vehicles, tractors, and like applications.

**Waste Oil:**

Crankcase oil that has been utilized in internal combustion engines.

#### AUTHORITY AND POWERS

The municipality is authorized to, by Public Act 90-220, and shall, through its legislative body (Town Council), designate where the following items generated from residential properties shall be taken for processing or sale: (1) cardboard, (2) glass food and beverage containers, (3) leaves, (4) metal food and beverage containers, (5) newspapers (6) storage batteries, (7) waste oil, (8) plastic food and beverage containers, and (9) scrap metal. The processing or sale of such items at any other area shall be prohibited.

The Town Council shall give not less than sixty (60) days notice of its intent to designate where these items from the residential properties shall be taken for processing or sale to all licensed collectors hauling solid waste or such items from within the municipality. At the conclusion of such period, the Town Council shall cause notice of such designation to appear in the Town Times newspaper of general circulation in the municipality and shall conduct a public hearing thereon.

The Town Council is hereby authorized to enact, from time to time, by resolution, such regulations as it shall deem in the public interest regarding separation, collection, recovery, removal, and storage or recyclables and enforcement of this Ordinance.

The Town Manager shall, and is granted the authority to, designate a person to be contacted by the DEP with inquiries regarding the recycling program.

The Town Manager shall, and is granted the authority to, designate an authorized person as a Municipal Agent to receive complaints and notices of violations of the separation requirements set forth in the Public Act 90-220 and this Ordinance.

The Town Council is hereby authorized to add or delete, from time to time, items on the list of mandatory and optional recyclables so long as such action is not in conflict with the Connecticut General Statutes, Department of Environmental Protection regulations, or the Municipal Recycling Service Agreement signed with the CRRA.

The Town Council is hereby authorized to adopt a fee schedule and a method(s) for ensuring payment of the fees; for depositing any and all recyclables at any municipal, or municipally designated, disposal facility for recyclables.

The Town Council, through resolution, shall adopt rules and regulations, from time to time, governing any practice and related practices contained in this ordinance provided that such rules and regulations are not inconsistent with the Connecticut General Statutes, Department of Environmental Protection regulations, or

any provisions of this ordinance.

The Town Council is hereby authorized to employ or make contracts with persons, including the CRRA, for the separation, collection, transportation, processing, and/or marketing of recyclables, as provided for in Public Act 90-220, Section 22a-241b 2(d) of the Connecticut General Statutes, as amended from time to time, to carry out the provisions of this ordinance.

## SEPARATION AND COLLECTION

**SEPARATION:** On or after January 1, 1991 (1) each person who generates solid waste from residential property within the Town of Watertown shall separate from other solid waste those items designated as mandatory recyclables and (2) every other person who generates solid waste shall make provision for the separation from other solid waste of those items designated as mandatory recyclables.

**RESIDENTIAL CONTAINER:** The municipality shall provide one recycling container, free of charge, to each residential property dwelling unit. Said container shall remain the property of the municipality and remain with the dwelling unit through changes in occupancy due to transfer from sale or rental.

The owner or occupant of such dwelling unit shall label or cause to be labelled said container with the address where the box shall be used. All said containers must be so labelled prior to the first time they are set out at the curb for recycling collection.

Regulations for replacement of recycling containers shall be established by resolution of the Town Council.

Residents shall use only the recycling containers for the purpose of placing the recyclables for collection and they shall not be used for any other purpose.

**MATERIALS:** Recyclables should be prepared for collection as follows; glass food containers, metal food containers, aluminum foil, PET and HDPE plastic bottles should be washed clean of their contents and placed inside the collection container. Lids should be removed, however, labels may be left on.

Newspapers, including advertising sections can be either bundled with string or placed in brown kraft paper grocery bags and placed on top of the recycling container for collection.

Corrugated cardboard in clean condition, not soiled by any putrescible materials or not coated with any wax should be flattened and cut in pieces no larger than two feet square and placed on top of the recycling container for collection.

Recycling containers shall not be used for other waste.  
Recyclables shall not be mixed with other waste.

**RESIDENTIAL CURBSIDE COLLECTION:** The recycling container shall be placed for collection purposed within ten (10) feet of the street or curblin e or in such other location as shall be agreed upon by the owner or tenant and the collector. For curbside collection the container shall be placed at curbside not earlier than twelve (12)

hours before the scheduled time of collection nor later than 7:00 A.M. on the scheduled collection days and shall be removed from the street or curblin within twelve (12) hours after the materials therein have been collected. Said containers and any bundles shall be so placed in such a manner that they do not constitute a travel or health hazard or nuisance of any sort.

Only recyclables generated from residential sources should be placed for residential curbside collection. The collector shall deliver all recyclables from residential properties to such locations as shall be designated by the Town Council from time to time.

**MULTI-FAMILY COLLECTION:** It shall be the responsibility of the person having custody and control of multi-family residential dwelling units to educate the tenants to the need and techniques of recycling.

Multi-family dwelling units utilizing dumpster service for garbage pickup shall have the option to establish residential curbside collection for recyclables for each dwelling unit.

In multi-family dwelling units not accessing residential curbside collection it shall be the responsibility of the owner, or the person having custody and control, to provide, at a convenient location, containers of sufficient size and quantity to receive the recyclable materials to be collected from the dwelling units they are intended to serve and to clearly label those containers for their intended use. Such containers shall provide for ensuring a minimum of contamination of the recyclables.

**OTHER RESIDENTIAL COLLECTION:** All residents who are not served by a collector shall arrange to dispose of their recyclables at such drop-off locations as the Town Council shall prescribe. (Occupants of premises within the municipality must apply for a permit to be able to dispose of these recyclables and said permit shall be displayed in a manner as the Director shall prescribe. Said permit may be revoked or suspended for the reasons and in a manner prescribed for Commercial licenses and appeals therefrom may be taken in the same manner.)

**Other Residential Recyclables:** All other mandatory recyclables generated from residential properties and not collected by residential curbside collection shall be delivered to such dropoff locations as the Town Council shall prescribe.

**Recyclables from Outside the Municipality:** The dumping or disposal of recyclables at any location as designated by the Town Council from a source outside of the municipality shall be prohibited. Any dumping or disposal of recyclables from a source outside the municipality at a regionally designated IPC in the name of the

municipality shall be prohibited.

Collection, Handling, and Disposal: Collection, handling, and disposal of recyclables within or on behalf of the municipality shall only be carried out by persons licensed by the municipality and in accordance with all State and Federal laws including, but not limited to, the Public Health Code of the State of Connecticut as it shall be amended from time to time, and in a manner as not to pose a hazard or potential hazard to public travel, health, or safety or to become a nuisance of any sort. Any recyclables collected or transported within the municipality shall be carried in tightly covered containers in or on such vehicles. Any recyclables which are collected or transported in open top vehicles shall be suitably covered so as to prevent scattering litter upon the streets. All vehicles used for collection or transportation of recyclables within the municipality shall be subject to approval of the Director of Public Works.

Anti-Scavenging: Upon placement of recyclables out for residential curbside collection, or upon delivery to any disposal location designated by the Town Council pursuant to provisions of this ordinance, it shall be a violation of this ordinance for any person other than the collector or the authorized agents of the municipality acting in the course of their employment, to collect or pick up any such recyclables, or cause the same to be collected or picked up.

In addition to the fine imposed for violation of this provision, the violator may be required to make restitution to the municipality for the value of any materials illegally removed. Each and every such collection or pickup in violation of this section from one or more locations shall constitute a separate and district violation.

Nothing in this ordinance shall abridge the right of any person to give or sell their recyclables, including deposit beverage containers, to any person provided that such materials have not been set out for residential curbside collection or delivered to any disposal location designated by the Town Council.

COMMERCIAL GENERATORS: SEPARATION AND DISPOSAL

On and after January 1, 1991 each generator of non-residential recyclable materials as determined in accordance with General Statutes Section 22a-220 and Public Act 90-220 shall be responsible to provide for the separation and disposal of all recyclable materials. All generators of non-residential recyclable materials shall comply with all General Statutes, Watertown Ordinances and regulations concerning Connecticut Mandatory recycling.

LICENSING

In accordance with the provisions of Subsection 22a-220(d) of the

Connecticut General Statutes, any person collecting solid waste or recyclables generated by residential, business, commercial, or other establishments in the municipality shall annually register each collection vehicle separately with the municipality on forms prescribed by the Director, upon or before the first day of July. Upon registration and payment of an annual permit, fee of FIFTY dollars (\$50.00), each such collector shall be permitted to collect or continue the collection of solid waste within the municipality.

Each such collector shall disclose the name of any other municipality in which such collector hauls such solid waste. The door of any private vehicle used to haul solid waste shall be clearly marked with the business name and address of the collector. Registration shall not be transferable from vehicle to vehicle.

The Town Council hereby orders DIRECTOR to require, prior to issuing a license, evidence of liability insurance in effect covering all vehicles to be used to collect recyclables.

The Town Council shall further require that any collector tipping recyclables at the CRRA IPC maintain a performance bond, or other means to ensure payment, with the vendor of that IPC or the municipality.

When any licensee shall sell or transfer all or part of his route to another Refuse Collector then presently licensed to collect solid waste in the municipality, he shall forthwith give written notice to the Director at least seven (7) days before the effective date of the sale or transfer stating the name of the buyer or transferee and the date of such sale or transfer.

No collector shall be required to provide collection services to any customer who is more than thirty (30) days delinquent in the payment of the collector's fee. If the delinquent customer shall discharge his delinquency, the collector shall immediately resume collection services to the customer.

No license shall be issued to any solid waste or recyclables collector whose permit has been previously revoked twice. For purposes of this section, the ownership of collectors shall be determined pursuant to the standards set forth in this Ordinance.

During the period of any licensee suspension, no license shall be issued:

- (a) To any person who is, or was an owner of, or partner in any unincorporated business whose license, during the period of said ownership, was revoked under the terms of this Ordinance; or who owns or owned fifty percent (50%) or more of the stock of any corporation whose license, during the period, of said ownership; was revoked under

the terms of this Ordinance.

- (b) To any partnership or unincorporated business in which any owner or partner is or was the owner of or partner in any unincorporated business whose license, during the period of said ownership, was revoked under the terms of this Ordinance or in which any partner or owner owns or owned fifty percent (50%) or more of the stock of any corporation whose license, during the period of said ownership, was revoked under the terms of this Ordinance.
- (c) To any corporation in which the owner of fifty percent (50%) or more of the stock is or was the owner of fifty percent (50%) or more of the stock of any corporation whose license, during the period of said ownership, was revoked under the terms of this Ordinance or is or was the owner of or partner in any unincorporated business whose license, during the period of said ownership, was revoked under the terms of this Ordinance.

For purposes of the computation of the ownership of stock in any corporation or the interest in any partnership or unincorporated business under the provisions of this section, the interest of any person shall include:

- (a) Any beneficial interest held for the benefit of said person or for the benefit of any person of the type set forth in section (b) or (c) hereof, whether in trust or otherwise.
- (b) Any interest owned by the spouse of said person, if said person and said spouse shall file a joint tax return for purposes of Federal or State tax.
- (c) Any interest owned by any person whom said person shall claim as a dependent upon his or her Federal or State tax return.

The Town Council may require of any licensee or license applicant such information, under oath, as it deems necessary for purposes of enforcement of this section. To the extent permitted by law, such information shall not be disclosed, except to the extent necessary for the determination, by the appropriate municipal authorities, as to the compliance with the provisions of this Ordinance.

The license of any collector shall, after notice and hearing pursuant to this Ordinance, be revoked for the violations listed in this Ordinance. In addition, said collector shall be prohibited from dumping or depositing any recyclables (Solid Waste) at the regional IPC (municipal Solid Waste facility(s)) for a period of

thirty (30) days from the date of such license revocation.

Refusing to remove or cause to be removed recyclables deposited at other than the authorized facility, when ordered to do so by the Town Council or its designated agent shall be a violation of this Ordinance.

Any material misrepresentation or omission in the filling out of any permit application or in providing information pursuant to this Ordinance shall be a violation of this Ordinance.

#### INVESTIGATIONS AND HEARINGS

Prior to any action pursuant to the provisions of this Ordinance, the Town Council shall hold a hearing, pursuant to the provisions of this section.

- (a) The Town Manager may cause the Public Works Director or the Town Attorney to investigate any allegation of a violation of the provisions of this Ordinance, and, if he or she shall determine that there is probable cause to believe that such a violation has occurred, he or she shall refer said matter to the Town Council for a hearing.
- (b) The Town Manager who, pursuant to the provisions of this section, shall preside at said hearing shall give notice of the time and place of said hearing and a general statement of the alleged violation, including the date thereof, to the licensee by mailing such notice, certified mail, return receipt requested, not less than seven (7) days prior to the date of said hearing, to the address set forth upon the license.
- (c) The Town Manager shall preside at said hearing unless said Town Manager shall be disqualified or is absent, in which event the Finance Director shall preside.
- (d) The licensee and the municipality shall have the right to be represented by counsel.
- (e) All witnesses at said hearing shall be placed under oath, and each party shall have an opportunity to cross-examine all witnesses to be presented by the other.
- (f) Unless both the municipality and the licensee shall waive the keeping of a transcript, a verbatim record of said proceeding shall be kept. Either party shall have the right to order a copy of said record upon the payment, in advance, of the cost thereof.
- (g) Informal rules of evidence (similar to Workers Compensation hearings and like proceedings) shall apply to any proceeding hereunder, and subject to the provisions of this section, the individual presiding shall be permitted to accept such evidence as he or she shall deem appropriate.
- (h) In the event that any member of the Town Council shall be a witness in the proceedings, he or she shall be disqualified to act upon said complaint.
- (i) In the event that any member of the Town Council shall

be disqualified to act upon said complaint for any reason, the remaining members of the Town Council shall select an elector of the municipality to replace said disqualified member at said hearing.       :::

In the event that the Town Council shall determine by a preponderance of the evidence, that the licensee is in violation of any section of this Ordinance, the individual presiding at said hearing shall take such action as may be proper under the provisions of this Ordinance. Notice of such action shall be given to the licensee, in writing, by mailing thereof, certified mail return receipt requested, to said licensee at the address set forth on the permit not less than five (5) days prior to the effective date of said action.

#### COMPLIANCE

On or after January 1, 1991, any collector who has reason to believe that a person from whom he collects solid waste has discarded recyclable items with such solid waste in violation of the provisions of this Ordinance or of Section 22a-241b of the Connecticut General Statutes, as amended, he shall promptly notify the municipal agent of the alleged violation. Upon the request of the municipal agent, a collector shall provide warning notices, by the placement of tags provided by the municipality, to any person suspected by the collector or the municipality of violating the separation requirements of state law or this Ordinance. Each collector shall also be required to assist the municipality in the identification of any person responsible for creating loads containing significant quantities of items subject to the separation requirements of state law or this Ordinance which are delivered to a resources recovery facility or solid waste facility by the collector and detected by the owner or operator of such a facility pursuant to Subsection (b) of Section 22a-220 of the Connecticut General Statutes.

### ENFORCEMENT

Any collector found to have violated the separation and collection requirements of this Ordinance shall be subject to a fine in the amount of one hundred dollars (\$100.00) for each offense. In addition, the municipality reserves the right to suspend or revoke the license of any such collector. Any collector whose license is either suspended or revoked as provided for herein shall be entitled to a hearing in accordance with the provisions of this Ordinance.

Any person who violates the provisions of this Ordinance shall be subject to the following penalties:

- (a) Upon a first or second offense, the violator shall receive a written warning.
- (b) Upon a third offense occurring within a period of one (1) year from the date of the original offense, the violator shall be subject to a fine in the amount of fifty dollars (\$50.00).
- (c) Upon any subsequent offense occurring within the period of one (1) year from the date of the original offense, the violator shall be subject to a fine of one hundred dollars (\$100.00) and, in addition, shall be refused recycling collection.

In accordance with the authority provided in Section 2 of Public Act 90-249, any commercial establishment that is found to have violated the provisions of Subsection (c) of Section 22a-241b of the Connecticut General Statutes shall be subject to a fine in the amount of five hundred dollars (\$500.00) for each such violation.

If in the judgment of Town Council the violation(s) is found to be willful the Town Council shall assess against the violator all costs of the Town of Watertown costs of the investigation and enforcement proceedings together with its reasonable attorneys' fees. All such costs and fees shall be paid by the violator to the Town of Watertown within thirty (30) days of any such Town Council order.

Pursuant to Public Act 90-220 Section 2(c)(2) the Town of Watertown hereby designates Town Manager, Paul Vayer, Town Hall Annex, 424 Main Street, Watertown, Connecticut, 06795 - Telephone 274-5411 as the person to receive information from and respond to questions from the Department of Environmental Protection on behalf of the Town of Watertown.

Pursuant to Public Act 90-220 Section 2(f) the Town of Watertown hereby designates Philip Deleppo, Director of Public Works as municipal agent to receive from collectors of solid waste and

recyclable items and from operators of resources recovery facilities and solid waste facilities the notices required to be sent to the municipality pursuant to section 4 of Public Act 90-220.

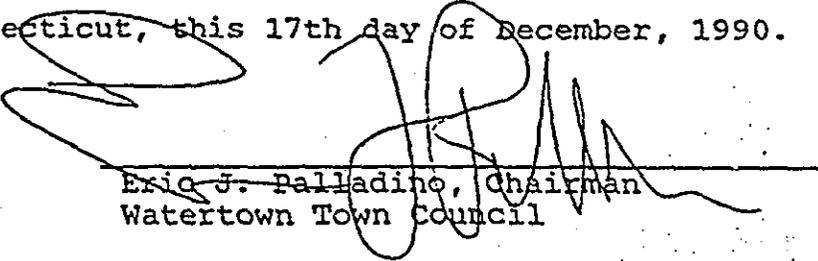
SEVERABILITY

Should any provision of this Ordinance be declared invalid for any reason, such declaration shall not affect the validity of other provisions or of this Ordinance as a whole, it being the legislative intent that the provisions of this Ordinance shall be severable and that the balance of this Ordinance shall remain valid notwithstanding such declaration.

EFFECTIVE DATE

Except as otherwise specifically provided for, the provisions of this Ordinance shall take effect on January 9, 1991.

Dated at Watertown, Connecticut, this 17th day of December, 1990.

  
Eric J. Palladino, Chairman  
Watertown Town Council

Date of Town Council Public Hearing, December 10, 1990.  
Date of Approval of Ordinance by Town Council, December 17, 1990.  
Date of Publication, December 20, 1990.  
Effective Date of Ordinance, January 9, 1991.

TOWN OF WATERTOWN  
ORDINANCE NO. 07-07-75-56  
REGARDING THE COLLECTION AND DISPOSAL OF GARBAGE

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF WATERTOWN THAT:

Section 1. It shall be unlawful for any person, firm or corporation to engage in the business of the collection or disposal of garbage or rubbish as herein defined; garbage shall include but not be limited to table scraps, vegetable or animal refuse or offal and shall include any substance of a putrescible nature; rubbish shall include trash, paper, plastics, wood, metal, ashes, rubber or any solid non-putrescible substance, without first having secured a license therefor. The annual fee for such license shall be \$15.00 for each vehicle used.

Section 2. Applications for such licenses shall be made to the Town Clerk, and shall be referred by said Clerk to the Town Manager; no such license shall be issued except on order of the Town Manager. Such application shall include the applicant's full name and mailing address, whether the applicant is an individual, firm or corporation, and, if a partnership, the names and addresses of the partners, the number of vehicles utilized and the signature of the applicant.

Section 3. Prior to the issuance of any license, an applicant shall provide satisfactory proof of:

(a) Workmen's Compensation insurance in the amounts required pursuant to the Connecticut General Statutes.

(b) Liability Insurance for each vehicle in the amounts of \$25,000.00 for property damage and \$100,000.00/\$300,000.00 for personal injury.

Section 4. Any vehicle used in connection with the collection or disposal of garbage shall be sufficiently watertight so as to preclude any but minimal leakage. Any vehicle used in connection with the collection or disposal of garbage or rubbish shall be covered sufficiently so as to preclude the emission of odors and prevent any garbage or rubbish from falling or blowing off the vehicle. It shall be unlawful for any vehicle containing garbage to be parked overnight.

Section 5. Each person, firm or corporation, so licensed, while exercising his trade, shall carry with him a copy of the license and shall exhibit the same to a peace officer or other proper officer when requested and shall have plainly displayed on such vehicle a sign designated by the Town Manager containing the number of his license and the year in which it is enforced. Such signs shall be returned to the Town Manager's office at the expiration of the license.

Section 6. Any person, firm or corporation who violates any provision of this ordinance shall be fined not more than twenty-five (25.00) dollars therefor. Each day a violation continues shall be deemed a separate offense.

Dated at Watertown, Connecticut, this 7th day of July, 1975.

EFFECTIVE DATE: This ordinance, adopted at a regular meeting of the Town Council of the Town of Watertown on the 7th day of July, 1975, shall be published in full within ten days after such passage, in a newspaper having circulation within the Town and shall become effective on the 21st day after such publication in accordance with the terms and provisions of Section 307 of the Charter of the Town of Watertown.

