

HEALTH SERVICES QUALITY IMPROVEMENT IMPLEMENTATION GUIDE

EXERCISE 16

SUBJECT: Infectious waste management at health care facilities

REFERENCE: (a) Title 40, Code of Federal Regulations (40 CFR) part 259 "Standards for the Tracking and Management of Medical Waste"

(b) Safety and Environmental Health Manual (COMDTINST M5100.47), chapter 6.D.

(c) Title 29, Code of Federal Regulations, (29 CFR) paragraphs 1910.132 (a) and (c) "Personal Protective Equipment"

PURPOSE: This exercise will assist health care facilities with the identification, collection, storage, and disposal of infectious medical waste in a manner which is efficient and in compliance with applicable federal, state, and local standards.

BACKGROUND: There is great public concern about pollution and personal health risks resulting from improper management and disposal of medical wastes. The HIV virus and the associated public information blitz has raised public consciousness about medical waste. For example, "body fluids", once a term used mainly by the medical profession, is now part of the general vocabulary. The media outcry over medical waste washing ashore in coastal areas indicates general concern. The concern persists even though there is no evidence that medical waste is more infective than residential waste, or that medical waste disposal practices have caused disease in the community. It is necessary and prudent for all Coast Guard health care facilities to develop and conscientiously adhere to standardized protocols for the management of infectious waste.

DISCUSSION:

1. This exercise deals with a subject area which is constantly changing. There are conflicting provisions within existing federal guidelines and programs. State requirements vary widely. Some states have requirements which far exceed those established by federal regulations while other states have none at all. Reference (a) provided much of the specific guidance for this exercise. It details a demonstration program which is only required in four states and one territory. However, the Environmental Protection Agency (EPA) strongly recommends that federal agencies follow these guidelines wherever possible.

2. This exercise requires each clinic to take two actions related to infectious waste:

a. Appoint an individual, in writing, to manage the infectious waste program for the facility. Enclosure (1) provides a sample memorandum which may be used in whole or in part for this purpose. This "Infectious Waste Manager" should be;

- (1) a senior petty officer; experienced E-5 or above,
- (2) a preventive medicine technician, if possible,
- (3) responsible for keeping abreast of applicable infectious waste regulations and acting as an advisor to the command when necessary, and
- (4) the contracting officer's technical representative (COTR) for any facility infectious waste disposal contract.

b. Develop a protocol which deals with the management of ACTUAL infectious waste as defined in paragraph 4. Clinics may also have to deal with local perceptions concerning infectious waste and may have to treat some additional non-infectious material as if it were infectious. If so, the protocol should include these items with a brief explanation of why they are considered infectious (e.g., municipal regulations, waste disposal contractor requires it, we want to).

3. References (a) and (b) provide detailed definitions of infectious waste. Briefly, we are dealing with "Infectious Solid Wastes". These wastes include solids, liquids, and contained gases, which are, or could well be, contaminated with organisms which pose a health hazard to humans. Waste which will be disposed of in a sanitary sewage system (municipal sewage system or septic tank) is specifically excluded from being considered infectious waste, state/local regulations permitting.

4. Definitions of infectious waste-related terms used in this guide:

a. Sharps: Needles, syringes, scalpel blades, pipettes, specimen slides, cover slips, glass petri dishes, and broken glass potentially contaminated with infectious material.

Note: Except for broken glass, all the listed items must be considered infectious waste when discarded, even if unused, due to public perception.

b. Pathological Wastes: Human tissues and organs, amputated limbs or other body parts, fetuses, placentas, animal carcasses or parts.

Note: Tissue being sent for pathological laboratory examination is excluded.

c. Microbiology Wastes: All cultures, discarded live viruses, disposable culture dishes, and devices used to transfer, inoculate, or mix cultures.

d. Blood and Blood Products: Waste blood, serum, plasma, blood products, pleurevacs, hemovacs, and materials saturated with blood or body products.

