

Michigan State University
**Biohazardous Waste
Management Plan**



Prepared by

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This document has been prepared to provide procedural guidance to MSU biohazardous waste generators and to fulfill regulatory requirements of the Michigan Medical Waste Regulatory Act (Act 368 Part 138), and the Michigan Bloodborne Infectious Diseases Standard (R325.70001-R325.70018)

Michigan State University
Biohazardous Waste Management Plan

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Introduction	1
General Program Management	2
• Areas of Responsibility	2
• Biohazardous Waste Management Plan Availability	3
Biohazardous Waste at MSU	3
• Types of Biohazardous Waste Generated and/or Handled on Campus	3
• Segregation, Packaging, Labeling and Collection of Biohazardous Waste at MSU	4
• Methods of On-Site or Off-Site Storage	5
• Methods of On-Site or Off-site Decontamination	6
Exposure Minimization Methods for Employees Involved in Biohazardous Waste Generation, Handling and Disposal	7
• Biohazardous Waste Training	7

APPENDICES

Appendix A: Biohazardous Waste-Generating Facilities

- MSU On-Campus Facilities
- MSU Off-Campus Facilities
 - Kellogg Biological Station
 - MSU Clinics: Sparrow Professional Building
 - MSU Clinics: Sparrow Health Science Pavilion
 - VARI Grand Rapids

Appendix B: Michigan Medical Waste Regulatory Act of 1990

Introduction

At Michigan State University, the term **biohazardous waste** is used to describe different types of waste that might include infectious agents. Currently, the following waste categories are considered to be biohazardous waste and are covered by the provisions of the MSU Biohazardous Waste Management Plan:

- **Medical Waste:** Defined as any solid waste which is generated in the diagnosis, treatment, (e.g. provision of medical services), or immunization of human beings in research and healthcare pertaining thereto, or in the production or testing of biologicals, as well as categories defined by the *Michigan Medical Waste Regulatory Act* (MMWRA).

According to the MMWRA, medical waste includes:

1. Cultures and stocks of infectious agents and associated biologicals, including laboratory waste, biological production waste, discarded live and attenuated vaccines, culture dishes, and related devices.
 2. Liquid human and animal waste, including blood and blood products and body fluids, but not including urine or materials stained with blood or body fluids.
 3. Pathological waste: defined as human organs tissues, body parts other than teeth, products of conception, and fluids removed by trauma or during surgery or autopsy or other medical procedure, and not chemically-fixed (i.e. formaldehyde).
 4. Sharps: defined as needles, syringes, scalpels, and intravenous tubing with needles attached regardless of whether they are contaminated or not.
 5. Contaminated wastes from animals that have been exposed to agents infectious to humans, these being primarily research animals.
- **Regulated waste** as defined by the *Michigan Occupational Safety Health Administration (MIOSHA) Bloodborne Infectious Diseases Standard* including:
 1. Liquid or semi-liquid blood or potentially infectious materials;
 2. Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed;
 3. Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling;
 4. Contaminated sharps which includes any contaminated object that can penetrate the skin;
 5. Pathological and microbiological wastes containing blood or other potentially infectious materials.
 - **Laboratory waste and regulated waste** as defined in the *NIH Guidelines for Research Involving Recombinant DNA Molecules* and the *CDC/NIH Biosafety in Microbiological and Biomedical Laboratories*. In general, this category includes contaminated waste that is potentially infectious and/or hazardous to humans, animals or plants.

MSU requires that all employees involved in the generation, handling and disposal of biohazardous waste comply with the provisions of the Biohazardous Waste Management Plan. The plan was prepared by the Office of Radiation, Chemical and Biological Safety (ORCBS) and is used in conjunction with the *MSU Hazardous Waste Disposal Guide*.

The plan encompasses the general provisions for all MSU facilities (on or off-campus). However, the main document addresses the types of waste and practices used by on-campus facilities only. Specific information regarding the types of wastes generated and practices used by off-campus facilities may be found in the appendices or by contacting ORCBS at 355-0153.

General Program Management

Areas of Responsibility

The proper segregation, treatment and disposal of biohazardous waste can only be achieved through the cooperation of all responsible MSU personnel. This division of responsibilities includes:

1. The Office of Radiation Chemical and Biological Safety (ORCBS); specifically the Hazardous Waste Coordinator and the Biological Safety Officer or their designee; (refer to Appendix A)
2. Supervisory Personnel (including Department Chairs, Directors, Principal Investigators, Managers and Supervisors);
3. Employees.