WILLIAM J. BUTTERLY, JR.  
William J. Butterly, Jr., Chairman  
Watertown Town Council

Introduced: 5/5 /75  
Public Hearing: 5/13/75  
Adopted: 7/7/75  
Effective: 7/31/75

TOWN OF WATERTOWN  
CONNECTICUT

ORDINANCE NO. 07-01-85-120

ORDINANCE CONCERNING OPERATION OF TOWN OF WATERTOWN WASTE TRANSFER  
STATION

Section 1. DEFINITIONS

1. TOWN shall mean the Town of Watertown, a municipal corporation organized pursuant to the State of Connecticut.
2. WASTE TRANSFER STATION shall mean the land owned by the Town of Watertown on Old Baird Road, site of the present Transfer Station.
3. PERSON shall mean any individual, corporation, firm, institution or other entity of any nature.
4. SOLID WASTE shall include:
  - (a) RUBBISH shall mean junk, discarded containers, dust, sweepings, waste paper and cardboard, boxes, crates, rags, clothings, textiles, glass, crockery and similar solid waste materials ordinarily accumulated in and around independent residential premises and residential condominiums.
  - (b) GARBAGE shall mean putrescible animal and vegetable waste resulting from the handling, preparation, cooking and consumption of food.
  - (c) COMMERCIAL - INDUSTRIAL WASTE shall mean all putrescible and non-putrescible matter from the manufacture, fabrication or processing of any product and waste generate by any non-residential premises.
  - (d) BULKY WASTE shall mean heavy or large objects for discard exceeding sixty (60) pounds in weight and/or having one or more dimensions of over four (4) feet, including but not limited to automobile parts; drum containers subject to inspection; mattresses and box springs, furniture; large appliances such as stoves, refrigerators, washers, doors, trunks, crates; pieces of lumber and other building materials, debris and rubble; bedsteads; and toys, and other similar items and/or materials.
  - (e) DEMOLITION AND CONSTRUCTION WASTE shall mean waste materials from the construction or destruction of residential, industrial or commercial structures. TOWN shall maintain a separate roll-off container for demolition waste. Town

Engineer may set special rules and regulations for accepting demolition materials at transfer station, provided such rules and regulations are approved by Town Council.

- (f) LEAVES-BRUSH-STUMPS shall mean all leaves, grass clippings, cut brush. Stumps shall mean tree stumps larger than four (4) inch diameter trees.
- (g) JUNK CARS shall mean junk cars and/or motor vehicles, or motor vehicle parts such as doors, fenders, engines, etc.
- (h) HAZARDOUS WASTE shall mean dangerous materials or substances such as cleaning fluids, paints, explosives, acids, caustics, poisons, drugs, radioactive materials, infected materials, and similar wastes and any additional substances, items, or materials as determined by State of Connecticut, Department of Environmental Protection.
- (i) RECYCLING MATERIALS shall mean all materials capable of being salvaged for recycling purposes, including, but not limited to, crankcase oil; newspaper - magazines; cardboard; glass, metals, etc. The Town Engineer may from time to time amend the list of materials to be considered recycling materials to be included in this definition and regulated pursuant to this ordinance.

## Section 2. DAYS AND HOURS OF OPERATION

THE WASTE TRANSFER STATION shall be open for acceptance of solid waste on such days and for such hours as determined by resolution of the Town Council. The schedule of days and hours of operation shall be posted in the respective offices of the Town Clerk, Town Manager and Town Engineer.

## Section 3. WATERTOWN - SOLID WASTE

THE SOLID WASTE TRANSFER STATION shall accept solid waste ONLY from residents and businesses located, and generating said solid waste, within the Town.

It shall be expressly prohibited for any person to deposit, or attempt to deposit, solid waste of any nature, generated from any location outside of the Town of the SOLID WASTE TRANSFER STATION.

EXCEPTION: Written authorization signed by the Town Manager.

## Section 4. REGULATIONS OF SOLID WASTE TRANSFER STATION

The Town Engineer shall, upon concurrence of the Town Council, prepare and post regulations concerning operation of the SOLID WASTE

TRANSFER STATION. Said regulations shall include designation of specific areas for each category of SOLID WASTE and recycling materials.

It shall be expressly prohibited for any person to deposit or attempt to deposit, solid waste of any nature in any area of the SOLID WASTE TRANSFER STATION in violation of the posted regulations.

Section 5. PROHIBITED MATERIALS

Hazardous waste shall NOT be deposited at the SOLID WASTE TRANSFER STATION at any time under any circumstances. Junk cars and/or motor vehicles of any kind shall not be deposited at the SOLID WASTE TRANSFER STATION at any time under any circumstances.

Section 6. TRESPASSING

No person shall enter or be permitted to enter the SOLID WASTE TRANSFER STATION property at any time except during normal operating hours.

EXCEPTION: Prior approval of the Town Engineer.

Section 7. TIPPING FEES

Tipping fees or user fees for the SOLID WASTE TRANSFER STATION shall be established, and may be amended from time to time, by resolution of the Town Council.

Section 8. PENALTY

Violations of any section or provision of this Ordinance, or of any regulation duly adopted and posted pursuant to this Ordinance, shall be punishable by a fine of not more than ONE HUNDRED DOLLARS (\$100.00).

Dated at Watertown, Connecticut this 1st day of July, 1985.

Barbara Hymel, Chairman  
Watertown Town Council

Readopted by Town Council  
at Regular Meeting of  
July 1, 1985

**APPENDIX B**

**U.S. EPA IDENTIFICATION NUMBERS  
FOR THE FLOOD CONTROL PROJECTS**

**(List furnished by U.S.EPA)**

DISTRICT

FEB 1951

INS # INSTALLATION NAME

CT

## NEW ENGLAND DISTRICT

00047	ANSONIA-DERRY LOC PROT	CT
00048	CH BET NORSO BROS DLS	VT
00049	CHATHAM STAGE HARBOR	MA
00050	DEPOT BOAT PROTECTION	CT
00051	DICKEY/LINCOLN SCH LAKE	ME
00053	PAWTUCKET COVE	RI
00054	PLYMOUTH-LONG BEACH DIK	MA
09607	MANSFIELD HOLLOW LAKE	CT
09813	BIRCH HILL DAM	MA
09814	CAPP (30) CANAL	MA
09815	KNIGHTVILLE DAM	MA
09817	TULLY LAKE	MA
09897	BLACKWATER RESERVOIR	NH
09898	EDWARD MADBUELL LAKE	NH
09899	FRANKLIN FALLS RESERV	NH
09900	SURRY MOUNTAIN LAKE	NH
10143	UNION VILLAGE RESERVOIR	VT
11421	KENNERBUNK RIV JETTY	ME
12528	BALL MOUNTAIN RESERVOIR	VT
12533	HOPKINTON-EVERETT DAMS	NH
12535	NORTH SPRINGFIELD LAKE	VT
12541	THOMASTON DAM	CT
12542	TOWNSHEND LAKE	VT
12545	HODGES VILLAGE DAM	MA
12566	EAST BRIMFIELD LAKE	MA
12567	BUFFUMVILLE RESERVOIR	MA
12568	BARRE FALLS RESERVOIR	MA
12572	UTTER BROOK RESERVOIR	NH
12580	NORTH HARTLAND LAKE	VT
13528	WEST HILL DAM	MA
13653	WESTVILLE LAKE	MA
14726	LITTLEVILLE LAKE	MA
14746	RELAY STATION BUILDING	MA
15492	HANDOCK BROOK LAKE	CT
15503	NORTHFIELD BROOK LAKE	CT
15512	WEST THOMPSON LAKE	CT
16060	CHICOPEE FALLS LOCAL PR	MA
16061	CUNANT BROOK DAM	MA
16074	RELAY STATION BUILDING	CT
16080	ST JUDITH BREAKWATER SI	RI
19336	COLEBROOK RIVER LAKE	CT
19337	HOP BROOK LAKE	CT
19338	RELAY STATION BUILDING	VT
19808	BLACK ROCK LAKE	CT
19817	COLEBROOK RIVER LAKE	MA
32394	CHARLES RIVER NVS	MA

**APPENDIX C**

**STATE HAZARDOUS WASTE PROGRAM  
SMALL QUANTITY GENERATOR**



**If You Are In These Kinds Of Business, YOU May Be An SQG (Small Quantity Generator) . . .**

- Cleaning Agents & Cosmetics
- Construction
- Funeral Services
- Laboratories
- laundries & Dry Cleaners
- Manufacturing – Textiles, Plastics, Leather, Chemicals, Furniture, Metal
- Pesticide End Users & Application Services
- Photo Processing
- Printing
- Vehicle Maintenance

**These Businesses Often Generate Hazardous Wastes Such As . . .**

- Acids/Bases
- Cyanide Wastes
- Flammable Materials
- Heavy Metals/Inorganics
- Materials That Bubble or Fume on Contact With Water
- Materials That Burn or Itch Upon Contact With The Skin
- Pesticides
- Printing Inks, Paints, Dyes
- Solvents, Cleaning Fluids, Thinners

**If You Generate 100 to 1000 Kilograms Per Month of Hazardous Waste, You Are A Small Quantity Generator.** (If you generate less than 100 kilograms per month, you are a "Conditionally Exempt Small Quantity Generator")

**If You Are A Small Quantity Generator You Are Required By Law To Properly Manage Your Wastes From "Cradle To Grave".**

**Are You A Small Quantity Generator Of Hazardous Waste?**



FOR MORE INFORMATION, CONTACT:

**The Hazardous Waste Management Section**



Connecticut Department of Environmental Protection  
Hartford, Connecticut 06106  
(203) 566-8844 or 5019

**If You Are A 100-1000 Kg Per Month Small Quantity Generator In The State Of Connecticut You Must . . .**

- Make a hazardous waste determination – which of your waste streams are hazardous?\*
- Obtain a U.S. EPA Identification Number.
- NOT accumulate over 1000 kg of hazardous waste on site—unless you comply with the large generator (over 1000 kg) requirements.
- Submit an Annual Report to the State telling how much hazardous waste was generated during the year and where it went.
- Store your waste for no longer than 180 days before shipping it for treatment or disposal.
- Store your hazardous waste in the proper containers.\*
- Properly label the containers.
- Plan for any emergencies that could occur.
- Post emergency telephone numbers and the location of emergency equipment.
- Train personnel about proper waste handling and emergency procedures.
- Use permitted waste transporters with EPA ID #'s.\*
- Use permitted waste receiving facilities with EPA ID #'s.\*
- Prepare wastes for shipment according to U.S. Department of Transportation requirements.
- Legibly and correctly fill out a Manifest and use it for each shipment off-site.
- Keep signed copies of manifest on file.

As a SQG, YOU are responsible for protecting public health and safety and the environment. By complying with the regulations, you will be doing just that.

\* Also required for "Conditionally Exempt" SQG's.

(Blank page)



**STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

79 Elm Street  
Hartford, CT 06106  
(203) 424-3023

---

Bureau of Waste Management

# Small Quantity Generator Guidance

For Hazardous Waste Handlers



March 1, 1993  
(Revised June 1, 1995)

SIDNEY J. HOLBROOK, COMMISSIONER

## Preface

This guidance document does not and is not intended to replace or supersede either Regulations of Connecticut State Agencies ("RCSA"), Sections 22a-449(c)-100 through 110 and 22a-449(c)-11 (Hazardous Waste Management Regulations) or the Code of Federal Regulations Title 40 ("40 CFR"), Parts 260 through 271.

The State of Connecticut Department of Environmental Protection ("DEP") advises the regulated community not to rely solely upon the information presented in this guidance document, but to read all applicable regulations set forth in both the Regulations of Connecticut State Agencies, Sections 22a-449(c)-100 through 110 and 22a-449(c)-11 (Hazardous Waste Management Regulations) and the Code of Federal Regulations, Title 40, Parts 260 through 271, and to keep informed of all subsequent revisions or amendments to these regulations.

DEP encourages generators to contact the Waste Engineering and Enforcement Division with any questions regarding this guidance document or regarding the requirements for small quantity generators of hazardous waste. If, after reading these guidelines, you have questions or would like to obtain a copy of the Hazardous Waste Management Regulations or copies of other publications, please do not hesitate to contact the Bureau of Waste Management at the telephone numbers provided below.

### Telephone Numbers

State of Connecticut  
Department of Environmental Protection  
Waste Engineering and Enforcement Division  
Bureau of Waste Management

- Enforcement & General Information (203) 424-3023
  - District I (Northwest Connecticut)
  - District II (Eastern Connecticut)
  - District III (Southwest Connecticut)
  - (Refer to Attachment 1: District Map of CT)
- Permitting & General Information (203) 424-3372
- Transporter Permitting & General Information (203) 424-3372
- Manifest Ordering Information (203) 424-3375

### **Acknowledgements**

This guidance document is the result of the collaborative efforts of individuals from the Department of Environmental Protection and the Region I U.S. Environmental Protection Agency. Christie Flowers of the Waste Engineering and Enforcement Division of the Bureau of Waste Management authored, edited and coordinated production of this document. Other individuals also contributed substantially to its development by providing technical information and review, and their valuable contributions are gratefully acknowledged.

Connecticut Department of Environmental Protection  
Waste Management Bureau  
Waste Engineering and Enforcement Division

**SMALL QUANTITY GENERATOR GUIDANCE**  
**Table of Contents**

**TOPIC** **PAGE NUMBER**

---

Executive Summary of Small Quantity Generator Requirements	i
Purpose and Structure of Guidance Document .....	ii
<b>A. Definition: Small Quantity Generator ("SQG") .....</b>	<b>1</b>
<b>B. Regulatory Requirements Applicable to SQGs .....</b>	<b>2</b>
1. Hazardous Waste Determination .....	2
2. EPA Identification Numbers .....	3
3. Accumulation Amount/Accumulation Time .....	4
4. Manifests .....	5
5. Land Disposal Restrictions .....	5
6. Recordkeeping and Reporting .....	6
6.1 Recordkeeping .....	6
6.2 Biennial Reporting .....	6
6.3 Exception Reporting .....	7
6.4 Additional Reporting .....	7
7. General Inspection Requirements .....	8
8. Emergency Planning .....	10
9. Personnel Training .....	11
10. Preparedness and Prevention .....	12
11. Pre-Transport Requirements .....	13
12. Use and Management of Containers .....	14
13. Tank Systems .....	16
14. Use of Permitted Transporters .....	18
15. Closure Performance Standards .....	19
<b>C. Episodic Generators of Hazardous Waste .....</b>	<b>20</b>
<b>D. Waste Minimization and Pollution Prevention .....</b>	<b>21</b>
Additional Reference Sources .....	24

**Attachments**

1. District Map of Connecticut
2. Guidance: Selection of a Treatment, Storage, or Disposal Facility
3. Example: Properly Completed Manifest
4. Sample Inspection Log Format and List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule
5. Example: Hazardous Waste Container Markers and DOT Guide: Hazardous Materials

**Warning Placards and Labels**

6. **Examples of Potentially Incompatible Waste**
7. **Request for Change Form (Status Change)**
8. **Pollution Prevention Statement and Reference Sheet**
9. **Glossary of Acronyms and Terms**

## Executive Summary of Small Quantity Generator Regulatory Requirements

A Small Quantity Generator ("SQG") is someone who generates between 100 and 1000 kilograms (220 and 2200 pounds or approx. 26 and 260 gallons) of hazardous waste per month, provided that the total amount of acute hazardous waste generated does not exceed 1 kilogram per month.

If you are an SQG, you must comply with the following hazardous waste management regulations:

- o Perform a Hazardous Waste Determination to determine if your wastes are regulated as hazardous wastes.
- o Notify of hazardous waste activity and obtain an EPA Identification Number.
- o Properly manage your hazardous wastes at your facility by:
  - not accumulating greater than 1000 kg (2200 lb) of hazardous waste on site;
  - never accumulating hazardous waste on site for more than 180 days (or for more than 270 days, if waste is to be transported >200 miles);
  - performing inspections of your hazardous waste management areas (including containers and tanks) and of your safety and emergency equipment, recording the inspection results in a log, and taking prompt and immediate action to correct any deficiencies found;
  - preparing for an emergency by designating an emergency coordinator, posting emergency information next to the telephone, and equipping your facility with the proper communication equipment and safety and emergency equipment;
  - training your employees to ensure they are familiar with proper waste handling and emergency procedures; and
  - properly managing containers and tanks used for the storage of hazardous waste.
- o Ensure the proper off-site disposal of your hazardous waste by:
  - using only permitted transporters and permitted waste receiving facilities which have EPA Identification Numbers;
  - preparing a uniform hazardous waste manifest to accompany your off-site shipment of waste;
  - complying with Land Disposal Restriction requirements; and
  - packaging, labeling, marking, and placarding your waste in accordance with DOT requirements before offering it for transport.
- o Maintain proper records to document your hazardous waste management activities and submit Biennial Reports to the State.
- o Make a good faith effort to minimize your waste generation and to select the best waste management method that is available to you that you can afford.

## Purpose and Structure of Guidance Document

**Purpose:** The purpose of this guidance document is to clarify the regulatory requirements for Small Quantity Generators ("SQGs") pursuant to the July 17, 1990 revision of Connecticut's Hazardous Waste Management Regulations (Regulations of Connecticut State Agencies ("RCSA") Sections 22a-449(c)-100 through 110). In the 1990 regulatory revision, Connecticut incorporated all of the federal requirements for SQGs, as set forth in Title 40 of the Code of Federal Regulations ("40 CFR"). In some cases, Connecticut's regulations for SQGs are more stringent. Such instances are described in this guidance document.

**Document Structure:** This guidance document is comprised of four major sections: A. Small Quantity Generator Definition; B. Regulatory Requirements Applicable to Small Quantity Generators; C. Episodic Generators of Hazardous Waste; and D. Waste Minimization and Pollution Prevention. A one page executive summary of the SQG requirements is also included and there are a number of attachments which provide additional information and examples for your use or reference. For your quick reference, Attachment 9 provides a Glossary of Acronyms and Terms.

For your ease of use and reference, the following example explains the structure of the Section B. Regulatory Requirements:

*Example:*

*Requirement-->*     **1. Hazardous Waste Determination**

*DEP Regulation Citation-->*     **RCSA 22a-449(c)-102(a)**

*Federal Regulation Citation-->*     **40 CFR 262.11**

The paragraph or text immediately following the section title will provide a summary of the regulatory requirement (in some cases the regulatory language may be used directly).

### **Discussion**

*The "Discussion" section may:*

- o highlight areas where Connecticut's regulations are more stringent or the same as EPA's (Federal) requirements;*
- o indicate points of contact and/or provide phone numbers to obtain additional information, forms, etc.;*
- o specify recordkeeping requirements applicable to the section;*
- o further explain the regulatory requirement; and/or*
- o suggest "best management practices".*

## A. Definition

### Small Quantity Generator ("SQG")

RCSA 22a-449(c)-100(c) and -102(c)(1)  
RCSA 22a-449(c)-100(b)(1)(B)<sup>1</sup>

A generator is a small quantity generator in a calendar month if he generates more than 100 but less than 1000 kilograms (between 220 and 2,200 pounds or approximately 26 to 260 gallons) of hazardous waste in that calendar month, provided that such waste does not include more than:

- (a) a total of one kilogram of acute hazardous wastes listed in 40 CFR Sections 261.31, 261.32, or 261.33(e); or
- (b) a total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean up of a spill, into or on any land or water, of any acute hazardous wastes listed in 40 CFR Sections 261.31, 261.32, or 261.33(e), provided that there is no more than a total of one kilogram of acute hazardous waste contained in that residue, soil, waste or debris.

#### CONVERSION CHART

KILOGRAMS	POUNDS	GALLONS *	55 GAL. DRUMS
100 kg	220 lbs.	= 26 gal.	= 1/2 drum
1000 kg	2200 lbs.	=260 gal.	= 3 to 5 drums

\* The gallon equivalents will vary according to the density (weight per volume, e.g., lbs./gal) of your waste.

#### Discussion

*As Connecticut limits accumulation on-site at any one time to 1000 kilograms, Connecticut's definition is more stringent than the Federal requirements. (Refer also to Section 3 "Accumulation Amount".)*

*Connecticut regulates any handler who generates greater than one kilogram of acute hazardous waste contained in a residue, soil, waste, or debris, resulting from the clean up of a spill, as a large quantity generator ("LQG").*

*For generators who do not generate hazardous waste at a uniform or consistent rate, please refer to the discussion of "Episodic Generator" in this document.*

---

Pursuant to RCSA Section 22a-449(c)-100(b)(1)(B), Connecticut does not incorporate the federal SQG definition in 40 CFR 260.10.

## B. Regulatory Requirements Applicable to Small Quantity Generators

RCSA Section 22a-449(c)-102(c)(2) states that SQGs are required to meet all requirements applicable to LQGs unless specifically excluded. As this language has caused some confusion within the regulated community, this section of the guidance document outlines regulatory requirements applicable to SQGs in Connecticut.

### 1. Hazardous Waste Determination

RCSA 22a-449(c)-102(a)  
40 CFR 262.11

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the methods specified in 40 CFR 262.11. In short,

- first you must determine if the waste is excluded from regulation under 40 CFR 261.4. If the material is not excluded,
- then you must determine if the waste is listed as hazardous in Subpart D of 40 CFR Part 261. If the waste is not listed in Subpart D of 40 CFR Part 261,
- then you must determine if the waste is identified in Subpart C of 40 CFR Part 261 by either testing the waste in accordance with Subpart C of 40 CFR Part 261 (or 40 CFR 260.21) or by applying knowledge of the hazard characteristic of the waste in light of the materials or processes used.

#### Discussion

*Connecticut's hazardous waste determination requirements are the same as the Federal and are the same for both SQGs and LQGs.*

*A generator must keep records of any test results, waste analyses, or other determinations made in accordance with 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. (40 CFR 262.40(c))*

*If hazardous waste determinations are performed by applying knowledge, it is highly advisable that the generator retain on-site in his files all supporting data used to make this determination. Connecticut may require this by regulation in the future.*

*Connecticut has available copies of excerpts from 40 CFR 261 Subparts C and D-- (Characteristics and Lists of Hazardous Wastes). To obtain a copy, please contact DEP using one of the District telephone numbers listed in the Preface of this document.*

## 2. EPA Identification Numbers

RCSA 22a-449(c)-102(a)(1)  
40 CFR 262.12

A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA Identification Number from the Commissioner.