Note: Materials containing small amounts of blood such as tainted gauze pads and discarded products for personal hygiene such as diapers, facial tissues, and sanitary napkins are not considered infectious waste.

e. Body Fluids: Liquid emanating or derived from humans and limited to blood; cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids; and semen and vaginal secretions.

f. Medical Waste from Isolation Rooms: Not considered infectious waste unless specifically contaminated or fitting into one of the above categories.

g. Generator (of Infectious Waste): EPA classifies a facility as a generator if it produces infectious waste. Note that this is unlike the generator definition for some other types of hazardous waste which requires that a facility produce above a certain weight to be a generator. A generator is responsible for its infectious waste from the time produced until rendered non-infectious (i.e. cradle-to-grave). If a facility pays a contractor to remove and properly dispose of infectious waste, the facility is responsible if the contractor mishandles it. Coast Guard units without a medical facility should arrange with the nearest MTF, in writing, to dispose of any infectious waste they may generate.

h. Transportation/Transporter (of Infectious Waste): Transportation means the shipment or conveyance of medical waste by air, rail, highway, or water. A transporter is a person engaged in off-site transportation of medical waste. Facilities which dispose of more than fifty pounds per month of infectious waste with a transporter must insure that the transporter is registered with the EPA and that the transporter provides the facility with a copy of a filled-out "Medical Waste Tracking Form" or equivalent [see reference (a), appendix I for an example]. Facilities which generate less than fifty pounds per month AND dispose of less than fifty pounds per shipment are exempt from using the Medical Waste Tracking Form but are required to maintain a log detailing disposal of all infectious waste. See enclosure(2) attachment(c) for a sample disposal

log.

Note: If you either generate over 50 pounds per month or ship over 50 pounds per shipment, you must use the Medical Waste Tracking Form.

5. Elements of your infectious waste management program must include:
 - a. Staff Training
 - (1) new employee orientation
 - (2) annual refresher training - all hands
 - b. Segregation of waste into infectious/non-infectious at the point of origin.
 - c. Packaging
 - d. Storage
 - e. Transport
 - f. Treatment
 - g. Disposal
 - h. Accidental spill handling
 - i. Record keeping.

Enclosures (2) and (3) provide samples of an infectious waste protocol and employee training syllabus which meet all current federal guidelines. You should contact the responsible agency for your area [see the lists provided as enclosures (4) and (5)] to see if they have additional guidelines or regulations. Your protocol must conform to the more strict, extensive, or comprehensive rules applicable to your location. Your training must support your protocol.

ACTION: All Coast Guard health care facilities must have a written infectious waste management protocol which meets all federal requirements and any additional state and local requirements. The command must designate, in writing, an individual responsible for the infectious waste management program at the clinic/sickbay. Each facility must conduct training annually and as part of the orientation for new employees covering the dangers, precautions, and protective equipment associated with infectious waste handling. Enclosures (1) through (5) provide samples of a protocol, training syllabus, and other aids which may be used in whole or in part in the creation of an effective waste management program.

- Encl:
- (1) Sample Memorandum Appointing and Delineating Responsibilities for an Infectious Waste Manager
 - (2) Sample Infectious Waste Management Protocol with Attachments
 - (3) Sample Employee Training Syllabus
 - (4) List of State Agencies Which Control/regulate Infectious Waste
 - (5) List of Regional EPA Offices

Memorandum

Subject: ASSIGNMENT AS CLINIC INFECTIOUS WASTE MANAGER Date: SSIC: 6280

From: Commanding Officer, [Unit Name] Reply to Attn of:

To:

1. You are hereby assigned the collateral duty of Infectious Waste Manager for the [unit name] health facility.

2. Your duties in this capacity include:

- a. Contacting [insert the name of your state infectious waste management agency here] to determine if there are state or local requirements for infectious waste management.
- b. Familiarizing yourself with pertinent state and federal regulations and Coast Guard policy regarding infectious waste.
- c. Developing, implementing and maintaining a written infectious waste management protocol which meets all local, state, and federal requirements.
- d. Developing, implementing and maintaining an infectious waste training syllabus which supports the waste management protocol.
- e. Ensuring that appropriate containers are maintained in areas where infectious waste is produced.
- f. Ensuring that all infectious waste containers placed in storage are properly labeled.
- g. Maintaining the infectious waste log and any other required records.
- h. Acting as an advisor on infectious waste matters for the clinic and the command.
- i. Acting as contracting officers technical representative (COTR) for the clinic's infectious waste disposal contract (delete this item if there is no local contract).
- i. Acting as liason with (insert name of USMTF or other facility which handles the disposal). (delete this item if there is a local contract).

SIGNATURE
INFECTIOUS WASTE MANAGEMENT PROTOCOL

Attachment A to this enclosure contains notes which clarify sections of this sample protocol. The sections are marked by a small, superscript number like¹. The attachment should not be part of your units Infectious Waste Management Protocol; nor should this paragraph.

1. Waste Containers: All patient examination and treatment areas must have a minimum of two waste containers, regular (non infectious) and sharps. Add infectious waste bag(s) if needed. Containers for infectious material must be red, orange, or marked with the universal bio-hazard symbol. Inpatient holding areas (ward, room, etc.) need infectious material containers if any patient has a disease which is communicable via body fluids or waste.

a. Sharps container - rigid, puncture resistant, leakproof, sealable. ALL SHARPS will be disposed of in a sharps container even if unused. Small amounts of other infectious waste may be discarded in a sharps container.

b. Infectious waste bag¹ - water resistant material, sealable, opaque if used for unsightly material such as limbs, animals, organs.

c. Regular waste container - no special requirements

d. Infectious fluids container - if potentially infectious liquids are produced and are not disposed of in the sanitary sewage system², there must also be a container for these fluids which is leakproof, burst resistant, and can be tightly capped or stoppered. Urine is NOT normally a potentially infectious liquid.

e. Infectious waste containers will routinely be maintained in the following places:

All dental operatories
All treatment rooms
Immunizations rooms
Medical laboratory
Minor surgery areas
Urgent care areas
(specify any other locations applicable at your facility)

f. Replacement containers will be available in (specify a central location; do not use the supply storeroom unless all personnel have easy access at all times)

2. Waste Segregation: Separate waste into the appropriate container at the time it is produced. If you accidentally place non-infectious waste in a red container, LEAVE IT THERE. If you accidentally place infectious waste in a regular container, move it to the proper one unless it has contaminated the regular waste or would be difficult to move. In that case, place the trash container into a red bag(s). The following are items whose classification might not be obvious³:

microscope slides & covers, pipets, and other fragile glass items are sharps

teeth are sharps

teeth given to children after extraction ARE NOT infectious waste

absorbent materials containing small amounts of blood or body fluids (e.g., dressings, diapers, facial tissue, sanitary napkins, any others items which do not contain unabsorbed or free-flowing body fluids) ARE NOT infectious waste

non-sterilizable disposable products used during ROUTINE examinations and dental procedures (e.g. rubber gloves, tongue blades, rubber dams, cotton) ARE NOT infectious waste.

3. Waste Storage:

a. Preparation - seal all containers prior to moving to storage. Cap sharp and liquid containers. "Twist-tie" plastic bags closed. If the bag seems especially heavy or likely to be punctured by tongue blade, cotton tip applicator, etc., tie it and place it inside another red bag prior to moving to storage.