ORCBS

The Hazardous Waste Coordinator and Biological Safety Officer or their designee will:

- Oversee the implementation of the Biohazardous Waste Management Plan;
- Develop, in coordination with administrators, additional biohazardous waste-related policies and procedures as needed to support the effective implementation of this plan and maintain compliance with regulatory requirements;
- Revise the plan each time there is a change in either of the following, within 30 days after the change occurs:
 - a. A person or site named in the plan;
 - b. The type of waste handled, or the methods of handling waste at a facility.

Supervisory Personnel

Supervisory personnel are responsible for compliance in their areas. In cooperation with the ORCBS, supervisory personnel must:

- Assure that all employees who generate, handle, treat and/or dispose of biohazardous waste receive biohazardous waste training as outlined below;
- Assure that all employees under their supervision who generate, handle, treat and/or dispose of biohazardous waste follow the procedures outlined in this document.

Employees

Employees who generate, handle, treat, and/or dispose of biohazardous waste are responsible for:

- Following the procedures and practices outlined in this document;
- Participate in a biohazardous waste training session.

Biohazardous Waste Management Plan Availability

Upon request, MSU will make the Biohazardous Waste Management Plan available to the Michigan Department of Environmental Quality (DEQ).

The Biohazardous Waste Management Plan will be available to MSU employees. Employees can request a hard copy of the plan by calling the ORCBS at 355-0153. A hard copy will be provided to the requesting employee within 24 hours of receipt of the request.

The latest revision of the MSU Biohazardous Waste Management Plan will be available on the ORCBS website (www.orcbs.msu.edu).

Biohazardous Waste at MSU

Types of Biohazardous Waste Generated and/or Handled On Campus

At Michigan State University the following types of biohazardous waste may be generated and/or handled:

1. Cultures and stocks of infectious agents and associated biologicals, including laboratory waste, biological production wastes, discarded live and attenuated vaccines, culture dishes, and related devices.
2. Liquid human and animal waste, including blood and blood products and body fluids, but not including urine or materials stained with blood or body fluids.
3. Pathological waste including human organs, tissues, body parts other than teeth, products of conception, and fluids removed by trauma or during surgery or autopsy or other medical procedure.
4. Sharps, which means needles, syringes, scalpels, intravenous tubing with needles attached; any item that is sharp enough to penetrate the skin and is contaminated with potentially infectious material.
5. Contaminated wastes from animals that have been exposed to agents infectious to humans or animals, these being primarily research animals.
6. Wastes generated in recombinant DNA research.
7. Animal carcasses and wastes (i.e. bedding) that have been generated in infectious disease research or recombinant DNA research. Refer to the MSU Hazardous Waste Disposal Guide for information regarding disposal of animal carcasses generated in other types of research.

Segregation, Packaging, Labeling and Collection of Biohazardous Waste at MSU

At Michigan State University the following procedures are used for segregation, packaging, labeling and collection of medical waste.

A. General methods

1. All biohazardous waste is to be packaged, contained and located in a manner that prevents and protects the medical waste from release at the producing facility at anytime before ultimate disposal.
2. All primary containers (other than approved biohazard bags) used for medical waste collection, storage and disposal are to be labeled with a **biohazard symbol**, or the words "**Medical Waste**", or "**Pathological Waste**" in letters not less than one inch high. The preferable background color of all primary containers is red or orange fluorescent (e.g., biohazard bags).
3. All waste containers that are picked up by the ORCBS and the University Laboratory Animal Resources (ULAR) should be labeled with a MSU Materials Pick Up Tag (Waste tag) in accordance with the MSU Hazardous Waste Disposal Guide.