A generator who has not received an EPA Identification Number may obtain one by applying to the Commissioner using EPA Form 8700-12 (Notification of Regulated Waste Activity). Upon receiving the request the Commissioner will assign an EPA Identification Number to the generator.

A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA Identification Number. (Please refer to Section 14: Use of Permitted Transporters for guidance on the selection of a transporter and refer to Attachment 2 for guidance on the selection of a treatment, storage or disposal facility.)

### Discussion

*This requirement is the same as the Federal requirement and is the same requirement as that for an LQG.*

*A generator may obtain an EPA Form 8700-12 (Notification of Regulated Waste Activity) by contacting the DEP Waste Engineering and Enforcement Division at (203) 424-3372.*

*There may be a slight time delay in processing your application and assigning your permanent Identification Number. Should you need to ship wastes off-site during the interim time period, you may obtain a 'Temporary' Identification Number by contacting the DEP at (203) 424-3372. Please note: Temporary Identification Numbers are only issued by the Department between the hours of 9:00 a.m. and 12:00 noon on Mondays, Wednesdays, and Fridays. Temporary Identification Numbers are effective for a 6-month time period.*

### 3. SQG Accumulation Amount/Accumulation Time

RCSA 22a-449(c)-102(a)(1), -102(a)(2)(F) and -102(a)(2)(G)  
40 CFR 262.34(d)(1), 40 CFR 262.34(e) and 40 CFR 262.34(f)

A Small Quantity Generator may accumulate hazardous waste on-site for 180 days or less (or for 270 days, if the waste is to be transported over a distance of 200 miles for off-site treatment, storage or disposal) provided that the quantity of waste never exceeds 1000 kilograms (or 2200 pounds). An SQG who accumulates hazardous waste in quantities exceeding 1000 kilograms is a Large Quantity Generator of hazardous waste and must comply with all regulatory requirements applicable to large quantity generators.

#### CONVERSION CHART

KILOGRAMS	POUNDS	GALLONS *	55 GAL. DRUMS
100 kg	220 lbs.	≈ 26 gal.	≈ 1/2 drum
1000 kg	2200 lbs.	≈ 260 gal.	≈ 3 to 5 drums

\* The gallon equivalents will vary according to the density (weight per volume, e.g., lbs./gal) of your waste.

#### Discussion

As Connecticut limits on-site accumulation to 1000 kilograms, the State requirements are more stringent than the Federal (which allow up to 6000 kilograms to be accumulated on-site during a 6-month period). Because Connecticut limits accumulation to only 1000 kilograms, should an SQG exceed this 1000 kilogram amount (but not exceed 6000 kilograms), the SQG will be operating as a large quantity generator. Large quantity generators may not accumulate hazardous waste on-site for more than 90 days. If greater than 1000 kilograms of hazardous waste are accumulated on-site for greater than 90 days, the generator is the operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of Part 270.

And, if an SQG accumulates hazardous waste in quantities exceeding 6000 kilograms or if an SQG accumulates hazardous waste for a time-frame exceeding 180 (270) days, by Federal regulation, the generator is also the operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of Part 270. (The generator may apply for an extension of up to 30 days if hazardous wastes are to remain on-site for longer than 180 days (or, 270 days) due to unforeseen, temporary, and uncontrollable circumstances. If the generator finds it necessary to apply for an extension, such requests must be made in writing before the 180 day (270 day) accumulation period has expired. Extensions may be granted at the discretion of the Commissioner on a case-by-case basis.)

## 4. Manifest

RCSA 22a-449(c)-100(c) (Definition)  
RCSA 22a-449(c)-102(a), 22a-449(c)-102(b)(3)  
40 CFR 262.20(a)-(d) and 40 CFR 262.21, 22, and 23

A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a manifest. (An example of a properly completed manifest is provided in Attachment 3.)

### Discussion

*Connecticut's manifest requirements are more stringent than the Federal regulations. Connecticut uses an eight-part manifest form; generators must complete "optional" information items A-K in accordance with manifest instructions. SQGs must comply with all manifest requirements applicable to LQGs. In Connecticut, SQGs are not given an exemption from manifesting requirements if they have a contractual agreement with a reclaimer.*

*A generator must keep a copy of each manifest signed in accordance with 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. (40 CFR 262.40(a))*

*Generators may obtain manifest forms for their use by contacting the DEP Waste Planning and Standards Division at (203) 424-3375.*

## 5. Land Disposal Restrictions

RCSA 22a-449(c)-108  
40 CFR Part 268

The Land Disposal Restriction ("LDR") requirements identify hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.

### Discussion

*LDR requirements for LQGs and SQGs are the same. Generators are urged to read these regulations. An EPA document entitled "Land Disposal Restrictions: Summary of Requirements" is available from DEP and provides a brief summary of these regulations.*

## 6. Recordkeeping and Reporting

Recordkeeping and Reporting Requirements for SQGs include those requirements for recordkeeping, biennial reporting, exception reporting, and additional reporting.

### 6.1 Recordkeeping

RCSA 22a-449(c)-102(a)(2)(I) and -102(c)(2)  
40 CFR 262.44(a) and 40 CFR 262.40

SQGs have specific recordkeeping requirements for Manifests, Biennial Reports, Exception Reports, and Hazardous Waste Determinations. The specific requirements are detailed in the respective discussion sections of this guidance document.

The periods of retention referred to above are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Commissioner.

### 6.2 Biennial Reporting

RCSA 22a-449(c)-102(a)(2)(H) and (I)  
40 CFR-262.44 and 40 CFR 262.41

A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit three copies of a Biennial Report to the Commissioner by March 1 of each even numbered year. The Biennial Report must be submitted on a form prescribed by the Commissioner.

#### Discussion

*This reporting requirement for SQGs is more stringent than the Federal requirement and is the same requirement as that for LQGs. However, the SQG Biennial Report form is a much simpler form than that for LQGs.*

*A generator must keep a copy of each completed Biennial Report for a period of at least three years from the due date of the report. (40 CFR 262.40(b))*

### **6.3 Exception Reporting (Manifest)**

RCSA 22a-449(c)-102(a)(1) and -102(a)(2)(I)  
40 CFR 262.42(b) and 262.44(a)-(b)

An SQG who does not receive a copy of the manifest with the hand-written signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the Commissioner.

#### **Discussion**

*Connecticut's exception reporting requirements are the same as the Federal requirements for SQGs (one exception is noted below)--both of which are less stringent than those for LQGs in that SQGs have 60 days to report exceptions, while LQGs have only 35 days. However, Connecticut is more stringent in that SQGs must retain copies of exception reports for a period of three years from the due date of the report. (40 CFR 262.40(b))*

### **6.4 Additional Reporting**

RCSA 22a-449(c)-102(a)(2)(I) and -102(c)(2)  
40 CFR 262.44(c) and 40 CFR 262.43

The Commissioner may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in 40 CFR Part 261. (Generators must furnish such additional reports as requested by the Commissioner.)

## 7. General Inspection Requirements

RCSA 22a-449(c)-102(b)(2)  
40 CFR 265.15

22a-449(c)-102(a)(1)  
40 CFR 262.34(a)(1)  
40 CFR 265.174 (Containers)  
40 CFR 265.195 (Tanks)

22a-449(c)-102(c)(2)

In summary, a generator must:

- (a) Inspect his facility for any deficiencies which may cause or lead to a release of hazardous waste or may pose a threat to human health;
- (b) Develop and follow a written schedule for inspecting all of the following:
  - monitoring equipment
  - safety and emergency equipment
  - security devices
  - operating and structural equipment
  - containers
  - container storage areas
  - containment systems
  - tanks and ancillary equipment
  - loading and unloading areas.

The written inspection schedule must:

- Be kept at the facility;
  - Identify the types of problems to be looked for during an inspection; and
  - Specify the frequency of inspection for all items on the schedule. (At a minimum, containers, container storage areas, containment systems, and battery storage areas must be inspected weekly; tanks and loading/unloading areas subject to spills must be inspected daily; and, it is advised that safety and emergency equipment be inspected at least monthly.)
- (c) Remedy any deterioration or malfunction of equipment or structures which the inspection reveals;
  - (d) Record inspections in an inspection log or summary.

### Discussion

*Connecticut's inspection requirements for SQGs and LQGs are more stringent than EPA's.*

*In devising an inspection log format, the generator should be aware that the inspection summary must include the date and time of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs or other remedial actions. It is highly advised that the inspection log enumerate all*

*items to be checked during an inspection; this would help to ensure consistency of inspections and help to ensure that no items or potential problems are overlooked during an inspection. For your assistance, a Sample Log Format is included in Attachment 4; you may use this Sample as a model in developing an inspection log specific to your facility.*

*Also included as Attachment 4 is a 'List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule'; this may also be of use to you in developing your inspection plan.*

## 8. Emergency Planning

RCSA 22a-449(c)-102(a)(1)  
40 CFR 262.34(d)(5)

The generator must comply with the following emergency planning requirements:

- (a) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified below. This employee is the "emergency coordinator".
- (b) The generator must post the following information next to the telephone:
  - The name and telephone number of the emergency coordinator;
  - Location of fire extinguishers and spill control material, and, if present, fire alarm; and
  - The telephone number of the fire department, unless the facility has a direct alarm.
- (c) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:
  - In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
  - In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
  - In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:
    - o The name, address, and U.S. EPA Identification Number of the generator;
    - o Date, time, and type of incident (e.g., spill or fire);
    - o Quantity and type of hazardous waste involved in the incident;
    - o Extent of injuries, if any; and
    - o Estimated quantity and disposition of recovered materials, if any.

### Discussion

*Connecticut's emergency planning requirements are the same as the Federal; these requirements are less stringent than those for LQGs as no formal written contingency plan is required for SQGs.*

*Generators are advised to post emergency information next to each telephone in their facility--most importantly, next to all telephones located in waste handling areas.*

## 9. Personnel Training

RCSA 22a-449(c)-102(a)(1)

40 CFR 262.34(d)(5)(iii)

The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

### Discussion

*Connecticut's personnel training requirements are the same as the Federal requirements. As no written records are required, these requirements are less stringent than the LQG requirements.*

## 10. Preparedness and Prevention

RCSA 22a-449(c)-102(a)(1)  
40 CFR 262.34(d)(4)  
40 CFR 265 Subpart C

In summary, a generator must:

- (a) Maintain and operate the facility to minimize the possibility of fire, explosion, or any releases;
- (b) Equip the facility with:
  - *internal communications or alarm system to provide immediate emergency instruction to facility personnel;*
  - *a telephone (immediately at the scene of operations) or a hand-held two-way radio, capable of summoning assistance from local authorities;*
  - *portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment; and*
  - *water at adequate volume and pressure, or foam producing equipment, or automatic sprinklers, or water spray systems.*
- (c) Test and maintain all equipment to assure its operation in time of emergency;
- (d) Provide immediate access to internal alarms or emergency communication devices to facility personnel involved in hazardous waste handling operations;
- (e) Maintain aisle space to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency; and
- (f) Attempt to make arrangements with police and fire departments, State and local emergency response teams, emergency response contractors, and local hospitals.

### Discussion

*This requirement is the same as the Federal requirement and is the same as the requirement for LQGs.*

## 11. Pre-Transport Requirements

RCSA 22a-449(c)-102(a)(1) and -102(c)(2)  
40 CFR 262 Subpart C (262.30, 31, 32, 33)

Before transporting hazardous waste or offering hazardous waste for transport, generators must package, label, mark and placard the waste in accordance with the applicable Department of Transportation ("DOT") regulations under 49 CFR Parts 172, 173, 178, and 179.

### Discussion

*Connecticut requires SQGs to comply with pre-transport requirements applicable to LQGs; this is more stringent than Federal requirements.*

*Attachment 5 provides examples of properly completed hazardous waste markers for containers of listed and characteristic hazardous wastes. Attachment 5 also provides summary guides to DOT Hazardous Materials Warning Placards and DOT Hazardous Materials Labels. You are urged to keep informed of any changes in DOT regulations.*

## 12. Use and Management of Containers

RCSA 22a-449(c)-102(a)(1), -102(a)(2)(B), -102(a)(2)(C), and -102(c)(2)  
40 CFR 262.34(d)(2), 262.34(d)(4), 262.34(a)(2)-(3)  
40 CFR 265 Subpart I, 40 CFR 264.175

Generators must comply with the following management requirements for containers holding hazardous waste:

- (a) Ensure that containers holding hazardous waste are in good condition and are not leaking. (If a hazardous waste container is leaking or is otherwise in poor condition (bulging, rusted/corroded, etc.), the contents of the container should be transferred to a container that is in good condition or the container should be managed in some other way that complies with the regulations.)
- (b) Ensure that containers holding hazardous waste are made of or lined with material which will not react with or are otherwise compatible with the waste to be stored. If the waste is incompatible with the container, the ability of the container to contain the waste may be impaired.
- (c) Ensure that containers holding hazardous waste are closed during storage, except when it is necessary to add/remove waste.
- (d) Ensure that containers holding hazardous waste are not opened, handled, or stored in a manner which may cause the container to rupture or leak.
- (e) Ensure that containers holding hazardous waste and areas where containers are stored are inspected on a weekly basis. Containers should be inspected for at least the following:
  - o Leaks,
  - o Deterioration caused by corrosion or other factors,
  - o Compliance with the Hazardous Waste Management Regulations:
    - ▶ Are the containers closed?
    - ▶ Are the containers marked?
    - ▶ Does the marker include the words "Hazardous Waste" and other words to identify the contents, such as the chemical name?
    - ▶ Are the markers legible?
    - ▶ Are the markers visible for inspection?
    - ▶ Are the containers marked with a date of accumulation?
    - ▶ Have the containers been on-site >180 days?
    - ▶ Does the amount of waste on-site exceed 1000 kilograms?
    - ▶ Is adequate aisle space maintained between containers?
    - ▶ Are the containers stored on an impermeable base and within a berm?
    - ▶ Are there cracks in the base or berm?
    - ▶ Is there evidence of spills or other accumulation in the berm?
    - ▶ Are incompatible wastes/materials separated by means of a dike, wall, or berm?
    - ▶ and so forth ....

(And, the generator must comply with all other applicable inspection requirements; refer to Section 7: General Inspection Requirements. Attachment 4 provides a Sample Inspection Log for Hazardous Waste Containers.)

- (f) Ensure that containers holding hazardous waste are managed in compliance with the special requirements for incompatible wastes. The purpose of such special requirements is to prevent the potential for fire, explosion, gaseous emission, or other discharge of hazardous waste which could result from the mixing of incompatible wastes or materials or which could result if containers break or leak. Special requirements include:
- Incompatible wastes or incompatible wastes and materials must not be placed in the same container. (Attachment 6 provides Examples of Potentially Incompatible Waste (40 CFR Part 265 Appendix V).)
  - Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.
  - A storage container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, or open tanks must be separated or protected from the other materials by means of a dike, berm, wall or other device.
- (g) Ensure that containers holding hazardous waste are stored on an impermeable base which is bermed to prevent leakage in case of a spill or release. The base must be free of gaps or cracks and must be sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed. Collected material must be removed in a timely manner to prevent overflow; collected material must be managed and disposed of in accordance with all applicable Federal, State, and local regulations (i.e., if the collected material is a hazardous waste, it must be managed in accordance with the Hazardous Waste Management Regulations.)
- (h) Ensure that containers holding hazardous waste are clearly marked with the date upon which each period of accumulation begins and are clearly marked with the words "Hazardous Waste" and other words that identify the contents of the container, such as the chemical name. Such markings must be legible and visible for inspection on each container.

**Discussion**

*For the most part, SQGs must comply with the same container management requirements as LQGs. Connecticut has additional marking requirements above those required by EPA and Connecticut requires SQGs to comply with secondary containment requirements. In both these aspects, Connecticut is more stringent than EPA.*

### 13. Tank Systems

RCSA 22a-449(c)-102(a)(1), -105(a)(1)(C)-(D), -105(a)(2)(I) and -105(e)  
40 CFR 262.34(a)(1), 262.34(a)(3), 262.34(d)(3)-(d)(4) and 265.201

Generators must comply with General Operating Requirements for Tanks, Inspection Requirements for Tanks, Special Requirements for Ignitable or Reactive Waste, and Special Requirements for Incompatible Wastes.

And, while being accumulated on-site, each tank must be labelled or marked clearly with the words "Hazardous Waste" and other words that identify the contents of the tank, such as the chemical name.

#### General Operating Requirements

- (a) Management of hazardous waste in a tank must be conducted such that:
- extreme heat or pressure, fire or explosion, or violent reaction are not generated;
  - uncontrolled toxic mists, fumes, or dusts in sufficient quantities to threaten human health or in sufficient quantities to pose a risk of fire or explosions are not produced;
  - structural integrity of the device or facility containing the waste is not damaged; or
  - human health and the environment is not threatened through other like means.
- (b) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.
- (c) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow, such as a waste feed cutoff system or by-pass system to a stand-by tank. (This system is intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., malfunctions, cracks, etc.).)

#### Inspection Requirements

- (a) Daily Inspections must be performed for each of the following, where present:
- discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems, to ensure that all such equipment is in good working order;
  - data gathered from monitoring equipment, such as pressure and temperature gauges, to ensure the tank is being operated according to its design; and
  - level of waste in the tank.
- (b) Weekly Inspections must be performed for each of the following, where present:
- construction materials of the tank to detect corrosion or leaking of fixtures or seams and

- construction materials of the discharge confinement structures (e.g., dikes) and the areas immediately surrounding these structures to detect obvious signs of leakage (e.g., wet spots or dead vegetation).

### **Closure Requirements**

Upon closure of the facility (or discontinuing the use of a tank for the management of hazardous waste), the generator must remove all hazardous waste from the tank, from the discharge control equipment, and from the discharge confinement structures. Any waste consequently generated must be managed in accordance with all applicable local, State, and Federal regulations. (Refer to Section 15 regarding Closure Performance Standards.)

### **Special Requirements for Ignitable or Reactive Waste**

- (a) Generators who manage ignitable or reactive waste in a covered tank must comply with the buffer zone requirements for tanks in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981).
- (b) Ignitable or reactive waste must not be placed in a tank unless the following conditions are met:
  - The waste is treated, rendered, or mixed before or immediately after placement in a tank so that:
    - o the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste and
    - o 40 CFR 265.17(b) is complied with.
  - The waste is managed in such a way to protect it from any material or conditions that may cause the waste to ignite or react.

### **Special Requirements for Incompatible Wastes**

- (a) Incompatible wastes or incompatible wastes and materials must not be placed in the same tank. (Attachment 6 provides Examples of Potentially Incompatible Waste (40 CFR Part 265 Appendix V).)
- (b) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material.

### **Discussion**

*SQGs must comply with the Federal SQG tank requirements. However, Connecticut is more stringent in that SQGs are not allowed to manage hazardous wastes in uncovered tanks nor are SQGs allowed to place ignitable or reactive waste in a tank used solely for emergencies. Connecticut also has more stringent marking requirements.*

## 14. Use of Permitted Transporters

RCSA 22a-449(c)-102(b)(1) and -102(c)(2)

A generator shall not offer his hazardous waste to a transporter who does not have an EPA Identification Number and who does not have a current transporter permit pursuant to section 22a-449(c)-11 of the Regulations of Connecticut State Agencies.

### Discussion

*This is a Connecticut requirement which is the same for LQGs and SQGs.*

*A transporter will be handling your waste once it leaves your facility and is beyond your control, yet you are still responsible for the proper management of your waste. Therefore, careful selection of a hazardous waste transporter is very important.*

*Before selecting a transporter, you may wish to check with the following sources:*

Trade Associations. *A trade association that you are affiliated with may be familiar with transporters which typically handle waste generated by your industry.*

Better Business Bureau and Chamber of Commerce. *Such agencies may have records of any complaints registered against the transporter.*

CT DEP Bureau of Waste Management Waste Engineering and Enforcement Division (203/424-3372). *Our Division processes all transporter applications and issues permits to transporters to transport waste through the State of Connecticut. You should contact us to determine if a particular transporter has a current and valid permit, if the transporter is permitted to handle the type of waste you generate, and if the transporter is under any enforcement action by DEP. Our Division also has lists of transporters by waste category; lists are available upon request. (However, these lists are not intended to recommend any particular company identified on the list. You are urged to contact us to verify that the information on the list is current.)*

*You may also wish to check the transporter's reputation with its clients and any other companies dealing with the transporter.*

*After checking the sources suggested above, contact the transporter directly to verify they have an EPA ID Number and necessary insurance and to verify whether the transporter can or will handle your waste.*

*When the transporter arrives at your site, ask to see a copy of their transporter permit (they are required to keep a copy of their permit in their vehicle). Review the permit to verify that the waste types you are offering for transport are in fact identified.*

*Try to begin your selection process well in advance. Careful selection is very important.*

**15. Closure Performance Standard  
Disposal or Decontamination of Equipment, Structures, and Soils**

RCSA 22a-449(c)-102(a)(1) and -102(c)(2)  
40 CFR 262.34(a)(1)  
40 CFR 265.111 and 265.114

The generator must close the facility in a manner that minimizes the need for further maintenance and controls, minimizes, or eliminates escape of hazardous waste and hazardous constituents.

During partial and final closure periods, all contaminated equipment, structures, and soil must be properly disposed of or decontaminated.