b. Location

{specify the location at your facility. Requirements: It must be kept free of rodents and vermin, have limited access to restrict entry of unauthorized persons, be clearly marked with the universal bio-hazard symbol on the door(s), and on any refrigerators, freezers, or large containers inside}

c. Container Labeling⁴ - each container in the storage area must be clearly marked with facility identifying information and indicate that the contents are infectious waste. If plastic bags are to be sealed in boxes, the bag does not have to identify the facility. Boxes must be red or must display the universal bio-hazard symbol. Each container must have a label at least 3 by 5 inches which contains facility identifying information, including name, mailing address, phone number. Label material and ink used to mark labels will be water resistant. Attachment (B) is a sample infectious waste label which may be used in whole or in part for this purpose.

d. Duration⁵ - the exact duration of storage will vary. Material must be maintained in a nonputrescent state. This means a maximum of 72 hours at room temperature unless autoclaved prior to storage. If autoclaved, it may be stored up to five days. Autoclaving, in this context, is to prevent putrefaction and can be done in any steam sterilizer. Waste so treated is still considered infectious unless the treatment meets the requirements in para. 4. With refrigeration, material may be held as long as it does not putrefy.

4. Treatment and Disposal⁶: Treat all infectious waste before local disposal.

a. Microbiological⁷

(1) Steam sterilize:

(a) open the neck of the bag to facilitate steam penetration

(b) maintain at 121_ C (250_F) for at least 90 minutes or more with large loads.

(c) include a Bacillus stearothermophilus spore test indicator in each pack.

(d) after sterilization, place in a non-bio-hazard container and dispose of as regular trash.

(2) Incinerate: Minimum temperature of 1600_ F in the secondary combustion chamber and minimum residence time of one second. Any ash remaining is considered noninfectious waste and should be disposed of as regular trash.

b. Pathological: Incinerate at a minimum temperature of 1600_ F in the secondary combustion chamber and minimum residence time of one second and dispose of as regular trash or turn over to a mortician for burial or cremation.

c. Sharps⁷

1. Steam sterilize: loosen the cap and maintain at 121_ C (250_ F) for at least 90 minutes or more with large loads. Include a Bacillus stearothermophilus spore test indicator in each pack and run a test pack at least once a week. After sterilization, material must be ground or crushed so that it is not recognizable, and then disposed of as regular trash.

2. Incinerate: Minimum temperature of 1600_ F in the secondary combustion chamber and minimum residence time of one second. If any material remains recognizable after incineration, grind or crush so that it is not recognizable, and dispose of as regular trash.

5. Spills

a. Cleanup will be performed only by personnel who have completed the infectious waste management training;

b. Don proper protective equipment; (gloves are usually sufficient);

c. Remove furniture and equipment if necessary;

d. Blot or wipe up liquid and dispose of material in infectious waste container;

e. Wipe the area with a chemical germicide which is tuberculocidal. Wiping/cleaning materials may be disposed of in regular trash container.

6. Record Keeping:

a. An "Infectious Waste Log" shall be maintained at the facility. Attachment (C) is a sample which may be used in whole or in part for this purpose.

b. An entry shall be made in the log for each container of infectious waste placed into and removed from storage.

c. A copy of the log and any associated documents shall be maintained on file for three years.

d. A copy of any document provided by a transporter shall be maintained on file for three years.

Attach: (A) Notes to clarify sections of the sample protocol (the notes and this reference need not be included in the facilities Infectious Waste Management Protocol).

(B) Sample Infectious Waste Container Label

(C) Sample Infectious Waste Log

END NOTES

The following notes are for your information/consideration when developing your protocol. They should not be included in the final document. The numbers all refer back to an item in the main document marked with the same number.

1. Some states have specified exact bursting strength, minimum thickness, or durability as evaluated by the ASTM dart test.
2. Check with your state agency to see if this practice is allowed.
3. Check with your state agency to see if they have different classification criteria.
4. Unless the state specifies a different marking method.
5. Some states have specified holding periods and temperatures which are different from those listed here. Use the stricter/shorter storage criteria.
6. Disposal by a contractor is probably the easiest and surest method which can be used at CG facilities and is strongly recommended. The contractor will usually supply containers which meet state requirements, provide documentation needed for your records, and substantially reduce the amount of staff time spent on infectious waste management.