B. Waste Type-Specific Management Methods

1. All liquid cultures and stocks of materials contaminated with an infectious agent and associated biologicals, including laboratory waste, biological production wastes, discarded live and attenuated vaccines, shall be stored in closable, puncture-resistant containers and **decontaminated by autoclaving**. After autoclaving, liquid decontaminated waste can be disposed of in a sanitary sewer if no other hazardous materials are present (e.g., chemicals and/or radioactive materials). For information on the special treatment of radioactive biohazardous waste, contact the ORCBS at 355-0153.
2. All solid cultures and stocks of materials contaminated with an infectious agent, culture dishes and related devices other than sharps, can be stored in leak-proof, biohazard bags prior to decontamination. If rupture of bags, or leakage is possible, the use of a secondary leak-proof container or bag is advised.
3. Biohazardous wastes, with the exception of liquids and sharps, that have been decontaminated by autoclaving, may be disposed of in the local (dumpster) if they are securely packaged in leak-proof containers and the biohazard warning labels have been removed or the container is clearly labeled as decontaminated biohazardous waste. Decontaminated waste in biohazard bags with an "Autoclaved" bag indicator must be placed inside a non see-through (opaque) plastic bag or other secondary non-transparent container (box) prior to disposal in the local. It is imperative that the waste is sufficiently autoclaved (darkening of the indicator) prior to disposal. Only biohazard bags with the "**AUTOCLAVED**" indicator are currently approved by MSU. These bags are available from MSU General Stores or MSU Biochemistry Stores.

4. All blood and blood products and body fluids shall be disposed of by one of the following methods:
 - Flushing down a sanitary sewer;
 - Decontaminated by autoclaving and disposed of in the landfill.
5. Human pathological waste shall be cremated or buried in a cemetery. Small pieces of tissue and fluids shall be ground until rendered unrecognizable and flushed down a sanitary sewer or incinerated. For disposal of animal waste (carcasses or tissue), refer to the MSU Hazardous Waste Disposal Guide.
6. Sharps shall be disposed of by incineration. Place discarded needles and syringes into an approved MSU sharps container. An approved sharps container is one that is leakproof, puncture-resistant, closable, bears the biohazard symbol and is manufactured as a sharps container. Sharps containers used on campus should also be labeled with the ORCBS "SHARPS" label to facilitate proper treatment and disposal of containers. Do not clip, bend, break, or recap sharps. A sharps container must be permanently closed and disposed of through the ORCBS when:
 - It is $\frac{3}{4}$ full, or
 - Within 90 days of the date that the first sharp was placed in it,whichever comes first. For pick-up request, refer to the MSU Hazardous Waste Disposal Guide.
7. Animal waste contaminated with organisms infectious to humans shall be collected in biohazard bags or other leak-proof containers labeled with a biohazard sticker and disposed of by incineration.
8. Animal carcasses generated in infectious disease research or recombinant DNA research will be stored in leak-proof containers labeled with a biohazard sticker and disposed of by incineration.
9. Wastes generated in recombinant DNA research will be stored, treated and disposed of in the same manner as comparable waste types (i.e. liquid, solid, sharps) generated in infectious disease research.

Methods of On-Site or Off-Site Storage

Biohazardous waste cannot be stored on the premises for **more than 90 days**. All containers and equipment (e.g., refrigerators) used for storage shall be labeled with the biohazard sticker or the words medical waste, or pathological waste in letters not less than one inch high. The preferable background color of all primary medical waste containers is red or orange fluorescent (e.g., biohazard bags).

Methods of On-site or Off-site Decontamination

Decontamination by Autoclave

Biohazardous waste, other than sharps and pathological waste, may be decontaminated on-site by autoclaving. To use this on-site treatment method, personnel must use an autoclave that has been tested and approved through ORCBS for biohazardous waste decontamination. Approved autoclaves are labeled with a large colored sign located on or near the autoclave. The colored sign will also list operating parameters for effective waste decontamination for that specific autoclave. These parameters must be followed by all personnel using the autoclave for waste decontamination purposes.

The ORCBS tests all autoclaves used for waste decontamination on at least an annual basis to verify that operating parameters used for waste treatment are sufficient and effective for biohazardous waste decontamination. For more information, contact the ORCBS at 355-0153.

On-site Incineration

On-site incineration is conducted by the Office of Radiation, Chemical, and Biological Safety (ORCBS) and the University Laboratory Animal Resources (ULAR). For more information regarding incineration, contact the ORCBS at 355-0153 or ULAR at 353-5064.

Corporate or other legally recognized business name of solid waste haulers who transport medical waste for the producing facility

Currently MSU is utilizing:

MediHaul Inc.
3400 Chief Drive
PO Box 977
Grand Blanc, Michigan 48439-0977

for treatment and disposal of solid biohazard waste (non-sharps) generated at the College of Veterinary Medicine.

Use of Sanitary Landfills, Cemeteries and Other Disposal Sites

All autoclaved and decontaminated biohazardous waste will be disposed of in a Type II Sanitary Landfill.