**Discussion**

*Connecticut requires SQGs to comply with closure standards applicable to LQGs.*

*This requirement applies to areas at a generator's site where hazardous wastes are managed and handled (e.g. a tank, its associated piping and underlying containment system; a container storage area, including the containers, and the land or pad upon which they are placed).*

*If you are discontinuing the use of equipment or structures used for the management of hazardous waste or closing your facility, please contact the DEP Waste Engineering and Enforcement Division for guidance on the proper disposal or decontamination of any contaminated equipment, structures or soils.*

## C. Episodic Generators of Hazardous Waste

An "episodic generator" is a generator who does not generate hazardous waste at a uniform rate. Such "episodic generators" may generate, for example, less than 100 kg of hazardous waste during one month, quantities of 100-1000 kg during other months, or may periodically exceed 1000 kg in a month.

A generator may be subjected to different standards at different times, depending upon his generation rate in a given calendar month. Thus, a generator of less than 100 kg in one calendar month would be deemed a conditionally-exempt SQG ("CESQG") in that month, subject only to regulatory requirements applicable to CESQGs for that month. However, if in the next calendar month, the generator generates more than 100 kg but less than 1000 kg of hazardous waste, he is subject to all regulatory requirements applicable to SQGs. Likewise, if a generator generates greater than 1000 kg in any calendar month, he is deemed an LQG, subject to all applicable regulatory requirements for LQGs.

When applying for an EPA Identification Number, a generator should notify of hazardous waste activity for their "worst case" generator category. For example, if a generator will operate as an SQG during some months and as an LQG during other months, the generator should notify as an LQG. (Likewise, when completing Biennial Reports, generators should specify the worst-case generator status that they operated as during the applicable reporting period.)

DEP strongly advises episodic generators to document their waste generation and accumulation rates each month to support any claims of episodic generation. DEP will place burden of proof on the generator to demonstrate he was not subject to certain requirements at certain times.

If a generator determines that his generator status has changed permanently, he should request a status change. Such requests should be made in writing to:

*Attn: Inga Rubecka  
State of Connecticut Department of Environmental Protection  
Bureau of Waste Management  
Engineering and Enforcement Division  
79 Elm Street  
Hartford, CT 06106-5127*

Upon receipt of this request, the Waste Management Bureau will forward appropriate forms to the generator which must then be completed and returned to DEP. (A "Request for Change" form is included in Attachment 7 for your convenience.)

The status change information above does not apply to TSDFs. If a facility operated as a treatment, storage or disposal facility at any time since the effective date of RCRA, such facilities must close in accordance with 40 CFR 264 or 265 before their status may be changed and before such facilities may be released from complying with TSDF requirements. The only exception may be in the case of a "protective filer"-- who notified "just in case" but never treated, stored or disposed of hazardous waste after 11/19/80 (the effective date of the first RCRA regulations) and who filed the necessary certification forms.

For more information regarding episodic generators, refer to "Determination of Generator Status" (Federal Register /Volume 51, No. 56 /Monday, March 24, 1986 /Page 10153.)

## D. Waste Minimization and Pollution Prevention

RCRA Section 3001(d)

RCRA Section 3002(b)

A small quantity generator is required to make a good faith effort to minimize his waste generation and select the best waste management method that is available to him that he can afford.

### Discussion

In the Resource Conservation and Recovery Act, Congress declared a national policy: the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. By reducing the amount of hazardous waste generated, the need for treatment, storage, or disposal of hazardous waste will subsequently be minimized. This concept is **WASTE MINIMIZATION**.

Waste Minimization methods include:

Source reduction or POLLUTION PREVENTION. Prevent waste generation through improved maintenance practices, by modifying equipment, or changing production/manufacturing processes. Manufacturing process changes may include either eliminating a process that produces a hazardous waste or altering the process so that it no longer produces the waste.

Source separation (or segregation). Keep hazardous waste from contaminating nonhazardous waste through management practices that prevent the wastes from coming into contact with each other. This is the cheapest and easiest method of reducing the volume of hazardous waste to be disposed of, and is widely used by industry. In addition to reducing disposal costs, source separation reduces handling and transportation costs.

Reusing, recycling or recovering wastes. Recycling is the process of removing a substance from a waste and returning it to productive use. Generators commonly recycle solvents, acids, and metals.

Substitution of raw materials. Replace a raw material that generates a large amount of hazardous waste with one that generates little or no hazardous waste, which can substantially reduce the volume of hazardous waste generated. Substitution may offer the greatest opportunity for waste reduction.

Good housekeeping practices. Avoid spills. Properly manage waste in tanks and containers, etc.

**POLLUTION PREVENTION** activities are those that cause a net reduction in the use of materials or that cause a net reduction in the generation of waste. Pollution prevention begins at the source and results in reduced quantities of materials used, reduced toxicity of materials and waste products, and reduced quantities of waste. Congress passed the Pollution Prevention Act of 1990 and reinforced the Environmental Management Hierarchy below as national policy. Public Act 91-376 established pollution prevention as the public policy of Connecticut.

With regard to selecting the best waste management method that is available to and affordable for SQGs, "best" is defined as Number 1 below, with Number 4 being the least desirable waste management option.

1. Pollution should be prevented or reduced at the source wherever feasible (i.e., the top priority is source reduction);
2. Pollution that cannot be prevented should be recycled in an environmentally safe manner wherever feasible (on-site recycling activities are preferable);

3. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner wherever feasible; and
4. Disposal or other release into the environment should be employed only as a last resort and should be conducted in a manner that minimizes the impact to the environment to the greatest extent possible.

There are many benefits associated with pollution prevention. For example, you are an SQG--generating between 100 and 1000 kilograms per month of hazardous waste. You reduce the amount of hazardous waste you generate to below 100 kilograms per month. As a result of this reduction in your waste stream, you may achieve the following:

- Change in RCRA generator status from SQG to conditionally-exempt small quantity generator ("CESQG"); which in turn reduces regulatory requirements (the hazardous waste regulatory requirements for CESQGs are less stringent than those for SQGs);
- Cost savings (through more efficient use of resources and materials and reduced waste treatment and disposal costs);
- Improved competitive advantage;
- Potential reduction in hazardous-waste-related liabilities at both on-site and off-site treatment, storage and disposal facilities and for worker safety (the less hazardous waste you generate, the lower your potential for negative environmental impacts);
- Enhanced public image in the community and among your employees; and
- Being part of the POLLUTION SOLUTION!

**For more information.** The booklets, "Waste Minimization Environmental Quality and Economic Benefits" and "Recommended Methods for Handling Hazardous Waste" provide detailed information on waste minimization procedures. Both are available from the Bureau of Waste Management free of charge. EPA has also developed a "Facility Pollution Prevention Guide"; excerpts from this guide and industry specific pollution prevention checklists are available through the Waste Management Bureau. Additional pollution prevention reference materials, such as DEP's Statement on Pollution Prevention and a DEP Pollution Prevention Reference Sheet, are listed in Attachment 8.

For additional information concerning waste minimization and pollution prevention, you may wish to contact the following:

**Program Coordination Unit, Planning and Standards Division, Waste Management Bureau, CT DEP (203)424-3022:** The DEP has identified three types of businesses to provide technical assistance for pollution prevention--lawn and ornamental plant pesticide applicators, furniture stripping and repair, and automotive repair and refinishing. Contact this unit for further information about this program.

**Hazardous Waste Management Service--Connecticut Technical Assistance Program ("ConnTAP") (203)244-2007:** The Hazardous Waste Management Service is a quasi-public agency. ConnTAP offers free, **non-regulatory** technical and financial assistance to industry and the public. ConnTAP focuses on waste minimization and pollution prevention, and offers on-site pollution prevention assessments, and operates a library of technical pollution prevention information.

*Northeast Multi-Media Pollution Prevention Program (NEMPP) (617)367-8558:* NEMPP has a clearinghouse of over 700 technical publications on pollution prevention (including technical reports, fact sheets, audit forms, case studies, etc.) , many of which can be ordered for the cost of printing and mailing.

*Small Business Development Office, Department of Economic Development (203)258-4220.* This office assists Connecticut companies by providing them with technical assistance and other business services.

*Note:* For questions regarding *hazardous waste management regulations,* you should contact:

- o State of Connecticut DEP (using the telephone numbers provided in the Preface of this document);
- o U.S EPA Region 1, Boston, Massachusetts 617/573-9680; and/or
- o U.S. EPA RCRA Hotline 800/424-9346 or 703/920-9810.

## **Additional Reference Sources**

For more information, refer to the following:

### **Regulations**

Regulations of Connecticut State Agencies, Sections 22a-449(c)-11 and -100 through 110 (Hazardous Waste Management Regulations).

Title 40 Code of Federal Regulation Parts 260 through 271 (Federal Resource Conservation and Recovery Act (RCRA) requirements).

Title 49 Code of Federal Regulation Parts 172, 173, 178, and 179 (Federal Transportation requirements).

Notice on SQG Rules--Federal Register /Volume 51, No. 56 /Monday, March 24, 1986.

### **Guidance on Compliance with Hazardous Waste Regulations**

"Does Your Business Produce Hazardous Waste? Many Small Businesses Do." (US EPA / 530-SW-90-027 January 1990).

"Do You Generate Hazardous Waste? Many Small Businesses Do." (CT DEP September 1985).

"Land Disposal Restrictions Summary of Requirements" (US EPA OSWER 9934.0-1A February 1991).

"Understanding the Small Quantity Generator Hazardous Waste Rules: A Handbook for Small Business" (US EPA / 530-SW-86-019 Sept. 1986).

Self-Audit Checklist for Small Quantity Generators (CT DEP June 1988).

"Solving the Hazardous Waste Problem EPA's RCRA Program" (US EPA /530-SW-86-037 November 1986).

### **Pollution Prevention Publications**

"Costs to Consider in a Financial Analysis of a Pollution Prevention Project" (CT DEP February 1992).

EPA Guidance to Hazardous Generators on the Elements of a Waste Minimization Program--Federal Register, June 12, 1989.

EPA Pollution Prevention Policy--Federal Register, January 26, 1989.

"Facility Pollution Prevention Guide" (US EPA/600/R-92/088 May 1992).

"Less is More: Pollution Prevention is Good Business", EPA Video (call RCRA Hotline 800/424-9346).

"Waste Minimization Environmental Quality and Economic Benefits" (US EPA /530-SW-90-044 Second Edition April 1990).

Waste Minimization in Metal Parts Cleaning" (EPA/530-SW-89-049 August 1989).

Waste Minimization Opportunity Assessment Manual (EPA/625/7-90/008 August 1990).

The following industry-specific "Guides to Pollution Prevention" are also available. To order these EPA publications, write to: ATTN: ORD Research Information Unit, U.S. EPA, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH 45268.

Auto Repair Industry (EPA/625/7-91/013).

Automotive Refinishing Industry (EPA/625/7-91/016).

Commercial Printing Industry (EPA/625/7-88/003 July 1988).

Fabricated Metal Products Industry (EPA/625/7-90/006 July 1990).

Fiberglass Reinforced and Composite Plastics Industries (EPA/625/7-91/014).

Marine Maintenance and Repair Industry (EPA/625/7-91/015).

Paint Manufacturing Industry (EPA/625/7-90/005 June 1990).

Pesticide Formulating Industry (EPA/625/7-90/004 February 1990).

Pharmaceutical Industry (EPA/625/7-91/017).

Photo-Processing Industry (EPA/625/7-91/012).

Printed Circuit Board Manufacturing Industry (EPA/625/7-90/007 June 1990).

Research and Educational Institutions (EPA/625/7-90/010 June 1990).

**Pollution Prevention Publications available from other state agencies include:**

Benefiting from Toxic Substance and Hazardous Waste Reduction: A Planning Guide for Oregon Businesses (Oregon DEQ, Hazardous Waste Reduction and Technical Assistance Program, 811 S.W. 6th, Portland, OR 97204, (503)229-5913.)

Minnesota Guide to Pollution Prevention Planning (Minnesota Office of Waste Management, 1350 Energy Lane 201, St. Paul, MN 55108, (612) 649-5750).

New York State Waste Reduction Guidance Manual (New York State DEC, Bureau of Pollution Prevention, Division of Hazardous Substances Regulation, 50 Wolf Road, Albany, NY 12233-7253, (518)457-6072).

Profiting from Waste Reduction in Your Small Business (Alaska Health Project, 1818 W. Northern Lights Blvd, Suite 103, Anchorage, AK, 99517, (800)-478-2864. Cost \$6.00.)

(Blank page)

**Attachment 1**

**District Map of Connecticut**

(Blank page)



Waste Engineering and Enforcement  
Hazardous Waste District 1

AVON  
BARKHAMSTED  
BEACON FALLS  
BETHEL  
BETHLEHEM  
BLOOMFIELD  
BRIDGEWATER  
BRISTOL  
BROOKFIELD  
BURLINGTON  
CANAAN  
CANTON  
COLEBROOK  
CORNWALL  
DANBURY  
EAST GRANBY  
EAST HARTFORD  
FARMINGTON  
GOSHEN  
GRANBY  
HARTFORD  
HARTLAND  
HARWINTON  
KENT  
LITCHFIELD  
MIDDLEBURY  
MORRIS  
NAUGATUCK  
NEW FAIRFIELD  
NEW HARTFORD  
NEWINGTON  
NEW MILFORD  
NEWTOWN  
NORFOLK  
NORTH CANAAN  
OXFORD  
PLAINVILLE  
PLYMOUTH  
PROSPECT  
ROCKY HILL  
ROXBURY  
SALISBURY  
SHARON  
SHERMAN  
SIMSBURY  
SOUTHBURY  
THOMASTON  
TORRINGTON  
WARREN  
WASHINGTON  
WATERBURY  
WATERTOWN  
WEST HARTFORD  
WETHERSFIELD  
WINCHESTER  
WINDSOR  
WINDSOR LOCKS  
WOLCOTT  
WOODBURY

Waste Engineering and Enforcement  
Hazardous Waste District 2

ANDOVER  
ASHFORD  
BOLTON  
BOZRAH  
BRANFORD  
BROOKLYN  
CANTERSBURY  
CHAPLIN  
CHESTER  
CLINTON  
COLCHESTER  
COLUMBIA  
COVENTRY  
CROMWELL  
DEEP RIVER  
DURHAM  
EASTFORD  
EAST HADDAM  
EAST HAMPTON  
EAST HAVEN  
EAST LYME  
EAST WINDSOR  
ELLINGTON  
ENFIELD  
ESSEX  
FRANKLIN  
GLASTONBURY  
GRISWOLD  
GROTON  
GUILFORD  
HADDAM  
HAMPTON  
HEBRON  
KILLINGLY  
KILLINGWORTH  
LEBANON  
LEDYARD  
LISBON  
LYME  
MADISON  
MANCHESTER  
MANSFIELD  
MARLBOROUGH  
MIDDLEFIELD  
MIDDLETOWN  
MONTVILLE  
NEW LONDON  
NORTH BRANFORD  
NORTH STONINGTON  
NORWICH  
OLD LYME  
OLD SAYBROOK  
PLAINFIELD  
POMFRET  
PORTLAND  
PRESTON  
PUTNAM  
SALEM  
SCOTLAND  
SOMERS  
SOUTH WINDSOR  
SPRAGUE  
STAFFORD  
STERLING  
STONINGTON  
SUFFIELD  
THOMPSON  
TOLLAND  
UNION  
VENUN  
VOLUNTOWN  
WATERFORD  
WESTBROOK  
WILLINGTON  
WINDHAM  
WOODSTOCK

Waste Engineering and Enforcement  
Hazardous Waste District 3

ANSONIA  
BERLIN  
BETHANY  
BRIDGEPORT  
CHESHIRE  
DARIEN  
DESBY  
EASTON  
FAIRFIELD  
GREENWICH  
HARDEN  
MERRIDEN  
MILFORD  
MONROE  
NEW BRITAIN  
NEW CANAAN  
NEW HAVEN  
NORTH HAVEN  
NORWALK  
ORANGE  
REDDING  
RODFIELD  
SEYMOUR  
SHELTON  
SOUTHINGTON  
STAMFORD  
STRATFORD  
TRUMBULL  
WALLINGFORD  
WEST HAVEN  
WESTON  
WESTPORT  
WILTON  
WOODBROGE

**Attachment 2**

**Guidance:  
Selection of a Treatment, Storage, or Disposal  
Facility**

(Blank page)

## **Guidance: Selection of a Treatment, Storage, or Disposal Facility**

A hazardous waste treatment, storage, or disposal facility ("TSDF") will be the final destination of your waste stream. While your waste will be beyond your control once it leaves your site, you are still responsible for its proper management. Therefore, careful selection and designation of a TSDF is extremely important.

As a generator, you must not offer hazardous waste to a treatment, storage, or disposal facility that has not received an EPA Identification Number or that does not have a RCRA facility permit.

Before selecting or designating a TSDF, you may wish to check with the following sources:

**Trade Associations.** A trade association that you are affiliated with may be familiar with TSDFs which typically handle waste generated by your industry.

**Better Business Bureau and Chamber of Commerce.** Such agencies may have records of any complaints registered against the TSDF.

**CT DEP Bureau of Waste Management Waste Engineering and Enforcement Division--Permitting and Enforcement Sections (Refer to the Preface for telephone numbers).** If the facility you are considering is located in the State of Connecticut, the Division reviews all facility permit applications and issues permits to facilities to treat or store hazardous wastes in Connecticut and the Division conducts annual inspections of these facilities to evaluate their compliance with the regulations. You should contact us to determine if a particular TSDF has a current and valid permit, if the TSDF is permitted to handle the type of waste you generate, and if the TSDF is under any enforcement action by DEP. A 'List of Commercial Waste Facilities in Connecticut' is maintained by the Bureau; the list is available upon request. (However, this list is not intended to recommend any particular company identified on the list. You are urged to contact us to verify that the information on the list is current.)

After checking the sources suggested above, contact the TSDF directly to verify they have an EPA ID Number, permit, and necessary insurance and to verify whether the TSDF can or will handle your waste. It may also be advisable to check the TSDF's reputation with its clients and any other companies dealing with the facility.

If you believe the facility is doing something irregular, discuss the issue with them and notify the DEP Waste Engineering and Enforcement Division immediately.

Again, try to begin your selection process well in advance.

(Blank page)

**Attachment 3**

**Example: Properly Completed Manifest**

(Blank page)

**STATE OF CONNECTICUT**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
 Hazardous Waste MANIFEST PROGRAM, State Office Building  
 Hartford, CT 06106

FOR STATE USE ONLY

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1 Generator's US EPA ID No C T D . 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9 . 10 . 0 . 0 . 0 . 1		Manifest Document No 0 0 0 1	2 Page 1 of 1	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 Small Generation Company, Inc. P.O. Box 100 Smalltown, CT 06000-0100 Generator's Phone ( 203 ) 555-5555					A. State Manifest Document Number <b>CT F 0082973</b>					
4. Transporter 1 Company Name Safe Transportation Company					6. US EPA ID Number C T D . 9 . 8 . 7 . 6 . 5 . 4 . 3 . 2 . 1					
5. Transporter 2 Company Name					8. US EPA ID Number					
9. Designated Facility Name and Site Address Destination Facility, Inc. One Treat-Rite Way Friendlyville, CT 06555					10. US EPA ID Number C T D . 4 . 3 . 2 . 1 . 6 . 7 . 8 . 9 . 5					
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)					12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste No.	
a. RQ, Hazardous Waste, Liquid, n.o.s. (1,1,1-Trichloroethane) ORM-E NA9189					0 0 1 D M		0 0 0 5 5	GAL	EPA FO01 STATE	
b. RQ, Hazardous Waste, Solid, n.o.s. (EPA, D008) ORM-E NA9189					0 0 1 D M		0 0 0 5 5	GAL	EPA D008 STATE	
c.									EPA STATE	
d.									EPA STATE	
J. Additional Descriptions for Materials Listed Above					K. Handling Codes for Wastes Listed Above					
a. 1,1,1-Trichloroethane					a.					
b. Tumbling Sludge Containing Lead					b.					
15. Special Handling Instructions and Additional Information  Emergency Telephone No. (203) 555-5555										
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, and all applicable State laws and 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 Marty T. Manager					On behalf of the US Army Corps of Engineers		Signature <i>Marty T. Manager</i>		Month Day Year 0 1 2 5 9	
17. Transporter 1 Acknowledgement of Receipt of Materials					Signature					
18. Transporter 2 Acknowledgement of Receipt of Materials					Signature					
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					Signature		Month Day Year			

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL CHEMICAL RECEIVING CENTER, U.S. COAST GUARD, 1-800-424-8802  
 TO REPORT SPILLS WITHIN CONNECTICUT CONTACT THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION, 150 WATER STREET, HARTFORD, CT 06103

(Blank page)

**Attachment 4**

**Sample Inspection Log Format**

**List of Equipment, Structures, Areas  
to be Considered for Inclusion in an  
Inspection Schedule**

(Blank page)

## SOGs Sample Inspection Log for Hazardous Waste Containers

**Instructions:** Please use ink. Results of weekly inspections of hazardous waste containers and container storage area must be recorded in this log. If any deficiencies are found during the inspection, a description of the deficiency must be recorded in the Observations column. Prompt and immediate action must be taken to correct any deficiencies observed. The date and nature of all corrective actions must be recorded in the Corrective Action column. Once this log is completed, it should be maintained in a binder and must be kept for at least 3 years from the date of the inspection. These inspection logs must be made available for inspection by State DEP inspectors.

Date of Inspection: \_\_\_\_\_ Time of Inspection: \_\_\_\_\_ a.m./p.m. Name of Inspector: \_\_\_\_\_

Item/Condition to be checked	Yes	No	Observation/ Deficiency	Corrective Action and Date
Are all containers closed?				
Are all containers in GOOD condition (NOT leaking, rusted, bulging or otherwise in poor condition)?				
Are all containers marked?				
Does the marker include the words "Hazardous Waste" and the Chemical Name?				
Are all markers legible and visible for inspection?				
Are all containers marked with accumulation dates?				
Are dates less than 180 days?				
Is the amount of wastes on-site less than 1000 kgs (2200 lbs)?				
Is there adequate aisle space?				
Are containers stored on an impermeable base that is bermed?				
Are the base and berm free of gaps, cracks and damage?				
Is the base free of spills, leaks or other accumulation?				
Are incompatible materials separated by a wall or berm?				