If you do opt to have a contract, remember that, as the generator, you are responsible if the contractor makes a mistake. For this reason, you should only use a specialist who is bonded (or willing to post an adequate performance bond).

If you have an infectious waste disposal contract, this entire section can read:

"4. Treatment and Disposal: In accordance with the infectious waste disposal contract."

7. Procedures and requirements are included for both steam sterilization and incineration. Eliminate the procedure you do not use. Please note the time/temperature requirement for steam sterilization. Your equipment may not be able to successfully treat infectious waste.
8. A floppy disk copy of this exercise has been provided. The volume name is [QAIG]. There are two directories, <Normal> and <Laser>.

[QAIG]<Normal>QAIGInfWaste.doc is a word processing file which contains most of the QAIG. It can be printed on any printer.

[QAIG]<Laser>InfWasteEncl.laser is a word processing file which contains only the parts which require a graphics-capable printer (one which uses the CanonIII driver is best). It contains:

Attachments - (B), (C)

Enclosures - (1), (4), (5)

[QAIG]<Laser>QAIG/InfWaste.laser is a word processing file which contains the entire QAIG. Same device and driver requirements as above.

[QAIG]<Laser>InfWasteDisposalLog.pic is an ART/OFIS Designer picture file which contains an editable version of Attachment (B). Caution: Opening this file in Document Designer will destroy it.

INFECTIOUS WASTE LABEL

<u>CONTENTS - INFECTIOUS WASTE</u>		
I		I
N	CLINIC NAME	N
F	address	F
E	City State Zip	E
C		C
T	Phone (xxx) xxx-xxxx	T
I		I
O		O
U		U
S	Date Stored: _____	S
W		W
A	Date Disposed: _____	A
S		S
T		T
E		E
<u>CONTENTS - INFECTIOUS WASTE</u>		

EMPLOYEE TRAINING SYLLABUS INFECTIOUS WASTE MANAGEMENT

Purpose: The purpose of this training is to familiarize you with infectious waste, its hazards, proper personal protection, and the collection, storage, and disposal methods used at this facility.

Objectives: At the completion of this training the employee will be able to:

Describe the types of infectious waste produced at this facility

Don proper protective equipment, if any, to handle our infectious waste

Segregate clinic waste into sharps, other infectious, and non infectious categories

Dispose of each category in the proper container

Prepare infectious waste containers for proper disposal

Clean up, safely and properly, after an accidental spill of body fluids or infectious waste.

Printed Handout: A copy of the facility's current Infectious Waste Management protocol.

Training Aids:

Sharps Containers (one of each size in use)
Red/Orange Infectious Waste Plastic Bag
Infectious Waste Box with label

Course Outline:

- I. Definitions
- II. Precautions and Protective Barriers
- III. Containers
- IV. Handling and Sorting
- V. Storage
- VI. Disposal
- VII. Spills

I. Definitions:

A. Infectious Solid Wastes: solids, liquids, and contained gases, which are, or could well be, contaminated with organisms which pose a health hazard to humans. Waste disposed of in a sanitary sewage system (municipal sewage system or septic tank) is specifically excluded from being considered infectious waste, state/local regulations permitting.

B. Sharps: needles, syringes, scalpel blades, pipettes, specimen slides, cover slips, glass petri dishes, and broken glass potentially contaminated with infectious material.

Note; except for broken glass, all the listed items must be considered infectious waste when discarded, even if unused, due to public perception.

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Note; tissue being sent for pathological laboratory examination is excluded.

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Note; materials containing small amounts of blood such as tainted gauze pads and discarded products for personal hygiene such as diapers, facial tissues, and sanitary napkins are not considered infectious waste.