Exposure Minimization Methods for Employees Involved in Biohazardous Waste Generation, Handling and Disposal

In accordance with MIOSHA regulations, Michigan State University has implemented an Exposure Control Plan (ECP) for Bloodborne Pathogens. The ECP covers the areas of protocols, procedures, and training, personal protective devices and clothing, physical containment or isolation devices or systems, and prevention or control of aerosols regarding bloodborne pathogens.

Michigan State University has developed a Biosafety Manual outlining necessary procedures and practices involving infectious agent research and recombinant DNA requirements.

Other training programs to meet the needs of personnel who may not receive information on this topic through routine ORCBS training programs (i.e. chemical hygiene training, bloodborne pathogens training) are available.

Biohazardous Waste Training

All personnel who generate, handle or dispose of biohazardous waste must complete training in the provisions of this plan. The training topics will include:

- Purpose and overview of the MSU Biohazardous Waste Management Plan;
- Types of biohazardous waste generated, treated or disposed of at the work site;
- Segregation, packaging, storage and transport of biohazardous waste that is generated, treated or disposed of at the work site;
- Treatment and disposal methods for biohazardous waste that is generated, treated or disposed of at the work site.

In accordance with the Michigan Medical Waste Regulatory Act, new personnel must complete biohazardous waste training before they assume duties that involve the handling of biohazardous waste.

Employees will receive updated information when a change in the Biohazardous Waste Management Plan occurs that directly affects their duties.

Training Records

The ORCBS will maintain training records for all on-campus personnel completing biohazardous waste training. Off-campus site coordinators will maintain training records for their facilities. These records will include:

- Employee's name
- Job classification
- Training date

All training records will be maintained for a minimum of three years.

Appendix A

MSU On-Campus Facilities

Management: Hazardous Waste Coordinator, ORCBS, Nathan Schuck
Biological Safety Officer, ORCBS, Stefan Wagener

For information regarding the management of biohazardous waste at MSU on-campus facilities, contact the ORCBS at 355-0153.

Incineration: Operations Supervisor, ULAR, Randall Shoemaker

For information regarding on-site incineration, contact Randall Shoemaker at 353-1887.

Types of Biohazardous Waste: As outlined in the MSU Biohazardous Waste Management Plan

Methods of storage, treatment and disposal: As outlined in the MSU Biohazardous Waste Management Plan

MSU Off-Campus Facilities

Kellogg Biological Station
3700 East Gull Lake Drive
Hickory Corners, MI 49060

Management: Hazardous Waste Coordinator, ORCBS, Nathan Schuck
Biological Safety Officer, ORCBS, Stefan Wagener

On-site Coordinator: Nina Consolatti, Administrative Assistant, KBS

Types of Biohazardous Waste: As outlined in the MSU Biohazardous Waste Management Plan

Methods of storage, treatment and disposal: As outlined in the MSU Biohazardous Waste Management Plan

MSU Clinics: Sparrow Professional Building

1200 E. Michigan Avenue
Lansing, MI 48912

Management: Hazardous Waste Coordinator, ORCBS, Nathan Schuck
Biological Safety Officer, ORCBS, Stefan Wagener

Site Coordinator: Kathy Beno, Administrative Assistant, MSU Health Team

Types of
Biohazardous
Waste:

As outlined in the MSU Biohazardous Waste Management Plan

Methods of
storage,
treatment and
disposal:

Biohazardous wastes stored as outlined in the MSU Biohazardous Waste Management Plan; Biohazardous waste treated and disposed of by Sparrow Hospital in accordance with that facility's MWMP.

MSU Clinics: Sparrow Health Science Pavilion

2900 Hannah Boulevard
East Lansing, MI 48823

Management: Hazardous Waste Coordinator, ORCBS, Nathan Schuck
Biological Safety Officer, ORCBS, Stefan Wagener

Site Coordinator: Kathy Beno, Administrative Assistant, MSU Health Team

Types of
Biohazardous
Waste:

As outlined in the MSU Biohazardous Waste Management Plan

Methods of
storage,
treatment and
disposal:

As outlined in the MSU Biohazardous Waste Management Plan

Van Andel Research Institute
333 Bostwick Avenue
Grand Rapids, MI 49503

Management: Hazardous Waste Coordinator, ORCBS, Nathan Schuck
Biological Safety Officer, ORCBS, Stefan Wagener

On-site Liam Sullivan, Safety Manager, VARI

Coordinator:
Types of
Biohazardous
Waste:

As outlined in the MSU Biohazardous Waste Management Plan

Methods of
storage,
treatment and
disposal:

As outlined in the MSU Biohazardous Waste Management Plan



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE AND HAZARDOUS MATERIALS DIVISION

MEDICAL WASTE

**Public Act and Rules Governing
Disposal of Medical Waste**



BIOHAZARD

Jennifer M. Granholm, Governor
Steven E. Chester, Director

Michigan Department of Environmental Quality
Waste and Hazardous Materials Division
Hazardous Waste and Radiological Protection Section
Medical Waste Regulatory Program
525 West Allegan
P.O. Box 30241
Lansing, MI 48909-7741
517-241-1320
www.michigan.gov/deq

Environmental Assistance Center 1-800-662-9278

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability or political beliefs. Questions or concerns should be directed to the MDEQ Office of Personnel Services, P.O. Box 30473, Lansing, MI 48909.

TABLE OF CONTENTS

PART 138, MEDICAL WASTE REGULATORY ACT, OF THE MICHIGAN PUBLIC HEALTH CODE, 1978 PA 368, AS AMENDED

333.13801	Short title.....	1
333.13803	Meanings of words and phrases; general definitions and principles of construction	1
333.13805	Definitions; A to M.....	1
333.13807	Definitions; P to T	1
333.13809	Producing facility not incinerating medical waste on site; containment of medical waste	2
333.13810	Producing facility incinerating medical waste on site; containment of medical waste	3
333.13811	Storage, decontamination, and disposal of medical waste	3
333.13813	Producing facility; registration form; medical waste management plan required; registration fee; certificate of registration; investigation of complaint; inspection of facility; disposition of fees.....	4
333.13815	Registration fee.....	4
333.13817	Medical waste management plan; contents; compliance, update; availability	4
333.13819	Medical waste management plan; modification; warning	5
333.13821	Manner of packaging medical waste.....	5
333.13823	Investigation and confirmation of reported medical waste on land or water; report; protective measures; consultations; information on results of investigation	6
333.13825	Investigation and confirmation of violation; report; corrective and protective measures; consultations; assistance; information on results of investigation	6
333.13827	Interdepartmental medical waste advisory council; creation; appointment and qualifications of members; chairperson; duties of advisory council	7
333.13829	Medical waste emergency response fund; creation; deposits; investments; interest and earnings; no reversion to general fund; use of fund	8
333.13830	Rules to prescribe training standards	8
333.13831	Violation; administrative fine; failure to register or have plan available for inspection; injunction	8

MEDICAL WASTE REGULATORY ACT ADMINISTRATIVE RULES

R 325.1541	Definitions	9
R 325.1542	Packaging, labeling, storage, and transportation	9
R 325.1543	Treatment of medical waste	10
R 325.1544	Equipment maintenance; record retention	10

R 325.1545	Registration of multiple producing facilities; medical waste management plan content; registrations for school districts; registration fee	10
R 325.1546	Fee payment for producing facilities with expired registrations; change of ownership.....	11
R 325.1547	Training requirement; training schedule; record of training.....	11
R 325.1548	Remedies and penalties	11
R 325.1549	Contested cases; applicable law.....	12

PART 138, MEDICAL WASTE REGULATORY ACT, OF THE MICHIGAN PUBLIC HEALTH CODE, 1978 PA 368, AS AMENDED

333.13801 Short title.

Sec. 13801. This part shall be known and may be cited as the “medical waste regulatory act”.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13803 Meanings of words and phrases; general definitions and principles of construction.

Sec. 13803. (1) For purposes of this part, the words and phrases defined in sections 13805 and 13807 have the meanings ascribed to them in those sections.

(2) In addition, article 1 contains general definitions and principles of construction applicable to all articles in this code.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13805 Definitions; A to M.

Sec. 13805. (1) “Advisory council” means the interdepartmental medical waste advisory council created in section 13827.

(2) “Autoclave” means to sterilize using superheated steam under pressure.

(3) “Decontamination” means rendering medical waste safe for routine handling as solid waste.

(4) “Fund” means the medical waste emergency response fund created in section 13829.

(5) “Health facility or agency” means that term as defined in section 20106.

(6) “Household” means a single detached dwelling unit or a single unit of a multiple dwelling.

(7) “Infectious agent” means a pathogen that is sufficiently virulent so that if a susceptible host is exposed to the pathogen in an adequate concentration and through a portal of entry, the result could be transmission of disease to a human.