**Note:** If the "NO" column is checked, corrective action must be taken and the "Observation" and "Corrective Action" columns must be completed.

Additional Comments:

## **List of Equipment, Structures, Areas to be Considered for Inclusion in an Inspection Schedule**

This list is not all inclusive and should be used only as guidance. Your inspection schedule should be developed specific to your facility and operational requirements. Regulations require that all monitoring equipment, safety and emergency equipment, security devices, operating and structural equipment, loading and unloading areas, containers and tanks (including ancillary equipment), storage areas, and containment systems be inspected.

### Safety Equipment

Emergency Shower  
Face Shields  
Protective Glasses  
Disposable Respirators  
First Aid Equip./Supplies  
Protective Clothing  
Air Purifying/  
Chemical Respirators  
Signs

### Emergency Equipment

Fire Blankets  
Fire Extinguishers  
Fire Alarm Systems  
Generators  
Emergency Lights  
Portable Pumps/Hoses  
Fire Fighting Wagon/Hoses  
Self-Contained Breathing App.  
Absorbents  
Containment Booms  
Spill Response Carts/Wagons

### Structures

Dikes/Berms  
Troughs/Sumps  
Ramps  
Elevators/Lifts  
Tank Supports  
Containment Vault  
Bases/Foundation  
Roofs  
Walls

### Security Equipment

Fences  
Warning Signs  
Gates  
Lighting  
Locks

### Monitoring Equipment

Liquid Level Alarms/Meters  
Conservation Vents  
Leak Detection System  
Fire Detection System  
Ground Water Monitoring Sys.

### Areas

Loading Area  
Unloading Area  
Storage Area  
Main Roadway  
Gate Areas  
Periphery

### Tanks

Waste Feed Cut-Off/Bypass  
Discharge Control Equip.  
Drainage System  
Monitoring Equip. Data  
-temperature  
-pressure  
Waste Level  
Tank Material/Seams  
-corrosion  
-leaking  
Plumbing/Sump  
Labeled/Marked  
-with words Hazardous Waste  
-with chemical name

### Containers

Condition  
-leaking  
-bulging  
-rusted/corroded  
Closed when not in use  
Marked  
-with words Hazardous Waste  
-with chemical name  
Accumulation Date  
On site < or > 180 days  
Adequate Aisle Space

### Mobile Equip.

Tires/Tracks  
Brakes  
Hydraulics  
Trailer Hitches  
Lights  
Horns/Sirens  
Engine Condition

### Communication Equipment

Telephones  
Pagers  
Radios (e.g., 2-way)  
Intercoms  
Public Address System  
TV Monitoring System

## Attachment 5

### **Examples: Hazardous Waste Container Markers**

*(Listed and Characteristic Hazardous Wastes)*

#### **DOT Guide: Hazardous Materials Warning Placards and Labels**

*NOTE: At the time of printing of this document, DOT regulations were under revision; revised regulations will be effective in October 1993. As a result, up-to-date DOT guides were not yet available at the time of printing. It was, therefore, not possible to include the guides in this attachment as intended. Please contact DOT to obtain a copy of these guides, when available, and insert them in this attachment.*

*To obtain Hazardous Materials Marking, Labeling and Placarding Guides, contact the Publications Office of DOT at 202/366-4900.*

(Blank page)

ORM-E

# HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR  
PUBLIC SAFETY AUTHORITY, OR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPERTY OF: Hazardous Waste Solid, s.o.s.  
SHIPPING NAME: (EPA, DD08): ORM-E UN OR NA: NA 9189  
(Luminescent sludge containing lead)

GENERATOR INFORMATION

NAME: Small Generation Company, Inc.

ADDRESS: 100 North Main Street

CITY: Smalltown STATE: CT ZIP: 06000

EPA ID NO: CID123456789 EPA WASTE NO: DD08

ACCUMULATION START DATE: 8/14/92 MANIFEST DOCUMENT NO: CT F 0082973

## HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

LISTED HAZARDOUS WASTE

ORM-E

# HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE, OR  
PUBLIC SAFETY AUTHORITY, OR THE  
U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPER D.O.T. 20, Hazardous Waste Liquid, n.o.s.  
SHIPPING NAME (1,1,1-Trichloroethane), ORM-E UN OR NA# NA9189

GENERATOR INFORMATION

NAME Small, Generation Company, Inc.  
ADDRESS 100 North Main Street  
CITY Smalltown STATE CT ZIP 06000

EPA ID NO CTD123456789 EPA WASTE NO F001

ACCUMULATION START DATE 8/10/92 MANIFEST DOCUMENT NO CT F 0082973

## HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

# Attachment 6

## Examples of Potentially Incompatible Waste

*(excerpt 40 CFR Part 265 Appendix V)*

(Blank page)

**APPENDIX V TO PART 265—EXAMPLES OF POTENTIALLY INCOMPATIBLE WASTE**

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge Alkaline caustic liquids Alkaline cleaner Alkaline corrosive liquids Alkaline corrosive battery fluid Caustic wastewater  Lime sludge and other corrosive alkalies Lime wastewater  Lime and water Spent caustic	Acid sludge Acid and water Battery acid Chemical cleaners Electrolyte, acid Etching acid liquid or solvent  Pickling liquor and other corrosive acids  Spent acid Spent mixed acid Spent sulfuric acid
Potential consequences: Heat generation; violent reaction.	
Group 2-A	Group 2-B
Aluminum  Beryllium Calcium Lithium Magnesium Potassium Sodium Zinc powder Other reactive metals and metal hydrides	Any waste in Group 1-A or 1-B
Potential consequences: Fire or explosion; generation of flammable hydrogen gas.	
Group 3-A	Group 3-B
Alcohols  Water	Any concentrated waste in Groups 1-A or 1-B Calcium Lithium Metal hydrides Potassium SO <sub>2</sub> Cl <sub>2</sub> , SOCl <sub>2</sub> , PCl <sub>5</sub> , CH <sub>3</sub> SiCl <sub>3</sub> Other water-reactive waste
Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.	

Group 4-A	Group 4-B
Alcohols  Aldehydes Halogenated hydrocarbons Nitrated hydrocarbons Unsaturated hydrocarbons Other reactive organic compounds and solvents	Concentrated Group 1-A or 1-B wastes Group 2-A wastes

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates  Chlorine  Chlorites Chromic acid Hypochlorites  Nitrates Nitric acid, fuming Perchlorates Permanganates Peroxides Other strong oxidizers	Acetic acid and other organic acids Concentrated mineral acids Group 2-A wastes Group 4-A wastes Other flammable and combustible wastes

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

C-49

(Blank page)

## Attachment 7

# Request for Change Form (Status Change)

*This form may be used to request changes in RCRA generator status. This form may also be used to notify the Department of a:*

- 1) change of company name,*
- 2) change of location or mailing address,*
- 3) change of company contact,*
- 4) change of phone number, and/or*
- 5) change of company ownership.*

(Blank page)



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



BUREAU OF WASTE MANAGEMENT

REQUEST FOR CHANGE(S)  
OF RCRA NOTIFIER DATA BASE

Please use this form to advise the Bureau of Waste Management of any changes to the information originally submitted on your "Notification of Hazardous Waste Activity," so that the Department of Environmental Protection and the U.S. EPA records can be updated.

Please be sure to sign the certification. Then turn the form over and complete the sections for which changes are being requested. Attach any additional information and submit it as a package to the following address:

Inga Rubecka  
Bureau of Waste Management  
State of Connecticut DEP  
79 Elm Street  
Hartford, CT 06106-5127

If you have any questions regarding this form, please contact Inga Rubecka at (203) 424-3566.

OWNER/OPERATOR CERTIFICATION: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

\_\_\_\_\_  
Name  
(please type)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

( )  
\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Date Signed

Note changes on reverse-->

(Blank page)

**Attachment 8**

**DEP Statement on Pollution Prevention**

**DEP Pollution Prevention  
Reference Sheet**

(Blank page)

State of Connecticut  
Department of Environmental Protection

**STATEMENT ON POLLUTION PREVENTION**

The Department of Environmental Protection is the steward of our natural heritage. Its mission is to protect and enhance the public health and the environment in the face of a variety of competing demands of human behavior. The complexity of this task is one of the greatest challenges of our generation. The purpose of this statement is to bring the philosophy of pollution prevention into the forefront of our efforts to deal with these problems in the coming years.

Pollution prevention is a different way of thinking about the solution to environmental problems. The traditional way of thinking is to accept some pollution as inevitable and to control it by a variety of "end-of-pipe" regulatory directives. There remains an important role for this approach. Pollution is a by-product of much of our society and the traditional mechanisms of regulation and control are necessary if the environment is to be protected and preserved. Nonetheless, there is an increasing awareness that our agency's role may be more effective and that society in general will be better served if we can eliminate pollution at the source. Pollution prevention is not really new. We have used it informally in agency programs for over twenty years.

Pollution Prevention has been established as the public policy of the State of Connecticut by Public Act 91-376. It has been established as the public policy of the United States by the Pollution Prevention Act of 1990. It will accordingly be a priority of this agency to expand and accennuate the use of pollution prevention in all our agency programs.

To this end, we have already begun on a program consisting of the following steps:

- Institutionalization of multi-media pollution prevention in our regulatory programs.
- Eliminating barriers to pollution prevention initiatives.
- Identifying the targets of an outreach program.

Virtually all members of the agency may expect to be involved in this program in one way or another.

A program is only as good as the individual initiatives which support it. It is therefore important that this program be regarded as a guide to creativity rather than a bureaucratic requirement. As we look to the future, there will be many opportunities to apply novel and innovative approaches to our task. Among the potential benefits are a more efficient regulatory climate, the stimulation and encouragement of a different ethic in the regulated community, a greater awareness of the costs of pollution and an integration of these costs into our market economy, the possible stimulation of a new generation of "green" economic activity and, most importantly, an improvement of the quality of life for all our citizens. For all these reasons, pollution prevention is hereby declared to be a priority of the agency and with your assistance, we intend to make the promise of this program become a reality.

September 18, 1992

  
Timothy R. E. Keeney  
Commissioner

**POLLUTION PREVENTION RESOURCE LIST:**  
**SERVICES, AGENCIES AND TECHNICAL ASSISTANCE PROGRAMS**

**A DEP Pollution Prevention Reference Sheet**

Business and industry can obtain a variety of information related to pollution prevention by contacting the many federal, state and private agencies who currently offer services and technical assistance programs. The listing below is provided as a reference and does not constitute an endorsement by the Department of Environmental Protection.

**Department of Environmental Protection Business Ombudsman**

Robert Kaliszewski  
165 Capitol Avenue, Hartford, CT 06106  
(203) 424-3003

DEP's ombudsman serves as liaison between the department and the business community and provides information on environmental programs and requirements.

**ConnTAP**

Connecticut Hazardous Waste Management Service  
900 Asylum Avenue, Suite 360  
Hartford, CT 06105  
(203) 241-0777

A quasi-public agency which promotes appropriate hazardous waste management. Offers technical assistance to business, publishes a free quarterly newsletter, houses a resource center & library, and administers grant programs.

**Connecticut Innovations Incorporated**

845 Brook Street, Rocky Hill, CT 06067  
(203) 258-4035

A non-profit organization charged with encouraging technological development in the State. Financial assistance, referrals, and business information & advice are all services available under the Product Development & Marketing Financing, Small Business Innovation Research, Technology Assistance Center and Seed Venture programs.

**Connecticut Development Authority**

217 Washington Street  
Hartford, CT 06106  
(203) 241-3730

Established to provide financial assistance to manufacturers and related businesses for a wide range of activities. CDA administers several direct and third party loan programs.

**Connecticut Department of Economic Development**  
865 Brook Street, Rocky Hill, CT 06067  
(203) 258-4200

The Department can help Connecticut companies by providing them with investment incentives, development assistance, financing, technical assistance and other business services. Contact the Department's Small Business Development office, 258-4220 or the Manufacturing Assistance Center, 258-4279.

**U.S. Small Business Administration**  
330 Main Street, Hartford, CT 06106  
(203) 240-4700

The Hartford District Office can provide information on SBA's Pollution Control loans, as well as other services and business loan programs.

**U.S. Environmental Protection Agency**  
Washington, DC 20460  
Region I Pollution Prevention Office, Boston MA 02203 - (617) 565-1155

EPA's Office of Pollution Prevention (202-245-3557) aims to integrate multimedia pollution prevention inside and outside the agency. News articles, case studies, up-coming conferences & workshops, and grant announces are published in their free monthly newsletter. The Pollution Prevention Information Clearinghouse (PPIC), (703-821-4800), disseminates information on various aspects of pollution prevention (technical, legislative, financial, case studies, activities, etc.), operates a hotline and document repository. PPIC's computerized network, PIES, allows computer access to the databases. The Small Business Ombudsman (800-368-5888) also has related information. Industry, individuals, and others are eligible to receive the Administrator's Award, an annual program to reward innovative efforts leading to a cleaner environment.

**Northeast Industrial Waste Exchange**  
90 Presidential Plaza, Suite 122  
Syracuse, New York 13202  
(315) 422-6572

A non-profit information clearinghouse for waste with reuse value. NIWE matches waste generators with waste users. A Listings Catalog is published quarterly and an On-Line Listings Catalog provides up-to-the-minute computerized information.

**NERAC, Inc.**  
One Technology Drive  
Tolland, CT 06084  
(203) 872-7000

A non-profit center involved in technology transfer. NERAC's technical and scientific specialists help businesses explore environmental issues, effects, regulations and problems.

Prepared by the Connecticut Department of Environmental Protection  
Waste Management Bureau, Program Coordination Unit, February 1992  
For more information call (203) 424-3022. C-59

(Blank page)

## Attachment 9

# Glossary of Acronyms and Terms

(Blank page)

## Glossary of Acronyms and Terms

<b>40 CFR</b>	Code of Federal Regulations. Title 40 concerns the Protection of Environment.
<b>49 CFR</b>	Code of Federal Regulations. Title 49 concerns Transportation.
<b>CESQG</b>	Conditionally-Exempt Small Quantity Generator of hazardous waste. A CESQG generates less than 100 kilograms (or 220 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)
<b>CFR</b>	Code of Federal Regulations. A document containing all finalized Federal regulations. Annually, regulations are compiled and placed in the Code of Federal Regulations according to a highly structured format.
<b>Commissioner</b>	Commissioner of the Connecticut Department of Environmental Protection, or his agent.
<b>DEP</b>	State of Connecticut Department of Environmental Protection.
<b>Designated Facility</b>	A hazardous waste treatment, storage, or disposal facility which has an EPA or State permit and which has been designated on the manifest by the generator as the facility to which the generator's waste should be delivered.
<b>DOT</b>	United States Department of Transportation.
<b>EPA</b>	United States Environmental Protection Agency.
<b>EPA ID No.</b>	EPA Identification Number. The unique number assigned by EPA to each generator or transporter of hazardous waste and to each treatment, storage, or disposal facility.
<b>Generator</b>	Any person who first creates a hazardous waste or any person who first makes the waste subject to Subtitle C regulation.
<b>Hazardous Waste Management Regulations</b>	Sections 22a-449(c)-100 through 110 and Section 22a-449(c)-11 of the Regulations of Connecticut State Agencies. Connecticut is authorized by EPA to conduct its own hazardous waste management program.
<b>LQG</b>	Large Quantity Generator of hazardous waste. An LQG generates greater than 1000 kilograms (or 2200 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)
<b>Manifest</b>	The shipping document used for identifying the quantity, composition, origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of treatment, storage, or disposal.
<b>Permit</b>	An authorization, license, or equivalent control document issued by EPA or State to implement regulatory requirements.
<b>RCRA</b>	Resource Conservation and Recovery Act is a public law enacted by Congress. Subtitle C of this Act imposes strict controls and requirements over the management of hazardous waste.
<b>RCSA</b>	Regulations of Connecticut State Agencies.

**Regulation**                    The legal mechanism that spells out how a statute's broad policy directives are to be carried out.

**SQG**                            Small Quantity Generator of hazardous waste. An SQG generates between 100 and 1000 kilograms (or 220 and 2200 pounds) of hazardous waste per month. (Refer to regulations for complete definition.)

**Transporter**                Any person engaged in the off-site transportation of hazardous waste within the United States, by air, rail, highway, or water.

**TSDf**                         A hazardous waste treatment, storage or disposal facility. TSDFs are subject to the permitting requirements of RCRA Sections 22a-449(c)-104, 105, and 110 and of 40 CFR Parts 264, 265, and 270.

**APPENDIX D**

**HAZARDOUS WASTE MANIFEST  
DESIGNATIONS AND SIGNATURE POLICIES**

The project manager should insert the training records and the formal written designation and authorization from the District Commander for those individuals authorized to sign hazardous waste manifests at the project.



US Army Corps  
of Engineers

# Construction Bulletin

No. 93-6 Issuing Office: CEMP-CP Issue Date: 5/4/93 Exp. Date: 31 DEC 95

CEMP-C

Subject: Hazardous Waste Manifest Signature Policy and Procedures

Applicability: DIRECTIVE

## 1. REFERENCES.

a. Construction Bulletin No. 91-13, 3 Jul 91, subject: Preparation and Signature of Hazardous Waste Manifests and Land Ban Certifications on EPA Superfund Projects.

b. Construction Bulletin No. 91-21, 27 Nov 91, subject: Signature of Hazardous Waste Manifests for EPA Superfund Projects.

c. Construction Bulletin No. 92-1, 29 Jan 92, subject: Asbestos Notification and Waste Shipment Record Requirements.

d. ER 1180-1-6, Construction Quality Management, 1 Apr 91.

e. ER 1110-1-263, Chemical Data Quality Management for Hazardous Waste Remedial Activities, 1 Oct 90.

f. CEMP-RF memorandum dated 30 Apr 93, subject: Signatory Responsibility for Hazardous Waste Manifests and Related Documents - Policy Guidance.

## 2. PURPOSE.

This Construction Bulletin (CB) establishes policy regarding the signing of hazardous waste manifests and related documents. The Resource Conservation and Recovery Act (RCRA) addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. Implementing regulation (40 CFR 262) requires a generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal to prepare and sign a manifest which describes the hazardous waste in detail.

CEMP-CP

SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

### 3. GENERAL.

With the exception of Corps owned facilities, USACE is not considered to be the owner of the hazardous waste it transports as part of the response activities. The customer agency is the generator for purposes of executing hazardous waste manifests. However, due to logistic complexities, a customer may not be able to provide an individual to sign the hazardous waste manifests in a timely manner. The customer may then request the Corps to sign project manifests on their behalf. (Federal regulations permit generators to have agents act on their behalf in signing the manifest forms). When an individual is signing on behalf of a generator which is a legal entity, such as a corporation or a company, the words "on behalf of" should be entered to indicate that the person signing the Generator's Certification is not necessarily accepting liability for violating the federal standards.

### 4. POLICY.

a. As the leader in DOD's full service environmental restoration efforts, USACE's role is expanding as a result of legislation, evolving missions, and customer needs. Commensurate with this role, it is USACE's goal to develop and implement practices that will facilitate the continuation of quality, comprehensive environmental services. In keeping with this goal, it is USACE's policy, if requested by its customers, to execute on behalf of those customers hazardous waste manifests and related documents. So far, two of our customers have requested USACE assistance in signing manifest forms on their behalf: the Environmental Protection Agency (EPA) and the Farmers Homes Administration. HQUSACE has accepted the delegated responsibility.

b. With regard to manifesting activities at sites where USACE is the owner or responsible agency, e.g., Civil Works facilities or Defense Environmental Restoration Program (DERP)-FUDS, manifest execution and related responsibilities will be performed by USACE.

c. With regard to DERP-Installation Restoration (IR) and Base Realignment and Closure (BRAC) environmental restoration activities, manifest execution and related responsibilities ordinarily belong to the customer (i.e., the installation or the base).

CEMP-CP

SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

In those instances where the additional cost of sending a qualified USACE representative to a remote location for a small project is unwarranted, the option of requiring the contractor to sign the manifests is permitted and should be considered. This option can only be exercised on a project specific basis after written authorization of the customer and approval of the Chief, Construction Division at the executing district. For FUDS projects, only the approval of the Chief, Construction Division at the executing district is necessary. In all cases, this requirement (of having the contractor sign the manifest) must be incorporated in the contract solicitation prior to contract award.