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I. Transportation/Transporter (of Infectious Waste): Transportation means the shipment or conveyance of medical waste by air, rail, highway, or water. A transporter is a person engaged in off-site transportation of medical waste. Facilities which dispose of more than fifty pounds per month of infectious waste with a transporter must insure that the transporter is registered with the EPA and that the transporter provides the facility with a copy of a filled-out "Medical Waste Tracking Form" or equivalent [see reference (a), appendix I for an example]. Facilities which generate less than fifty pounds per month AND dispose of less than fifty pounds per shipment are exempt from using the Medical Waste Tracking Form but are required to maintain a log detailing disposal of all infectious waste. See enclosure(2) attachment(c) for a sample disposal log.

Note: If you either generate over 50 pounds per month or ship over 50 pounds per shipment, you must use the Medical Waste Tracking Form.

II. Precautions and Protective Barriers:

A. Infectious waste probably does not present any greater threat to the environment than other trash.

B. It can present a hazard to workers who are exposed to it.

C. However, we have several barriers which can normally prevent our exposure;

1. biological barriers
 - unbroken skin
 - mucus membranes
 - cilia (lining respiratory tract)
 - immune system

2. non-biological barriers
 - gloves
 - eye goggles or full face shield
 - gown
 - mask

III. Waste Containers - see the Infectious Waste Protocol, page 1, para. 1

IV. Handling and Sorting

A. General Guidelines

use proper protective equipment for the procedure and anticipated exposure

immediately wash any skin surfaces contaminated with blood or body fluids.

infection from exposure to HIV or HBV will depend on VIRULENCE,
CONCENTRATION, and CONTACT TIME of the pathogen.

HBV is much easier to get infected with than HIV

B. Sharps - discard in the sharps container.

C. Other Infectious Waste - discard small quantities/items in the sharps container. Otherwise use the red/orange bio-hazard bag. Includes;

disposable material used in a "dirty" case which contain any amount of blood or body products

absorbent material used in patient treatment which is saturated with blood or body products

tissue or body parts which are not being sent for pathological examination.

D. Other Waste - discard in regular trash container or into the sanitary sewer system

Note: Material which is poured down a sink or toilet is not considered infectious waste

V. Storage - see the Infectious Waste Management Protocol, page 2, para 3.

VI. Disposal - as specified in the Infectious Waste Management Protocol, page 2 para 4.

VII. Spills - clean up procedures are detailed in the Infectious Waste Management Protocol, page 2, para 5.

STATE AGENCIES WITH
HAZARDOUS WASTE OVERSIGHT

Alabama Department of
Environmental Management
Land Division
1751 Federal Drive
Montgomery, Alabama
36130
(205) 271-7700

Bureau of Health Care
Institution Licensure
Arizona Department of
Health Services
1740 West Adams Street
Phoenix, Arizona 85007
(602) 255-1115

California Department of
Health Services
Hazardous Materials
Management Section
714/744 P Street
Sacramento, California
95814
(916) 324-1798

Hazardous Waste
Management
Department of Environment
Protection
State Office Building, 165
Capitol Avenue
Hartford, Connecticut 06106
(203) 566-4869 or 5712

District of Columbia - see
Washington D.C.

Solid Waste Management
Program
Department of
Environmental Regulation
Twin Towers Office Building,
6th Floor
2600 Blair Stone Road
Tallahassee, Florida 32301
(904) 488-0300

Air and Solid Waste Permit
Section
Dept. of Health, Amelco
Building, 3rd Floor
645 Halekau Wila Street
Honolulu, Hawaii 96313

Division of Land Pollution
Control
Environmental Protection
Agency
2200 Churchill Road
Springfield, Illinois 62706
(217) 782-6762 or 6760

Air and Waste Permit
Branch, Program Oper. Div.
Iowa Department of Water,
Air and Waste Mgt.
Henry A. Wallace Building
900 East Grand Street
Des Moines, Iowa 50319
(515) 281-8692

Division of Waste Mgt.,
Cabinet of Natural
Resources and
Environmental Protection
18 Reilly Road
Frankfort, Kentucky 40601
(502) 564-6716