(8) “Medical waste” means any of the following that are not generated from a household, a farm operation or other agricultural business, a home for the aged, or a home health care agency: (a) Cultures and stocks of infectious agents and associated biologicals, including laboratory waste, biological production wastes, discarded live and attenuated vaccines, culture dishes, and related devices.

(b) Liquid human and animal waste, including blood and blood products and body fluids, but not including urine or materials stained with blood or body fluids.

(c) Pathological waste.

(d) Sharps.

(e) Contaminated wastes from animals that have been exposed to agents infectious to humans, these being primarily research animals.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13807 Definitions; P to T.

Sec. 13807. (1) “Pathogen” means a microorganism that produces disease.

(2) "Pathological waste" means human organs, tissues, body parts other than teeth, products of conception, and fluids removed by trauma or during surgery or autopsy or other medical procedure, and not fixed in formaldehyde.

(3) "Point of generation" means the point at which medical waste leaves the producing facility site.

(4) "Producing facility" means a facility that generates, stores, decontaminates, or incinerates medical waste.

(5) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of medical waste into the environment in violation of this part.

(6) "Response activity" means an activity necessary to protect the public health, safety, welfare, and the environment, and includes, but is not limited to, evaluation, cleanup, removal, containment, isolation, treatment, monitoring, maintenance, replacement of water supplies, and temporary relocation of people.

(7) "Sharps" means needles, syringes, scalpels, and intravenous tubing with needles attached.

(8) "Storage" means the containment of medical waste in a manner that does not constitute disposal of the medical waste.

(9) "Transport" means the movement of medical waste from the point of generation to any intermediate point and finally to the point of treatment or disposal. Transport does not include the movement of medical waste from a health facility or agency to another health facility or agency for the purposes of testing and research.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13809 Producing facility not incinerating medical waste on site; containment of medical waste.

Sec. 13809. A producing facility that does not incinerate medical waste on site shall do all of the following to contain medical waste: (a) Package, contain, and locate medical waste in a manner that protects and prevents the medical waste from release at the producing facility or at any time before ultimate disposal.

(b) Separate the categories of medical waste at the point of origin into appropriate containers that are labeled as required under subdivision (c).

(c) Label the containers required under subdivision (b) with a biohazard symbol or the words "medical waste" or "pathological waste" in letters not less than 1 inch high.

(d) Not compact or mix medical waste with other waste materials before decontamination, incineration, and disposal.

(e) If decontaminated medical waste is mixed with other solid waste, clearly label the container to indicate that it contains decontaminated medical waste.

(f) Store medical waste in such a manner that prevents putrefaction and also prevents infectious agents from coming in contact with the air or with individuals.

(g) If medical waste is stored outside of the producing facility, store the medical waste in a secured area or locked in a container that weighs more than 500 pounds and prevent access to the area of container by vermin or unauthorized individuals.

(h) Not store medical waste on the premises of the producing facility for more than 90 days.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13810 Producing facility incinerating medical waste on site; containment of medical waste.

Sec. 13810. A producing facility that incinerates medical waste on site shall do all of the following to contain medical waste: (a) Package, contain, and locate medical waste in a manner that protects and prevents the medical waste from release at the producing facility or at any time before ultimate disposal.

(b) Separate and dispose of sharps in the manner described in section 13811(d).

(c) Label the containers required under subdivision (a) with a biohazard symbol or the words "medical waste" or "pathological waste" in letters not less than 1 inch high.

(d) Not store medical waste on premises of the producing facility for more than 90 days.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13811 Storage, decontamination, and disposal of medical waste.

Sec. 13811. A producing facility shall store, decontaminate, and dispose of medical waste pursuant to the following: (a) Cultures and stocks of material contaminated with an infectious agent shall be stored in closed, puncture-resistant containers, decontaminated by autoclaving or incineration, and disposed of in a sanitary landfill.

(b) Blood and blood products and body fluids shall be disposed of by 1 or more of the following methods:

(i) Flushing down a sanitary sewer.

(ii) Decontaminating by autoclaving or incineration.

(iii) Solidifying.

(iv) If not in liquid form, transferring to a sanitary landfill.

(v) A process approved by the department.

(c) Pathological waste shall be disposed of by 1 or more of the following methods:

(i) Incineration or cremation.

(ii) Grinding and flushing into a sanitary sewer.