#### 5. PROCEDURES.

Where USACE personnel execute Uniform Hazardous Waste Manifest forms and related documents, procedures will be adopted by the operating divisions or districts as follows:

a. In the Generator's Name and Mailing Address box (block #3) on the Uniform Hazardous Waste Manifest form, Corps authorized personnel shall enter the following information: "Environmental Protection Agency/Superfund Program", "Farmers Homes Administration", or "DOD (DERP/FUDS)" as appropriate followed by "c/o" and then the name and address of the Corps office that manages the returned manifest forms. In the generator's certification box (block #16), the Corps employee would then sign his or her name, followed by "USACE" after writing or printing the phrase "On-behalf of the Environmental Protection Agency" or "On behalf-of the Farmers Homes Administration" as appropriate. On FUD sites, Corps personnel should follow the same procedure after typing or printing the phrase "On behalf-of the Department of Defense". All other manifest related documents executed by USACE members on behalf of a customer shall be executed by signature followed by USACE after writing or printing the phrase "on behalf of the (name of the customer)".

b. On Corps owned facilities where the Corps is a "generator" of hazardous wastes or is the "Responsible Party", Corps personnel shall enter in block #3 on the manifest form "U.S. Army Corps of Engineers", followed by the name and address of the Corps office that manages the returned manifest forms. In the generator's certification

CEMP-CP

SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

box (block #16), the Corps authorized employee would sign his or her name after typing or printing the phrase "On behalf of the U.S. Army Corps of Engineers".

c. Corps personnel authorized to execute manifest forms and related documents shall assure compliance with all reporting requirements (e.g., exceptions reports, biennial reports and state reports) as well as follow-on requirements, including the assembly and retention of all appropriate documentation and certifications.

d. Assure that USACE is authorized by its customers to execute hazardous waste manifests and related documents on their behalf before such documents are executed. This authorization is effected through an explicit provision in a Memorandum of Agreement, Inter-Agency Agreement, or correspondence signed by an appropriate agency official\* requesting and authorizing USACE to sign on their behalf. The customer request and authorization must acknowledge that the customer retains all responsibilities for the hazardous waste as a generator. This shall extend to the execution of the Hazardous Waste Manifests, Land Disposal Restriction Notification and Certifications, Waste Profile Sheets, and other forms necessary for the completion of manifests for transportation and disposal of hazardous waste. Approval to undertake the delegated responsibility of signing manifest forms and related documents rests with the chief of Construction Division at the executing district. If state statutes or regulations do not permit USACE to sign such documents on behalf of the customer, the Resident Engineer (RE) or other designated USACE representative is to contact the customer for further guidance.

e. All USACE members executing hazardous waste manifests and related documents must receive appropriate training before executing such documents. The minimum required training is specified in the following regulations:

\* HQUSACE Office of Counsel advised that EPA's letter of 18 Oct 90 (see reference 1a) requesting and authorizing USACE to execute and certify manifest forms and related documents on their behalf is legally sufficient and that no further documentation or individual project authorization is necessary.

CEMP-CP

SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

(1) Occupational Safety and Health Act (OSHA), 29 C.F.R. 1910-120;

(2) Resource Conservation and Recovery Act (RCRA), 40 C.F.R. 264.16 and 40 C.F.R. 265.16;

(3) Hazardous Transportation Uniform Safety Act (DOT), 49 C.F.R. 173.1; and May 15, 1992 Final Rule, Federal Register 49 C.F.R. 172.700 (Subpart H-Training); and

(4) Army Regulatory training requirements (AR 55-355).

Additional training may be required by operating divisions or districts. Training can be obtained from within or outside USACE. Regardless of the training source, it is the responsibility of the employing division or district to assure that the training is appropriate and that records of the members' successful completion of the training are appropriately maintained.

f. Only USACE members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

g. Where USACE members are executing hazardous waste manifests and related documents, the contract under which the removal or remediation is being performed must contain supporting chemistry-related requirements and procedures. These items are imposed by the specifications and addressed by the contractor in a document known as the "Chemical Data Acquisition Plan" (see reference 1e). These plans are site specific guidance for sampling and analyses. They address, among other things, laboratory activities, chemical data documentation, equipment, sampling documentation, quality control, sample custody and shipment, analytical methods and document preparation. The project specific supplement to the QA Plan, developed by the Resident Engineer in accordance with reference 1d, must define the USACE quality assurance role in the manifesting process.

CEMP-CP

SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

h. It is intended that future contracts shall contain a requirement that hazardous waste manifests and related documents executed by USACE members be supported by contractor submittals prepared, reviewed, and approved by an authorized representative of the contractor. The contractor's employee shall also certify that packaging, labeling, marking and placarding of the waste meet all applicable federal and state regulations, and shall also certify as correct, Land Disposal Restriction Notifications and Certifications, Waste Profile Sheets, and related documents before providing the documents to USACE.

6. To implement the above policy and procedures, HQUSACE (with MRD MCX support) is defining the responsibility of and the course of action to be followed by all parties involved, i.e., HTRW design districts, executing districts and contractors. A complete hazardous waste transportation and disposal check list will be developed for contractors to complete as part of the submittal process. For your information, the Engineer Manual on manifesting is projected to be complete by end of this fiscal year. Previously issued CB's provided you with recommended training sources, Hot Lines, and videotape libraries to assist you in accomplishing your mission.

7. This CB has been coordinated with HQUSACE 's Environmental Restoration Division (CEMP-R); Engineering Division (CEMP-E); Office of the Chief Counsel (CECC-C); Office of the Principal Assistant Responsible for Contracting (CEPR-ZA); and, Operations, Construction and Readiness Division, Directorate of Civil Works (CECW-OC).

  
CHARLES R. SCHROER

Chief, Construction Division

25 AUG 1993

CECW-OA

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Hazardous Waste Manifest Signature Policies and Procedures

1. References:

a. Department of Transportation Regulation 49 CFR 172.700 (Subpart H-Training).

b. Construction Bulletin 93-6, subject as above (enclosed).

2. It is Civil Works and Military Programs policy with regard to manifesting activities at sites where the U.S. Army Corps of Engineers is the owner or responsible agency, that manifest execution and related responsibilities will be performed by the Corps.

3. Department of Transportation regulation 49 CFR 172.700 (Subpart H-Training) requires training employees who load, unload, or handle hazardous materials for transportation, assure the safety of a shipment, or operate a motor vehicle used to transport hazardous materials.

4. Construction Bulletin 93-6, paragraph 5e., requires that all Corps members "executing" hazardous waste manifests and related documents must receive appropriate training before executing such documents. Completion of training is required by 1 October 1993, for employees employed on or before 2 July 1993.

5. Only Corps members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

CECW-OA

SUBJECT: Hazardous Waste Manifest Signature Policies and  
Policies

6. Headquarters point of contact is Jim Wolcott (CECW-OA), at  
(202)272-1152.

ENCL

51  
JOHN P. ELMORE, P.E.  
Chief, Operations, Construction,  
and Readiness Division  
Directorate of Civil Works

**APPENDIX E**

**RECYCLING INFORMATION**

REGIONAL RECYCLING COORDINATORS/CONTACTS

Recycling: \*Kathy Dube  
CAPITOL Region Council of Govts.  
221 Main Street  
Hartford, CT 06106  
522-2217/Fax:724-1274

Recycling: \*Jeff Barnes  
CENTRAL NAUGATUCK VALLEY Council  
of Governments  
20 East Main Street  
Waterbury, CT 06702  
757-0535/Fax:756-7688

Recycling: \*David B. Sulkis  
CONNECTICUT RIVER ESTUARY  
Regional Planning Agency  
P.O. Box 778  
Old Saybrook, CT 06475  
388-3497/Fax 395-1404

Recycling: \*Linda Szczygiel  
HOUSATONIC Resources Recov. Auth.  
Old Town Hall, Route 25 & 133  
Brookfield, CT 06804  
775-6256/Fax:740-9167

Recycling: \*Edward Donovan  
LITCHFIELD HILLS COUNCIL  
of Elected Officials  
42 North St., Town Hall  
Goshen, CT 06756  
491-9884/Fax:491-3729

Recycling: \*Tim Wentzell  
MID-NORTHEAST Regional Recycling  
Operating Committee  
630 Governor's Highway  
South Windsor, CT 06074  
289-2296/Fax:289-2296

Recycling: \*Winston Averill  
NORTHEASTERN CT Regional RRA  
P.O. Box 198  
Brooklyn, CT 06234  
774-1253/Fax:779-2056

Recycling: \*Heather Gilbert  
SOUTH CENTRAL Reg. Council  
of Governments  
23 Peck Street  
North Haven, CT 06473  
234-7555/Fax:234-9850

Recycling: \*Toby Goodrich  
SOUTH EASTERN CT Regional RRA  
132 Military Highway  
Preston, CT 06365  
887-6368/Fax:885-0191

Recycling: \*Valerie Knight  
SOUTHWEST CT Reg. Recyc.  
Operating Committee  
Dept. of Public Works  
125 East Avenue  
Norwalk, CT 06856  
852-0103/Fax:857-0143

Recycling: \*Mark Bobman  
TUNXIS Recycling Operating  
Committee  
75 Twining Street  
Bristol, CT 06010  
585-0419/225-9811; Fax:585-9875

\* Indicates regional coordinator

Prepared by Connecticut DEP  
Recycling Program  
December 1992

## RECYCLING REGION LISTING BY TOWNS

### CAPITOL/MID-CONNECTICUT

Andover  
Canton  
Cromwell  
Durham  
East Granby  
East Hampton  
East Hartford  
East Windsor  
Ellington  
Enfield  
Farmington  
Glastonbury  
Granby  
Haddam  
Hartford  
Hebron  
Marlborough  
Middlefield  
Middletown  
Newington  
Portland  
Rocky Hill  
Simsbury  
South Windsor  
Stafford  
Suffield  
Vernon  
West Hartford  
Wethersfield  
Windsor Locks

### CENTRAL NAUGATUCK

Beacon Falls  
Bethlehem  
Middlebury  
Naugatuck  
Oxford  
Southbury  
Thomaston  
Watertown  
Woodbury

### ESTUARY

Chester  
Clinton  
Deep River  
Essex

Killingworth  
Old Saybrook  
Westbrook

### HOUSATONIC

Bethel  
Bridgewater  
Brookfield  
Danbury  
Kent  
New Fairfield  
New Milford  
Newtown  
Roxbury  
Sherman

### LITCHFIELD HILLS

Barkhamsted  
Canaan  
Colebrook  
Cornwall  
Goshen  
Harwinton  
Litchfield  
New Hartford  
Norfolk  
North Canaan  
Salisbury  
Sharon  
Torrington  
Winchester

### MID-NORTHEAST

Ashford  
Bolton  
Chaplin  
Columbia  
Coventry  
Eastford  
Mansfield  
Tolland  
Union  
Willington  
Windham

### NORTHEAST

Brooklyn  
Canterbury  
Griswold  
Hampton

Killingly  
Plainfield  
Pomfret  
Putnam  
Scotland  
Sterling  
Thompson  
Woodstock

### SOUTH CENTRAL

Ansonia  
Derby  
Hamden  
New Haven  
North Haven

### SOUTHEAST

Bozrah  
Branford  
Colchester  
East Lyme  
Franklin  
Groton  
Guilford  
Ledyard  
Lyme  
Madison  
Montville  
New London  
North Stonington  
Norwich  
Preston  
Salem  
Sprague  
Stonington  
Voluntown  
Waterford

### SOUTHWEST

Bridgeport  
Darien  
East Haven  
Easton  
Fairfield  
Greenwich  
Milford  
Monroe  
New Canaan  
Norwalk  
Orange

Shelton  
Stamford  
Stratford  
Trumbull  
Weston  
Westport  
Wilton  
Woodbridge

### TUNXIS

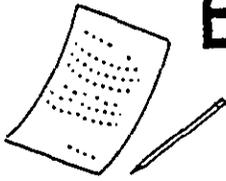
Berlin  
Bristol  
Burlington  
Meriden  
Morris  
New Britain  
Plainville  
Plymouth  
Prospect  
Southington  
Warren  
Washington  
Wolcott

### INDIVIDUAL TOWN PROGRAMS

Avon  
Bloomfield  
East Haddam  
Hartland  
Lebanon  
Lisbon  
Manchester  
Redding  
Ridgefield  
Somers  
Wallingford  
Waterbury  
Windsor

### UNDECIDED

Bethany  
Cheshire  
North Branford  
Old Lyme  
Seymour  
West Haven



# BUSINESS RECYCLING



## A DEP Recycling Program Fact Sheet

### AUTOMOBILE BATTERY MARKETS

The following scrap metal recyclers have indicated a willingness to accept automotive batteries. Generally, these recyclers pay for each battery; however, some recyclers merely accept batteries as a public service at no charge. Most recyclers pay a higher price for large quantities of batteries banded to pallets. Some recyclers only accept batteries if they are banded to pallets. Broken, damaged and leaking batteries are unacceptable and some dealers require batteries to be drained and dry. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Alderman-Dow Iron & Metals  
358 Chapel Street  
New Haven, CT 06511  
telephone: 562-1594

MJ Metal Inc.  
561 North Washington Ave.  
Bridgeport, CT 06604  
telephone: 334-3484

Calamari Brothers  
20 Trumbull Street  
New London, CT 06320  
telephone: 442-5794

Ostrinsky, Inc.  
731 Parker St.  
Manchester, CT 06040  
telephone: 643-5879

Joseph Freedman Co.  
40 Albany Street  
Springfield, MA 01101  
telephone: 522-6395 or  
(413) 781-4444

Rome Recycling Corp.  
45 Olive Street  
Hartford, CT  
telephone: 951-3186

J.W. Green Co.  
2676 South Washington St.  
Plainville, CT 06062  
telephone: 747-5514

Rubino Brothers  
560 Canal Street  
Stamford, CT  
telephone: 323-3195

S. Kasowitz & Sons  
149 Front Ave.  
West Haven, CT 06516  
telephone: 932-5978

Shetucket Iron &  
Scrap Metal  
Norwich, CT 06360  
telephone: 887-1681

Kramer Scrap  
Southern Ave.  
Greenfield, MA 01301  
telephone: (413) 774-3103

Suisman & Blumenthal  
500 Flatbush Ave.  
Hartford, CT 06106  
telephone: 522-3123

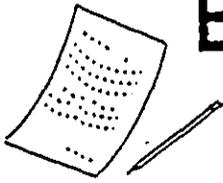
Lajoies  
Meadow Street  
South Norwalk, CT  
telephone: 886-6650

M. Wilder & Sons  
569 North Colony St.  
Meriden, CT 06450  
telephone: 235-4225

Prepared by Connecticut  
DEP Recycling Program  
December 1989



PRINTED ON RECYCLED PAPER



# BUSINESS RECYCLING



## A DEP Recycling Program Fact Sheet

### WOOD PALLET MARKETS

The following businesses have indicated that they accept wooden pallets or are listed under pallets in the yellow pages. Some businesses accept any grade and size because they make chips for fuel, while others reuse the pallets. To be reusable, the pallets must be heavy duty returnable construction and a commonly used size. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Associated Refuse  
Newtown, CT  
Contact: Pat Caruso  
telephone: 426-8870  
\* chips for fuel

Recycled Wood Products  
RD #3 Box 548A  
Hurffville, NJ  
Contact: Steve Eisenhower  
telephone: (609) 589-1501

Condordia Manufacturing Co.  
Box 151  
West Warwick, RI  
Contact: Paul Boghossian  
telephone: (401) 828-1100

Recycled Wood Products  
25 Atlantic Ave.  
Woburn, MA  
telephone: (617) 933-3818

Ecolab  
John Barkala  
New Jersey  
telephone: (201) 636-2100  
\* reusable wood pallets  
\* only accepts specific sizes:  
40 x 48, 40 x 40, 48 x 48

Reliable Pallet  
127 Park Avenue  
East Hartford, CT  
telephone: 528-8753

Interstate Pallet Co.  
50 Eddy  
New Haven, CT  
Contact: Joe Nacca  
telephone: 865-7543

Southern Connecticut Pallet  
Co.  
417A Washington Ave.  
North Haven, CT  
telephone: 239-6622

NRS Carting  
P.O. Box 783  
So. Norwalk, CT 06856  
Contact: George LeBlanc  
telephone: 853-7570  
\* chips wood waste

Star Recycling Division  
Allied Sanitation  
Woodside/Queens, NY  
Contact: Lou Vigliotti  
telephone: (718) 497-8011  
\* chips for fuel

Willimantic Waste Co.  
Willimantic, CT  
telephone: 423-4527

Prepared by Connecticut  
DEP Recycling Program  
August 1988

E-4



NEW YORK

Anchor Glass Container Corp.  
1901 Grand Central Ave.  
Elmira, NY 14902  
telephone: (607) 737-3531

Central New York Bottle Co.  
RD#6, County House Road  
Auburn, NY 13021  
telephone: (315) 255-5201

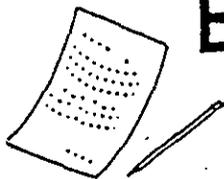
J. Bass & Sons  
9-11 Carolton Ave.  
Mt. Vernon, NY 10550  
contact: Bob Bass  
telephone: (914) 667-1442

Owens-Illinois/Brockway Glass  
Great Bear Road, RD#5  
Fulton, NY 13069  
telephone: (315) 598-0931

Prepared by Connecticut  
DEP Recycling Program  
September 1989



PRINTED ON RECYCLED PAPER



# BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

## GLASS RECYCLING MARKETS

The Department is aware of the following glass markets in Connecticut and nearby states. These markets accept color separated container glass, free of contaminants such as ceramics, stones, gravel, etc. Some companies allow metal rings and caps. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

### CONNECTICUT

Connecticut Container Recovery  
Corp./REI  
150 Colonial Road  
Manchester, CT 06040  
contact: Bill Leonard  
telephone: 646-7573

Diamond Bathurst, Inc./  
Anchor Glass Corp.  
Route 101  
Dayville, CT 06241  
contact: Ms. Dale Johnson  
telephone: 774-9636

Stratford Baling Corp.  
80 Garfield Ave.  
Stratford, CT 06597  
contact: John Mastroianni  
telephone: 377-7491  
\* will consider accepting color  
separated glass from paper accounts

### MASSACHUSETTS

Foster-Forbes Glass  
National Can Co.  
1 National Ave.  
Milford, MA 01757  
contact: Gene Riggs  
telephone: (617) 478-2500  
\* prefer cullet

New England CRINC  
74 Salem Road  
North Billerica, MA 01862  
contact: Bob Torriere  
telephone: (508) 667-0096  
\* accepts unprocessed glass

### NEW JERSEY

Ball Glass Container  
1 Minue Street  
Cateret, NJ  
contact: Kevin Shipley  
telephone: (201) 969-1400  
\* accepts clear glass only  
\* prefer cullet

Owens- Illinois/Brockway  
Center Street  
Freehold, NJ 07728  
contact: Roger Wangerien  
telephone: (201) 462-6500  
\* prefer to crush

Pace Glass, Inc.  
73-75 Cornelison  
Jersey City, NJ 07304  
contact: Vinnie Pace  
telephone: (201) 432-7983

Alderman-Dow Iron & Metals  
358 Chapel St.  
New Haven, CT 06511  
contact: Norman Alderman  
562-1594

H. Bixon & Sons  
808 Washington Ave.  
New Haven, CT 06519  
contact: David Bixon  
777-7445

Calamari Brothers  
20 Trumbull St.  
New London, CT 06320  
contact: Paul Calamari  
442-5794

Environmental Maintenance  
75 East Aurora St.  
Waterbury, CT 06708  
754-2111

MJ Metals  
561 No. Washington Ave.  
Bridgeport, CT 06604  
contact: Jeff Dreyer  
334-3484  
\* accept all municipal scrap &  
metal food containers

Ostrinsky Inc.  
731 Parker St.  
PO Box 128  
Manchester, CT 06040  
contact: Sandy  
643-5879

Reynolds Aluminum Co.  
117 Murphy Rd.  
Hartford, CT 06114  
contact: Alexander Polgardi  
278-6136  
\* aluminum only

Rubino Brothers  
560 Canal St.  
Stamford, CT 06904  
323-3195

Suisman & Blumenthal  
500 Flatbush Ave.  
Hartford, CT 06106  
contact: Bob Tyrol  
522-3123

Prepared by Connecticut  
DEP Recycling Program,  
January 1990  
Contact: Lynn Stoddard, 566-8722

J.W. Green Co.  
2676 So. Washington St.  
Plainville, CT 06062  
contact: George McAdoo  
747-5514

Jacob Brothers  
1240 Seaview Ave.  
Bridgeport, CT  
contact: Joel Jacob  
367-5341  
\* no light iron or mixed scrap

S. Kasowitz & Sons, Inc.  
149 Front Ave.  
West Haven, CT 06516  
contact: Steven Kasowitz  
932-5978

Lajoies  
Meadow Street  
South Norwalk, CT  
866-6650

Schiavone & Sons  
234 Universal Dr.  
North Haven, CT 06473  
contact: Joe Anstata  
777-2591

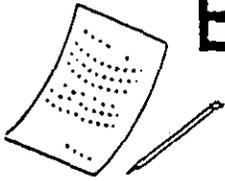
Schiavone - Bonomo Corp.  
640 Canal St.  
Stamford, CT 06902  
contact: Tony Avani  
324-3411

Shetucket Iron & Metal Co.  
New Wharf  
Norwich, CT 06360  
contact: Walter Cedar  
887-1681

Stanley Sack Co.  
30 Barber Pond Rd.  
Bloomfield, CT 06002  
contact: Mark Sack  
242-6228



# BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet



## Recycling Scrap Metal

Scrap metal has been designated for recycling in accordance with Connecticut Mandatory Recycling Act. The recycling regulations define scrap metal as "used discarded items which consist predominantly of ferrous metals, aluminum, brass, copper, lead, chromium, tin, nickel or alloys thereof, including, but not limited to, white goods, metal food containers." After January 1, 1991, scrap metal must be separated recycling.

Many industrial and commercial facilities have significant amounts of waste classified as scrap metal. (For the purposes of this fact sheet, metal food containers will not be considered because another fact sheet discusses methods of recycling those items.) These businesses will be responsible for making arrangements to recycle the scrap metal they generate.

Large generators of scrap metal who have sufficient space can separate the material on site to meet market specifications and transport it directly to a scrap metal processor. Those who generate smaller amounts and/or face serious space constraints can contract with a private hauler to collect the scrap metal (commingled with other commercial recyclables such as corrugated paper, pallets, plastics, etc.), sort it at another location and market it. Scrap metal should not be commingled with bottles and cans or non-recyclable trash. Small generators may find it advantageous to share storage facilities and hauling arrangements with other businesses in their building complex or industrial park.