Bureau of Oil and Hazardous
Waste Materials
Department of
Environmental Protection
State House -- Station 17
Augusta, Maine 04333
(207) 289-2651

Division of Solid and
Hazardous Waste
1 Winter Street
Boston, Massachusetts
02108
(617) 292-5582

Office of Hazardous Waste
Management
Michigan Department of
Natural Resources
P.O. Box 30038
Lansing, Michigan 48909
(517) 373-1220

Division of Solid/Hazardous
Waste Management
Bureau of Pollution Control
Department of Natural
Resources
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171

Solid and Hazardous Waste
Management Bureau
Department of Health and
Environmental Sciences
Cogswell Building, Rm B201
Helena, Montana 59620
(406) 444-2821
Division of Environmental
Protection
Department of Conservation
and Natural Resources
Capital Complex
Carson City, Nevada 89710
(702) 885-4670

Division of Waste
Management
Department of
Environmental Protection
33 East Hanover Street
Trenton, New Jersey 08625
(609) 292-9877

Division of Solid and
Hazardous Waste
Department of
Environmental Conservation
50 Wolf Road, Rm 417
Albany, New York 12233
(518) 457-3254

Division of Health Facilities
Department of Health
State Capital Building
Bismark, North Dakota
58505
(701) 244-2352

Institutional Services,
Medical Facilities
Department of Health
P. O. Box 53551
1000 N. E. 10th Street, 4th
Floor
Oklahoma, City, Oklahoma
73152
(405) 271-6811

Bureau of Waste Management
Department of Environmental Resources
Fulton Building 8th floor
P. O. Box 2063
Harrisburg, Pennsylvania 17120
(717) 787 6239

Bureau of Solid and Hazardous Waste
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201
(803) 758-5681

Division of Solid Waste Management
Tennessee Department of Public Health and Environment
Customs House , 4th Floor
601 Broadway St.
Nashville, Tennessee 37219-5403
(615) 741-3424

Bureau of Solid Hazardous Waste
Department of Health
P. O. Box 45500
Salt Lake City, Utah 84145-0501
(801) 533 4145

Division of Solid and Hazardous Waste Mgt.
Department of Health
Monroe Building, 11th Floor
101 North 14 Street
Richmond, Virginia 23219
(804) 255-2667

Hazardous Waste Section
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504-8711
(206) 459-6322

State Health Department
1800 Washington Street East
Charleston, West Virginia 25305
(304) 348-2970

Air and Solid Waste Management
Department of Environment Conservation
Pouch O
Juneau, Alaska 99811
(907) 465-2666

Solid Waste Management Division
Department of Pollution Control and Ecology
8001 National Drive, P. O. Box 9583
Little Rock, Arkansas 72219
(501) 562-7444

Waste Management Division
Colorado Department of Health
4210 E. 11th Avenue
Denver, Colorado 80220
(303) 320-8333 Ext. 4346

Waste Management Section
Department of Natural Resources and Environmental Control
89 King Highway, P. O. Box 1401
Dover, Delaware 19903
(302) 736-4781

Land Protection Branch
Environmental Protection Division
Department of Natural Resources, Room724
270 Washington Street, S.W.
Atlanta, Georgia 30334
(404) 656-2833

Hazardous Materials Bureau
Department of Health and Welfare
State House
Boise, Idaho 83720
(208) 334-4107

Division of Land Pollution Control
State Board of Health
1330 West Michigan Street,
Rm A304
Indianapolis, Indiana 46206
(317) 243-9100

Solid Waste Management Section
Department of Health and Environment
Forbes Field, Building 321
Topeka, Kansas 66620
(913) 862-9360 Ext. 309

Hazardous Waste Division
Department of Natural Resources
P. O. Box 44066
Baton Rouge, Louisiana 70804
(504) 342-1216

Air Management Administration
Department of Health and Mental Hygiene
201 West Preston St, 2nd Floor
Baltimore, Maryland 21201
(301) 225-5260