Regardless of the method selected, it is important to handle the metals carefully because some industrial/commercial machinery and appliances contain small PCB capacitors, PCB transformers, or hydraulic fluids. These contaminants need to be removed before most scrap dealers will accept the metal. The DEP has developed an educational program which trains individuals to identify, locate, remove and dispose of PCB capacitors. For information on this program, contact Carey Hurlburt at 393-2449 or 566-2852.

Although a complete listing of scrap metal dealers can be found in the *Business to Business Yellow Pages*, the following scrap metal dealers have indicated a willingness to accept municipal scrap metal if prepared to their specifications. As with any recovered material, a better price is paid for large quantities of properly segregated metals. Contact dealers directly to learn what types of metals they accept, transportation and equipment available, preparation requirements, and price quotes. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Albert Brothers  
225 E. Aurora St.  
Waterbury, CT 06721  
contact: Dave Bessette  
753-4146

Joseph Freedman Co.  
40 Albany St.  
Springfield, MA 01101  
contact: Dick Boucher  
522-6395

The following list includes local waste paper processors, and waste paper dealers that the Department is aware of. This is only a partial listing and by providing it to you, the Department of Environmental Protection is not recommending these companies over any others.

Automated Materials Handling, Inc.  
655 Christian Lane  
Kensington, CT 06037  
Contact: Bob Patterson  
(203) 249-0686  
\*all types & grades

Cassone Paper Stock Co.  
420 John Fitch Blvd.  
South Windsor, CT  
Contact: Victor Goldstein  
(203) 528-9278  
\*high grades only

Fairfield County Newspaper  
180 Watson Boulevard  
Stratford, CT 06497  
Contact: Joseph Sabatini  
(203) 375-8000  
\*clean newspaper only

Ferraro Bros., Inc.  
335 Central Ave.  
Bridgeport, CT 06607  
Contact: Bob Ross  
(203) 335-5161  
\*high grades only

Marcus Paper Co.  
First Ave. & Wood St.  
P.O. Box 8986  
New Haven, CT 06532  
Contact: Michael Zamkov  
(203) 934-6351  
\*high grades & computer

New England Paper Recycling Ctr  
600 Atlantic St.  
Stamford, CT 06902  
Contact: Michael Tomasello  
(203) 629-1702  
\*all office waste paper

Newhallville Recycling, Inc.  
5 Science Park  
New Haven, CT 06511  
Contact: Ramu Ramiah  
(203) 786-5032

Ostrinsky, Inc.  
731 Parker St., P.O. Box 128  
Manchester, CT 06040  
Contact: Sandy  
(203) 643-5879

Recycled Fibers of Connecticut  
260 Tolland Turnpike  
Manchester, CT 06040  
Contact: Angello or David  
(203) 647-7096  
\* no newspaper

Stratford Baling  
80 Garfield Ave.  
Stratford, CT  
Contact: John Mastroianni  
(203) 377-7491  
\*all types & grades

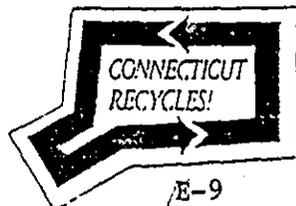
B. Swirsky & Co.  
260 Railroad Hill St.  
Waterbury, CT 06721  
Contact: David or Joseph Swirsky  
(203) 574-3131

United Paper & Metal Co.  
Stockhouse Rd.  
Fitchville, CT 06334  
Contact: Harold Kirstein  
(203) 886-5511  
\*all types & grades

M. Wilder & Sons, Inc.  
569 North Colony St.  
Meriden, CT 06450  
(203) 235-4225  
\*newspaper

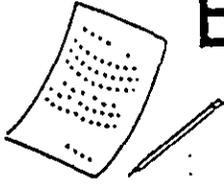
Willimantic Waste Paper Co.  
P.O. Box 4239  
Willimantic, CT 06226  
Contact: James DeVivo  
(203) 423-4527

Prepared by Connecticut  
DEP Recycling Program  
June 1990



E-9

For more information  
contact: Anne Gobin  
566-8722



# BUSINESS RECYCLING



A DEP Recycling Program Fact Sheet

## WASTE PAPER RECYCLING & MARKETS

Paper constitutes the largest single component of the municipal solid waste stream--approximately one third by weight and one half by volume. Therefore, paper recycling can significantly reduce the amount of waste that has to be disposed of in Connecticut. Although a certain level of waste paper recycling exists, a significant amount of waste paper has yet to be recovered in Connecticut.

Waste paper is traded on a world-wide commodity basis through a network of brokers and exporters. The paper market has stringent quality requirements for its 49 grades of paper stock and another 31 specialty grades. The four categories of paper recycling programs need to be concerned with are:

Corrugated cardboard used to ship merchandise. For maximum value, contaminants such as styrofoam packing material, metal, wax, plastic coated cartons, and junk should be removed.

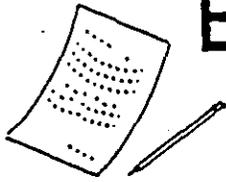
Old newspaper as is delivered to a household. Newspaper must be clean, dry, and stored out of direct sunlight. Contaminants such as junk mail, plastic bags, telephone books, magazines, etc. should be removed.

High grade office paper includes white typing, writing and copy paper, white scratch paper, tab cards, index cards, and computer paper. Prohibited materials include carbon paper and NCR forms, blueprint paper, tape and glue, post-it notes, newspaper, corrugated, tissues, towels, and paper cups.

Mixed paper office paper recovered from offices and institutions in an unsorted, but clean form.

Waste paper recovered from mixed municipal waste generally does not meet industry specifications for use by paper mills in the United States. Best results are achieved through source separation programs. Paper markets fluctuate with supply and demand. When the supply of waste paper is plentiful, markets retain suppliers of high quality materials who can guarantee large tonnages of clean paper free of contaminants. Therefore, it is advisable to design source separation programs to maximize quality and quantity of waste paper.

The paper processors in Connecticut listed on the reverse side have facilities to sort, bale and transport waste paper. Not all processors deal in all grades of waste paper. Paper brokers are in contact with mills and know the baling and quality specifications of paper mills. Brokers determine who is buying and selling each grade of paper and facilitate sales by arranging transportation and payment. The Connecticut paper brokers know the needs and specifications of the Connecticut mills as well as other northeast, U.S. and international users of waste paper.



# BUSINESS RECYCLING



## *A DEP Recycling Program Fact Sheet*

### Waste Oil Recycling

#### What is Waste Oil?

"Waste Oil" is defined in the Mandatory Recycling Regulation (Section 22a-241b-1 of the Regulations of Connecticut State Agencies) as "crankcase oil that has been utilized in internal combustion engines."

#### How to Collect Waste Oil

If your business uses a small number of vehicles, service stations that change the oil in these vehicles should have provisions for recycling it. If your business uses and maintains a fleet of vehicles, you should establish a collection tank where you can safely store the oil before contacting a licensed transporter to haul it to a recycling facility. If you are only storing oil from your own business and do not accept oil from outside sources, you do not need a permit to install a collection tank, but the tank should be designed and managed in accordance with the guidelines listed below.

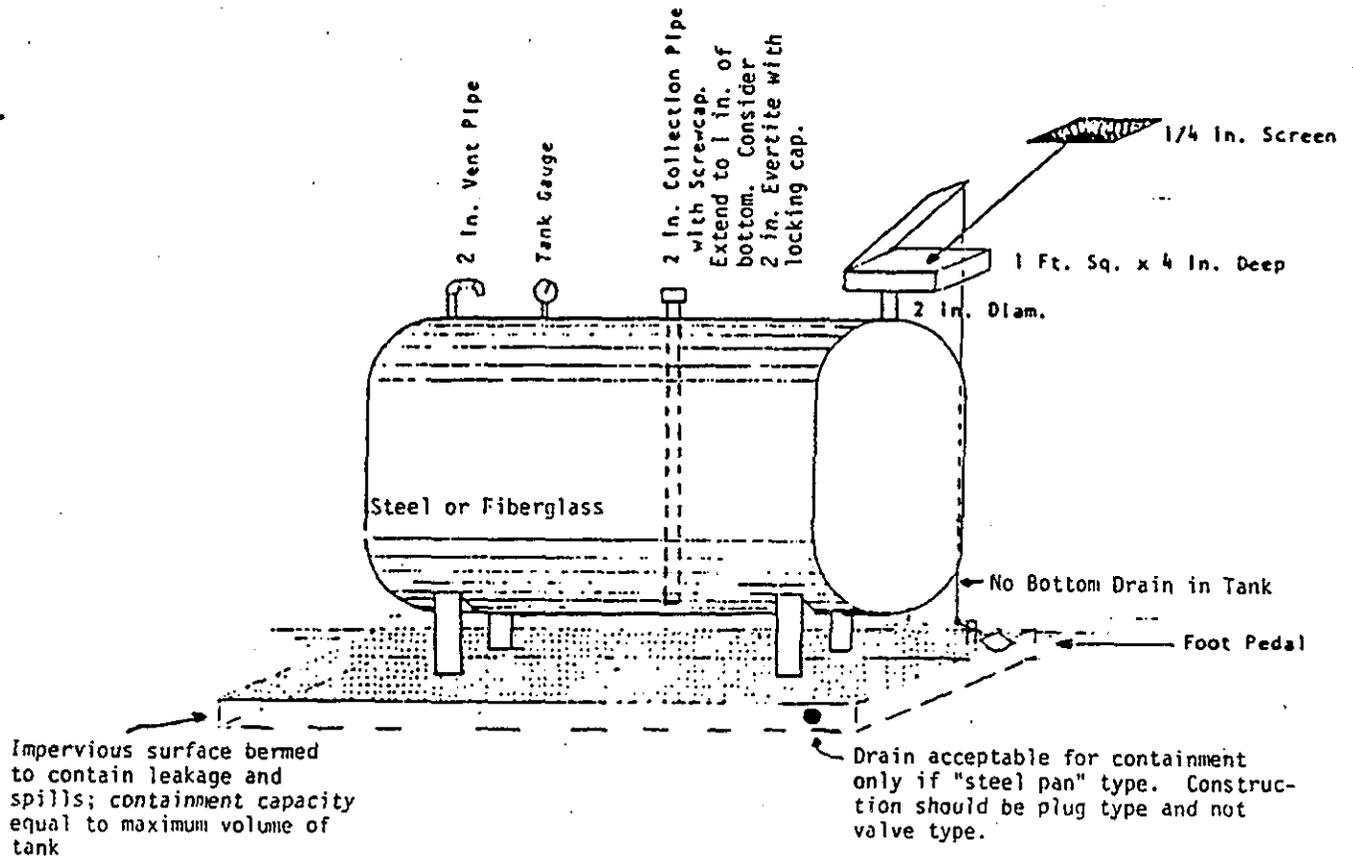
#### Tank Location, Design, and Management

Follow the guidelines below in siting, designing, and managing a used oil storage program:

- \* Locate the tank in an above ground area that will minimize unauthorized access, vandalism, fire/explosion possibility, and release of oil to the environment.
- \* Place the tank on an impervious base that provides for secondary containment equal in volume to the capacity of the storage tank.
- \* Keep the tank locked when not in use.
- \* Appoint one person to be responsible for monitoring oil storage and contacting a licensed waste oil transporter to haul the oil to a treatment facility for processing. This person should visually inspect the tank on a regular basis for leaks or malfunctions.
- \* Do not mix gas, paint thinners, solvents, pesticides, anti-freeze, or other hazardous materials with oil.
- \* Employees who handle used oil should be instructed about the proper operation and management of the oil storage area.
- \* Use kitty litter, saw dust, or a commercially available product to absorb oil from minor spills.

- \* Prepare a contingency plan describing the action that the tank manager and other personnel must take in response to vandalism, theft, fires, explosions, or release of oil to the environment. The plan must contain the names, addresses and phone numbers of, and describe the arrangement agreed to by local police and fire departments, contractors, and state and local emergency response teams in case of emergency. Federal law requires a spill prevention and countermeasures plan for any collection facility that has an aggregate storage of greater than 1,320 gallons or a single above-ground tank having a capacity greater than 660 gallons.

### Typical Waste Oil Collection Tank Design



### What To Do Once You Have Collected Waste Oil

You should contact a DEP-licensed commercial waste oil transporter to haul your waste oil to a treatment facility for processing. (See attached list entitled "Transporters permitted to haul waste oil and/or waste water soluble oil.") Used oil can be re-refined into high quality lubricating oil, reclaimed, treated, and used as feedstock in the manufacture of other products, or reprocessed as fuel oil.

In addition, service stations and other commercial establishments may burn the used oil that they generate (but not oil accepted from other sources). Oil burners must meet certain design standards and the oil must meet fuel specifications. Contact George Dews of the DEP at 566-4869 for information on the requirements for burning waste oil.

Prepared by Connecticut  
DEP Recycling Program  
January 1990



For more information  
contact: Lynn Stoddard  
at 566-8722, or George  
Dews at 566-4869

If your business sells lead acid batteries retail or wholesale...

PA 90-248 places the following requirements on retailers and wholesalers of lead acid batteries:

No retailer shall dispose of a used battery except by delivery to one of the following: 1) a wholesaler, 2) a battery manufacturer for delivery to a secondary lead smelter permitted by the US EPA, 3) a recycling center, 4) a secondary lead smelter permitted by the US EPA, or 5) a scrap metal processor.

From Oct. 1, 1990 - April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). A deposit refund is only required if the consumer presents a receipt.

Each retailer must post a written notice at his/her place of business advising customers that: it is illegal to discard a battery with solid waste; batteries must be recycled; the retailer must accept up to 3 batteries from a consumer (even if he/she is not purchasing a new battery) until April 1, 1992; after April 1, 1992, the retailer must accept a used battery for recycling in exchange for the purchase of a new battery. This notice must be at least 8-1/2 inches wide and at least 11 inches long.

All unclaimed deposits shall accrue to the retailer.

A wholesaler must accept at the point of transfer used batteries from retailers or consumers (as many as the number of new batteries purchased).

Wholesalers must remove batteries from the retail point of collection within 90 days.

Penalties are established for violations of these requirements.

If retailers and wholesalers need information on how to properly handle and store lead acid batteries, call the DEP Recycling Program for a copy of the DEP Fact Sheet entitled "How to Recycle Lead Acid Batteries" and/or call George Dews of the DEP at 566-4869.

#### How are lead acid batteries recycled?

Battery recyclers separate the useable components of the battery and reclaim the lead, most of which is used to make new batteries. Small percentages of recycled lead can also be used in such products as lead shot, radiation shielding, and grease compounds. The acid from the batteries is either recycled or neutralized and disposed of. The plastic battery case can also be recycled.

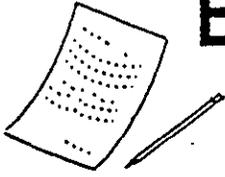
Prepared by Connecticut  
DEP Recycling Program  
July 1990



For more information  
contact: Lynn Stoddard  
at 566-8722

PRINTED ON RECYCLED PAPER

# BUSINESS RECYCLING



## A DEP Recycling Program Fact Sheet



### How to Recycle Lead-Acid Batteries

#### Recycling lead acid batteries: What is required?

PA 87-544 and the recycling regulations require the recycling of "storage batteries" in Connecticut by January 1, 1991. Storage batteries include lead acid batteries used in motor vehicles (such as automobiles, airplanes, boats, recreational vehicles, and tractors). In 1990, PA 90-248 established a mandatory deposit and redemption system that will capture lead acid batteries for recycling and prohibits the disposal of used lead acid batteries with mixed municipal solid waste by October 1, 1990.

If your business uses and maintains a fleet of vehicles, you will need to arrange for the recycling of lead acid batteries. After October 1, 1990, used batteries can be delivered to the following facilities for recycling:

- 1) Retailers or wholesalers. Between October 1, 1990, and April 1, 1992, retailers must accept up to 3 used batteries from a consumer (even if the consumer does not purchase a battery). After October 1, 1990, any person who purchases a battery shall return a used battery or pay a \$5 deposit for each new battery purchased. A \$5 refund shall be given if a used battery is returned within 30 days after purchase of a new battery and the consumer has a receipt.
- 2) A recycling facility, secondary lead smelter permitted by the US EPA, or scrap metal processor. If your business generates large quantities of used lead acid batteries (this would apply to service stations, for example), you should store them properly and arrange to have them recycled by one of the types of facilities listed above. Call the DEP for a fact sheet entitled "How to Recycle Lead Acid Batteries" which describes how properly to handle and store batteries. Depending on market conditions, you may receive a payment for your batteries. You will not receive a refund of any deposit paid because the refund requirement applies only to retailers.
- 3) A municipally established collection site. Call the recycling coordinator or public works director for your town to see if there is a municipal collection site where businesses can drop off used lead acid batteries. Because the \$5 refund from battery deposits is available from retailers only, do not expect to receive any payment for your batteries from a municipal recycling program.

## Common Contaminants To Corrugated

Your paper processor or market (mill) will help you make the final determination regarding which materials are unacceptable, but the following is a typical list:

- Packing material - such as polystyrene foam pellets
- Excessive amounts of plastic tape or plastic packing envelopes (*small amounts ok*)
- Wood stapled or otherwise attached to the box
- Non-paper insulation layer between the layers of corrugated
- Metal (generally, small numbers of staples *do not* have to be removed)
- Wax or plastic coated corrugated (usually used to pack produce, usually darker and shinier than uncoated corrugated)
- Other extraneous materials - material stored in boxes, sweepings, etc.
- Asian corrugated - is not acceptable for most recycling purposes at this time. you can distinguish Asian corrugated by its yellow/green tinge (usually used for products shipped from Asia). Check with your paper processor or market about the acceptability of this particular material.

Prepared by Connecticut DEP Recycling Program  
January, 1990  
Contact: Judy Belaval



compacting (larger generators), or backhauling the loose corrugated to a central distribution center for baling or compacting (for stores that are part of a chain). You can really get innovative and perhaps come up with a plan for smaller businesses picking up merchandise at wholesalers to backhaul their corrugated there for compaction or baling.

## To Bale Or Not To Bale

Small businesses, who generate only minimal amounts of corrugated, may find it more economical to manually bundle or store the loose corrugated in an appropriately sized container and have it collected either by a town or cooperatively contracted hauler, or a business may choose to use its own vehicles, and have the corrugated delivered to a private or municipal drop-off site.

For businesses generating larger quantities of corrugated, the decision to simply use storage containers, or to bale or compact and the choice of bale size, should be made on a case by case basis. Generally speaking, both baling and compacting improve ease of handling, and by densifying the material reduce storage space requirements (one must also consider the size of the equipment when assessing the affect on storage requirements) and allow greater quantities of corrugated to be carried per haul, thus reducing hauling costs.

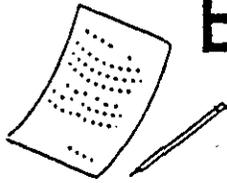
Compactors are usually more expensive than balers and usually require a lot more space than most balers. There is usually better quality control with balers than compactors, because more attention is paid to the materials being placed into the baler. However, many of the smaller balers and some of the more inexpensive larger balers do require hand tying of the bundles, and do have labor requirements associated with their operation. Also, if you do decide to use a baler, check the size of its chamber to assess the necessity of cutting the corrugated to make it fit into the baler. Baled corrugated is not necessarily worth more per ton than loose or compacted corrugated since bales smaller than "mill size" (at least 1,000 lbs) must be broken open and rebaled by the paper processor. For your guidance, lists of baler and compactor manufacturers are presented on the next page.

When making a decision, consider:

- \* the relative labor requirements of the various methods
- \* the quantity of corrugated generated
- \* type and amount of available storage space
- \* space requirements for the different types of storage/processing equipment
- \* comparative costs of renting or buying a baler, compactor, dumpster, or trailer
- \* hauling arrangements (including price per haul)
- \* markets for the corrugated (i.e. paper processor or directly to a mill)
- \* distance from a market, and
- \* market value of the corrugated.

Contact your paper processor, hauler, or market to help you determine the system appropriate for your facility.

Remember by collecting clean corrugated for recycling you will be saving Connecticut landfill space and at the same time you'll be decreasing your business's trash disposal costs.



# BUSINESS RECYCLING



## A DEP Recycling Program Fact Sheet

### CORRUGATED CARDBOARD

Corrugated cardboard<sup>1</sup> represents a significant percentage of the commercial solid waste generated: from 10%, in a public or institutional setting to 40% or more in a retail establishment<sup>2</sup>. Actual corrugated generation rates have been approximated<sup>3</sup> as follows:

<b>Business type</b>	<b>Corrugated generated</b>
Small convenience stores	1 to 2 tons/month
Grocery stores/supermarkets	up to 8 tons/month
Furniture stores	4 to 6 tons/month
Warehouse stores	4 to 6 tons/month
Department stores	4 to 6 tons/month
Home improvement centers	4 to 6 tons/month
Warehouse distribution centers	8 to 10 tons/week

By recycling your corrugated, instead of discarding it, you'll be conserving landfill space and saving refuse tipping fees.

The recycling of corrugated containers is easy and simple to implement. It involves: source separation from the refuse stream; preparation to minimize contamination and improve ease of handling; storage; and delivery to a paper processor or mill (see Fact Sheet on Waste Paper Recycling and Markets) to be recycled into various recycled paper products such as unbleached kraft paperboard, the center fluting of corrugated boxes, and recycled paperboard.

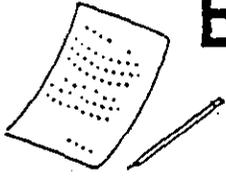
There are many possible methods for handling corrugated. At a minimum, storage facilities must be easily accessible to building maintenance personnel and haulers and must comply with fire codes. Corrugated boxes should be opened and flattened and contaminants removed before being placed in the storage container. A list of common contaminants is presented on the reverse side of this fact sheet. Remember, the cleaner the material, the more marketable it is.

Once the contaminants are removed, your system for handling the corrugated may be as simple as placing the loose flattened corrugated into a dumpster. Other options include manually bundling the corrugated, mechanically baling or

1 Information from various paper processors in Connecticut and Publications of the American Paper Institute in NYC [*How to Recycle Waste Paper* (1985) and *Paper Recycling and Its Role In Solid Waste Management* (1987)]

2 From a study of the commercial waste sector in Westchester, from: "Developing Recycling Programs for Commercial Establishments" - David Cerrato and Barbara Riley, Malcolm Pirnie, 1989

3 Figures derived by Load King - a baler manufacturer



# BUSINESS RECYCLING



*A DEP Recycling Program Fact Sheet*

## Recycling Newspapers At Work

Newspapers have been designated for recycling in accordance with Connecticut's Mandatory Recycling Law. Newspapers typically include daily, weekly and monthly publications printed on newsprint. Newspapers do not include glossy catalogues, mail, magazines or similar printed materials. Although some paper processors will accept other materials mixed with newspaper, it is generally best to train people to separate only the newspaper and the inserts that come in it. This helps to guarantee that the old newspapers (ONP) will be desirable to a recycler.

After January 1, 1991, newspapers will be required to be source separated for recycling in accordance with ordinances adopted by Connecticut municipalities. Although the vast majority of newspapers are expected to be collected from people's homes, businesses and institutions will also have to make provisions to be sure that newspapers are recycled if they are generated in the work setting.

The type of program developed will depend on the number of newspapers that need to be handled. In small offices and industries, probably the simplest way to achieve the recycling of newspapers is to require employees who bring newspapers to work to take them home again for recycling through the residential recycling system. Businesses like newspaper dealers, printers and publishers will need to make an arrangement with their newsprint suppliers to take back overruns or defective stock or arrange for the direct delivery of these items to a paper processor.

Larger offices and those which take subscriptions as part of their business efforts will need to set up one or more collection points. This collection system can mirror that which is established for white office paper (see the DEP guide to white paper recycling: CONNECTICUT RECYCLES OFFICE PAPER), but will be more limited since the quantities involved will probably be much smaller. A drop-off point at the exits or on each floor may suffice. In addition, a larger storage container will also be necessary to aggregate the material for delivery to a processor or market. As with the white paper collection, the collection and storage containers for newspaper must be kept dry, be well marked, and be in compliance with fire codes.

You should contact your municipal or regional recycling coordinator to determine specific municipal requirements and to see whether you can utilize the community system for processing and marketing the newspaper you collect. The community may provide a drop-off point where you can take the papers, or you may be able to arrange with your hauler or a community organization to deliver them to an intermediate processing center or waste paper dealer.

A list of paper processors that accept ONP is included on the reverse side of this fact sheet. You should contact them to learn their exact specifications.

## Processors

Automated Material Handling, Inc.  
Kensington, CT  
Bob Patterson, 249-0686

Fairfield County Newspaper  
Stratford, CT  
Joseph Sabatini, 375-8000

Stratford Baling  
Stratford, CT  
John Mastroianni, 377-7491

Swirsky & Co.  
Waterbury, CT  
David Swirsky, 574-3131

United Paper & Metal  
Fitchville, CT  
Harold Kirstein, 886-5511

Willimantic Waste Paper Co.  
Willimantic, CT  
James DeVivo, 423-4527

## Mills

Federal Paper Board  
Sprague, CT  
Pete Birnie, 822-8201

Lydall and Foulds  
Manchester, CT  
Don Cossette, 646-1233

Rand Whitney Paper Board  
Montville, CT  
William Bartlett, 848-9231

Simpkins  
New Haven, CT  
Frank Camera, 787-7171

Prepared by Connecticut DEP Recycling Program  
May, 1990  
Contact: Jacquelyn Pernel, 566-8722



Printed on recycled paper.

**APPENDIX F**

**MANAGEMENT OF OZONE-DEPLETING SUBSTANCES**

## CHAPTER 10 - MANAGING OZONE DEPLETING SUBSTANCES (ODS) AT USACE PROJECTS AND FACILITIES

**10-1. Purpose.** This chapter establishes guidance for managing ODSs at USACE projects and facilities.

**10-2. Applicability.** This chapter applies to all USACE commands having responsibility for civil works funded activities, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations shall adapt the ozone-depleting substance guidance in AR 200-1, Environmental Protection and Enhancement, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commanders' ozone-depleting substance elimination program requirements.

### 10-3. Guidance.

a. Executive Order 12843 established a policy of the Federal government to implement cost-effective programs to minimize procurement of materials and substances that contribute to the depletion of stratospheric ozone and give preference to the procurement of alternative chemicals, products and manufacturing processes that reduce overall risks to human health and the environment by lessening the depletion of ozone in the upper atmosphere.

b. The Army's objective is to end dependence on ODS use in equipment and processes so that the pending phaseout of Class I ODSs causes minimal impact on Army missions. Although the Class I phaseout applies to chemical production and import only, and does not apply to their use, EO 12843 and Army policy do. Class I Substances list can be found in 40 CFR Part 82, Appendix A.

c. The key to efficiently eliminating ODSs from USACE projects and facilities is developing and implementing comprehensive ODS elimination plans. Operations project managers or facility managers should develop and execute ODS elimination plans addressing applicable facilities and equipment. Advance planning for phaseout of ODSs will minimize impact on individual projects and facilities. The following paragraphs describe the steps involved in ODS elimination planning.

#### (1) Step 1: Assign an ODS Elimination Coordinator

(a) It is recommended that MSC commanders and District commanders designate an ODS coordinator in the Operations element since most of the affected facilities and equipment are at operating projects. Laboratories and FOAs should also designate ODS coordinators. The intent is to provide senior leadership with a responsible individual to monitor execution of ODS elimination efforts throughout the division, district, laboratory, FOA, etc.

(b) ODS coordinators should be knowledgeable of USACE policies, and Federal, state and local regulations concerning ODSs, and familiar with the operations and maintenance of projects and facilities, especially those having refrigeration, air conditioning, and fire suppression systems. The ODS coordinator should also be familiar with the planning, programming and budgeting processes.

(c) It is further recommended that operations project managers and facility managers appoint an individual to oversee and coordinate their ODS elimination efforts.

### (2) Step 2: Inventory ODS Equipment and Supplies

(a) The first task is to assemble an accurate inventory of all equipment which uses ODSs and an inventory of all ODS supplies on hand. The equipment inventory should include air conditioning, refrigeration and fire fighting systems, and all other ODS applications. These inventories will serve as the baseline for ODS elimination planning. The following information should be gathered as part of the equipment inventory process:

- Location of equipment - area, building, and room
- Ownership - determine if equipment is project, PRIP, logistics or personal property
- Equipment type - manufacturer, model, and serial number of affected components
- Chemical used - identify the ODS used and amount of chemical contained in the system
- Operating record - include the date of installation and operating conditions of the system which apply primarily to air conditioning and refrigeration units
- Maintenance record - include scheduled maintenance actions, emergency repairs, leaks, major overhauls and chemical recharges. The history of chemical requisition may be useful to supplement maintenance records
- Future Plans - such as upcoming scheduled maintenance, building renovation, demolition plans or facility realignment

(b) The information collected should include project and facility supplies and at least the following information:

- Chemical type - chemical name, new or recycled product (for quality control)
- Storage location - building location and ownership
- Allocation - chemical dedicated for a specific use
- Amount - total chemicals at that location, volume, weight, number of containers

(c) The equipment and chemical stock inventories should be prepared in a format that can be updated over the course of the ODS elimination program. Periodic inventories are required.

### (3) Step 3: Conservation Measures

(a) The next phase of the ODS elimination planning is establishing maintenance processes aimed at conserving and recovering ODS chemicals. Conservation measures, such as leak prevention, will be a major priority of the on-going maintenance. By preventing leaks, the

project or facility will have to procure fewer ODSs to replenish systems and will have a larger recoverable supply for reuse. For refrigeration and fire fighting systems, periodic checks using a specialized chlorine detector may be preferable. For air conditioning systems, especially those in detached mechanical rooms, a fixed detector may provide better protection against leaks. Fixed fire suppression systems can be checked by monitoring cylinder pressure gauges. If leakage does occur, the systems must be repaired immediately. Without a detection system, leakage might progress to the point of reduced operating efficiency.

(b) Another conservation measure that can be implemented is the installation of high efficiency purge units on centrifugal air conditioning systems. The high efficiency purges prevent the venting of Chlorofluorocarbons (CFCs) during normal operation. These purges are a low cost method to conserve refrigerant and may be considered for equipment not immediately scheduled for retrofit or replacement.

#### (4) Step 4: ODS Recovery and Reuse

(a) After establishing accurate inventories, the operations project manager or facility manager should then do an analysis or evaluation of each ODS application. Based on these evaluations, decisions can be made regarding how to deal with each ODS being used.

(b) Halons installed in power distribution systems, computer facilities and other electronic systems should be recovered. CFCs should also be recovered from project or facility systems when retrofit or replacement occurs. CFCs recovered from projects or facilities may be reused at the same project or facility. CFCs should also be recovered, reclaimed and reused if the project or facility determines the expense of recovery and reclaiming equipment to be worthwhile as an interim alternative to disposing used ODS solvents.

#### (5) Step 5: Building the Elimination Plan

(a) With the information gathered from steps 1 through 4, operations project managers or facility managers can build ODS elimination plans. The schedule for retrofitting or replacing equipment should be based on a priority assessment.

(b) Retrofit refers to the modification of existing equipment so it can operate effectively with an alternative chemical. Recovery of the Class I ODS chemical and recharging the system with the replacement chemical is only part of the retrofit action. Frequently, additional system components should be replaced during retrofit actions. For example, fire fighting system nozzles and air conditioner lubricant should be compatible with the new chemicals used. The complexity and cost of these modifications should be evaluated when deciding between retrofit and replacement options.

(c) Replacement is the complete removal of an existing ODS dependent system and installation of a new system that uses an environmentally acceptable alternative chemical. In some cases, ODS containing equipment may no longer be needed and can be eliminated using approved disposal procedures. Only hermetically sealed ODS systems, such as water coolers and refrigerators, which require no ODS additions during maintenance, will be allowed to continue operating indefinitely and eventually be replaced through normal attrition and eliminated using approved disposal procedures.

(d) Decisions on whether to retrofit or replace hardware will be based on factors such as cost, condition, age, performance, and safety. Based on the information gathered during the inventory, the project or facility manager can determine which systems are in need of immediate attention, and which will be efficient and useful for a longer period. Those systems judged to be high priority for major maintenance should be retrofitted or replaced before those systems which are operating well. Listed below are some factors to consider when prioritizing and scheduling retrofits and replacements.

**High Priority System Indicators:**

- Frequent recharges, leaking components
- Obsolete, inefficient equipment
- Equipment near end of life in hours use or age
- Frequent maintenance and repair required
- Building modernization scheduled

**Low priority system indicators:**

- Recent Installation
- Low maintenance, infrequent repair required
- CFC-13 refrigerant (no option available)
- System resistant to retrofit

**10-4. Yearly Updates.** Operations Project Managers and facility managers should update their ODS elimination plans in advance of each annual budget cycle to reflect projected costs, plus justification for necessary resources, and provide input to the budget process. The updated yearly plan should reflect both accomplishments and unfinished requirements for eliminating ODSs.

**10-5. Resourcing ODS Elimination.** There is no special funding for ODS elimination. ODS elimination requirements should be included in the applicable budgeting process. Using the methodology described in this guidance, project and facility plans can be developed to totally eliminate Class I ODSs.

## CHAPTER 10 - MANAGING OZONE-DEPLETING SUBSTANCES AT USACE PROJECTS AND FACILITIES

10-1. **Purpose.** This chapter establishes the policy for managing ozone-depleting substances (ODSs) at civil works projects and facilities.

10-2. **Applicability.** This chapter applies to all USACE commands having responsibility for civil works functions, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations will adapt the ozone-depleting substance guidance in AR 200-1, Environmental Protection and Enhancement, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commanders' ozone-depleting substance elimination program requirements.

10-3. **Policy.**

a. It is the policy of USACE, in conformance to Executive Order (EO) 12843, to:

(1) implement cost-effective programs to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and

(2) give preference to the procurement of alternative chemicals, products, and manufacturing processes that reduce overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere.

b. In implementing this policy, procurement practices will conform to the general requirements of Title VI of the Clean Air Act Amendments by:

(1) minimizing, where economically feasible, the procurement of products containing, or manufactured with, Class I substances in accordance with EPA's phaseout schedule and maximizing the use of safe alternatives;

(2) amending existing contracts to the extent permitted by law and, where practical, to be consistent with the phaseout schedules for Class I substances;

(3) being aware of the phaseout schedule for Class II substances (Clean Air Act Amendments, Section 605) in developing procurement policies and in awarding contracts; and

(4) implementing policies and practices that recognize the increasingly limited availability of Class I substances as production levels capped by the Montreal Protocol decline until final phaseout. Such practices will include, but not be limited to:

- reducing emissions and recycling ozone-depleting substances;

- ceasing the purchase of non-essential products containing or manufactured with ozone-depleting substances; and

- requiring that new contracts provide that any acquired products containing, or manufactured with, Class I or Class II substances be labeled in accordance with section 611 of

**the Clean Air Act Amendments.**

**c. USACE projects and facilities will establish, fund and implement management programs to support this policy. MSC commanders, district commanders and commanders/directors of facilities outside the district structure will develop internal procedures to assure compliance with all aspects of this policy. ODS Elimination Plans will be prepared for all projects and facilities where USACE has operations and maintenance responsibilities for facility needs, including government-owned, contractor-operated facilities. Production phase-out milestones are contained in the Clean Air Act Amendments and are listed in the Army Acquisition Pollution Prevention Support Office publication "Strategic Plan for Eliminating Ozone-Depleting Chemicals from U.S. Army Applications."**

**10-4. Program Requirements.**

- a. Identify sources of ODSs and determine type and amount.**
- b. Monitor regulated ODSs to comply with standards.**
- c. Procure equipment that meets applicable standards.**
- d. Cooperate with Federal, state, and local authorities in achieving ODS plan goals.**
- e. Assure that all technicians who service appliances, industrial process refrigeration units and motor vehicle air conditioner units that contain ODSs are certified by an EPA approved program in accordance with the 1990 Clean Air Act Amendments, Title VI, Section 602(a).**

**f. USACE organizations in General Services Administration (GSA)-leased facilities and USACE users of GSA-leased vehicles will support applicable GSA programs to eliminate ODS use in accordance with lease agreements.**

**10-5. Reporting and Record Keeping Requirements. Programs certifying technicians must maintain records in accordance with section (g) of appendix D of 40 CFR, Part 82.166. Reporting and Record Keeping Requirements.**

**APPENDIX G**

**RECENT CECW-OA GUIDANCE**

**COMMANDER'S POLICY MEMORANDUM #3**

**SUBJECT: Waste Reduction, Recycling and Priority Purchase of Environmentally Preferable and Recycled Products**

1. In keeping with our goal of promoting good environmental stewardship, it is vital that we develop and sustain programs that will conserve natural resources for the benefit of present and future generations. We are, therefore, establishing a policy which emphasizes the importance of such stewardship. Major Subordinate Command commanders, district commanders, and commanders /directors outside the district structure shall initiate and/or maintain cost-effective waste reduction and recycling programs if they have not already done so.
2. The "Vision Statement," enunciated in the Department of Defense pollution prevention strategy, states that we should establish and promote efficient material and energy use practices through conservation, materials substitution, recycling, affirmative procurement of recycled products, and the creation of markets for recycled materials. All of these are measures that will conserve natural resources.
3. We believe that the basis for good environmental stewardship is a personal commitment by USACE commanders to make it work. Proper stewardship of our resources and those of our customers begins with our obligation to conserve the natural resources that have been entrusted to us. This is a standard to which everyone throughout this organization needs to be committed. Enthusiastic implementation of this policy will pay great dividends in the future as we strive to improve our services to our customers and to the Nation. Your support is essential both to beginning and continuing these programs, as well as to instilling a waste reduction and recycling ethic throughout the entire USACE community.

JOE N. BALLARD (signed)  
Lieutenant General, USA  
Commanding

## MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling

1. Purpose: This memorandum, which replaces U.S. Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Solid Waste Recycling, provides guidance for development and management of waste reduction and recycling programs at USACE projects and facilities.

2. Applicability: This guidance applies to all Headquarters, USACE elements, major subordinate commands (MSCs), district commands, engineering laboratories and field operating activities (FOAs) having responsibility for Civil Works funded activities, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations shall adapt the guidance found in AR 200-1, in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commander's program requirements.

3. References:

- a. AR 200-1, Environmental Protection and Enhancement, 21 Feb 97
  - b. Executive Order (EO) 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, 6 Aug 93
  - c. EO 12873, Federal Acquisition, Recycling and Waste Prevention, 20 Oct 93
  - d. 40 CFR, Part 247, Guidelines for Procurement of Products that Contain Recycled Material
  - e. "Greening the Government," a Guide to Implement EO 12873, USEPA
  - f. Pollution Prevention Plans, Director of Civil Works Memo, 10 Aug 95  
CECW-OA
- SUBJECT: US Army Corps of Engineers Facilities Environmental Compliance Guidance Letter No. 1, Waste Reduction and Recycling
- g. Procurement Guidelines for Government Agencies, United States Environmental Protection Agency (USEPA), December 1990, (703) 941-4452

h. The Affirmative Procurement Program, Office of the Secretary of Defense, Under Secretary of Defense (Acquisition and Technology), July 1995

i. Resource Conservation and Recovery Act (RCRA) of 1976, PL 94-580

j. USACE Facilities Environmental Compliance Guidance Letter No. 1, Solid Waste Recycling, 24 Nov 92 (rescinded)

#### 4. Policy:

a. MSC commanders, district commanders and commanders/directors outside the district structure shall initiate and/or maintain cost-effective waste reduction and recycling programs.

b. USACE projects and facilities shall reduce waste generation and shall conserve natural resources by designing, specifying and procuring products that are environmentally preferable and/or made with recycled materials. For guidance in purchasing recycled products, refer to 40 CFR Part 247, Guidelines for Procurement of Products that contain Recycled Material (Reference d).

c. Operational Recycling Programs for USACE operated projects and facilities shall be compatible with State and local recycling requirements.

#### 5. Definitions:

a. "Environmentally Preferable" means products or services that have a less negative effect on human health and the environment when compared with competing products or services that serve the same purpose.

b. "Recycling" means a series of activities, including collection, separation and processing by which materials that would otherwise become waste are removed from the waste stream and reused as raw materials in making new products.

c. "Solid Waste" means garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, air pollution control facility, or other discarded material including solid, semi-solid, liquid or contained gaseous material resulting from industrial, commercial, mining, agricultural or community activities. It does not include solid or dissolved material in domestic sewage, irrigation return flows, dredged material or the by-products of clearing, snagging and debris removal from waterways or woody debris disposal from land areas. Impounded items are not solid waste until legal process has occurred.

d. "Source Reduction" is a method of waste reduction, through pollution prevention, in which any change in design, manufacturing, purchase or use of recycled or environmentally preferable materials or products, including packaging, re-

duces toxicity of these materials or products before they enter the waste stream.

e. "Waste Reduction" means decreasing amount of waste through source reduction or recycling.

6. Guidance:

a. The environmental protection hierarchy lists, in order of preference, source reduction, recycling, and disposal after treatment as recommended options for waste management. Waste reduction through source reduction is the preferred option. Disposal after treatment is considered the optional measure of last resort.

b. Reference f requires projects and facilities to complete waste reduction plans. Those plans must have assessments which identify opportunities for source reduction and recycling and outline methods to achieve this.

c. Design, construction, repair and maintenance of USACE projects shall consider use of environmentally preferable products consistent with mission and life-cycle cost considerations.

d. For consistency with the Federal Acquisition Regulation (FAR) and its supplements, contract solicitations for USACE activities shall comply with this policy. Federal Acquisition Circular 90-27, 31 May 95, amends the FAR to clearly reflect

government preference for acquisition of environmentally sound and energy-efficient products and to establish an affirmative procurement program favoring items containing the maximum practical content of recycled materials.

e. Environmentally preferable products and products made from recycled materials, such as recycled plastic, reprocessed oil and retread tires, should be used to the extent practical. Specifications and standards must be reviewed and updated to ensure that products made from recycled materials are not unduly restricted.

f. The USEPA publishes "Procurement Guidelines for Government Agencies" (Reference g), which contains recommendations for implementing certain requirements of the RCRA. These guidelines should be consulted for development of recycling programs and contracts.

g. Local purchases shall comply with this policy and guidance.

h. Whenever possible, quantities of solid waste should be reduced at the location where the waste was generated by using returnable containers, separation for recycling, composting, and/or other methods.

i. Solid waste recycling programs must be compatible with applicable Federal, State, and local recycling laws and regulations. Care shall be taken to ensure that each USACE project and facility developing recycling programs fully understands storage and handling requirements of materials and conducts systematic safety and health evaluations, including hazard analyses. Handling, storage and transportation requirements shall be incorporated into all recycling programs.

j. Where practical, USACE projects and facilities should take part in recycling programs conducted by regional organizations, counties and/or local communities.

k. In general, USACE lands and facilities should not be used for storage or disposal of solid waste. Products of clearing, snagging, and debris removal from waterways and woody debris removal from land areas are not considered solid waste; therefore, USACE lands can be used for storage or disposal of such matter.

7. Dissemination: Please use the Environmental Compliance Coordinator network for distribution of this Guidance Letter.

FOR THE COMMANDER:

RUSSELL L. FUHRMAN (signed)  
Major General, USA  
Director of Civil Works