Massachusetts Department of Public Health

150 Tremont St.
Boston, Massachusetts
02111
(617) 727-2700

Division of Solid and
Hazardous Waste
Minnesota Pollution Control
1935 West County Road B-2
Roseville, Minnesota 55113
(612) 296 7373

Waste Management
Program
Department of Natural
Resources
P. O. Box 176
Jefferson City, Missouri
65102
(314) 751-3241

Land Quality Division
Department of
Environmental Control
State House Station
P. O. Box 94877
Lincoln, Nebraska 68509
(402) 471-2186

Bureau of Health Facilities
Administration
Division of Public Health
Department of Health and
Welfare
6 Hazen Dr.
Concord, New Hampshire
03301
(603) 271-4592

Solid and Hazardous Waste
Management Programs
Health and Environment
Department
P. O. Box 986
Santa Fe, New Mexico
87504-0986
(505) 827-5271 or 0020
Solid and Hazardous Waste
Management Branch
Division of Health Services
Department of Human
Resources
P. O. Box 2091
Raleigh, North Carolina

27602
(919) 733 2187

Division of Solid and
Hazardous Waste Mgt.
Ohio Environmental
Protection Agency
361 East Broad Street
Columbus, Ohio 43215
(614) 466-7220

Hazardous and Solid Waste
Division
Department of
Environmental Quality
P. O. Box 1760
Portland, Oregon 97207
(503) 229-6266

Division of Air and
Hazardous Materials
Department of
Environmental Management
204 Cannon Building
75 Davis Street
Providence, Rhode Island
02908
(401) 277-2797

Office of Air Quality and
Solid Waste
Department of Water and
Natural Resources
Joe Foss Building
523 East Capital Avenue
Pierre, South Dakota 57501
(605) 773-3153

Bureau of Solid Waste
Management
Texas Department of Health
1100 West 49th Street,
T601A
Austin, Texas 78756-3199
(512) 458 7271

Hazardous and Solid Waste
Management Division
Department of Water
Resources and
Environmental Engineering
Agency of Environmental
Conservation
State Office Building
Montpelier, Vermont 05602
(802) 828-3395

Department of Consumer
and Regulatory Affairs and
Environmental Control
Division
5010 Overlook Avenue,
Washington, DC 20032
(202) 767-8414

Bureau of Solid Waste
Management
Department of Natural
Resources
P.O. Box 7921
Madison, Wisconsin 53707
(608) 266-2111

Solid Waste Management
Program
State of Wyoming
Department of
Environmental Quality
Herschler Building
122 West 25th street
Cheyenne, Wyoming 82002
(307) 777-7752
EPA REGIONAL OFFICES
HAZARDOUS WASTE
OVERSIGHT

Region I
State Waste Programs

Branch
JFK Federal Building
Boston MA 02203
(617)573-5758

Region II
Air and Waste Management
Division
26 Federal Plaza
New York NY 10278
(212)264-5166

Caribbean Field Office
(809)729-6920

Region III
Waste Management Branch
841 Chestnut Building
Philadelphia PA 19107
(215)597-2842

Region IV
Hazardous Waste

Management Division
345 Courtland St NE
Atlanta GA 30365
(404)347-3016

Region V
RCRA Activities
230 S Dearborn ST
Chicago IL 60604
(312)353-9510

Region VI
Air and Hazardous Materials
Division
1445 Ross Avenue Suite
1200
Dallas TX 75270
(214)655-6652

Region VII

RCRA Branch
726 Minnesota Ave
Kansas City KS 66101
(913)236-2856

Region VIII
Waste Management Division
999 18th St Suite 500
Denver CO 80202
(303)293-1496

Region IX
Toxic and Waste
Management
215 Fremont St
San Francisco CA 94105
(415)974-8388

Region X
Waste Management Branch
1200 Sixth Ave
Seattle WA 98101
(202)442-6501