(iii) Burial in a cemetery, if transported in leakproof containers of sufficient integrity to prevent rupture.

(iv) Grinding until rendered unrecognizable, stored in closed, puncture-resistant, properly labeled containers, and, if not in liquid form, disposed of in a sanitary landfill.

(v) A process approved by the department.

(d) Sharps shall be disposed of by 1 of the following methods: (i) Placement in rigid, puncture-resistant containers that are appropriately labeled and transported to a sanitary landfill in a manner that retains the integrity of the container.

(ii) Incineration or decontamination and grinding that renders the objects unrecognizable. Ground sharps shall be placed in a sealed, rupture-resistant container and transported to a sanitary landfill.

(iii) A process approved by the department.

(e) Animal waste contaminated with organisms infectious to humans shall be disposed of by incineration or by burial in a sanitary landfill in properly labeled, double containers that are leakproof and puncture-resistant and are tightly sealed to prevent escape of fluids or material. Contaminated animal organs disposed of separately shall be rendered unrecognizable.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13813 Producing facility; registration form; medical waste management plan required; registration fee; certificate of registration; investigation of complaint; inspection of facility; disposition of fees.

Sec. 13813. (1) Each producing facility shall register with the department on a form prescribed by the department. A producing facility shall have a written medical waste management plan that contains information required in section 13817 on file on the premises within 90 days after registration.

(2) A producing facility shall submit the following registration fee with the registration form: (a) For a producing facility that is a private practice office with fewer than 4 licensees under article 15 who are physicians, dentists, podiatrists, certified nurse practitioners, certified nurse midwives, or veterinarians employed by, under contract to, or working at the producing facility, a registration fee of \$50.00.

(b) For a producing facility that is a private practice office with 4 or more licensees under article 15 who are physicians, dentists, podiatrists, certified nurse practitioners, certified nurse midwives, or veterinarians employed by, under contract to, or working at the producing facility, a registration fee of \$20.00 for each licensee, up to a maximum total registration fee of \$80.00.

(3) Upon receipt of a complete registration form and registration fee under this section or section 13815, the department shall issue a certificate of registration to the producing facility. A certificate of registration issued under this section is valid for 3 years from its date of issuance. The department shall investigate each complaint received and may inspect a producing facility registered under this section pursuant to the receipt of a complaint.

(4) Registration fees collected pursuant to this section and section 13815 shall be forwarded to the state treasury and deposited pursuant to section 13829.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13815 Registration fee.

Sec. 13815. A producing facility shall submit the following registration fee with the registration form required under section 13813: (a) For a producing facility that is a health facility or agency other than a hospital described in subdivision (b) and for a producing facility that is not a health facility or agency, a registration fee of \$75.00.

(b) For a producing facility that is a health facility or agency that is a hospital with 150 or more licensed beds or a clinical laboratory, a registration fee of \$150.00.

History: Add. 1990, Act 21, Eff. June 4, 1990.

333.13817 Medical waste management plan; contents; compliance; update; availability.

Sec. 13817. (1) The medical waste management plan required in section 13813 shall contain information relating to the handling of all medical waste generated, stored, decontaminated, or incinerated at each producing facility or transported from the producing facility for handling by another facility for storage, decontamination, incineration, or for disposal in a sanitary landfill, cemetery, or other disposal site. A professional corporation may identify and prepare a common medical waste management plan for all producing facilities owned and operated by the corporation. The medical waste management plan shall describe each of the following, to the extent the information is applicable to the producing facility:

- (a) The types of medical waste handled.
 - (b) The segregation, packaging, labeling, and collection procedures used.
 - (c) The use and methods of on-site or off-site storage.
 - (d) The use and methods of on-site or off-site decontamination.
 - (e) The use of on-site or off-site incineration.
 - (f) The corporate or other legally recognized business name of solid waste haulers who transport medical waste for the producing facility.
 - (g) The use of sanitary landfills, cemeteries, and other disposal sites.
 - (h) The measures to minimize exposure of the facility's employees to infectious agents throughout the process of handling and disposing of the medical waste, including, where applicable, the use of protocols, procedures and training, personal protective devices and clothing, physical containment or isolation devices or systems, and prevention or control of aerosols.
 - (i) The name of the individual responsible for the management of the medical waste.
 - (2) A medical waste management plan shall comply with the requirements of this act.
 - (3) A producing facility shall update a medical waste management plan each time there is a change in either of the following, within 30 days after the change occurs: (a) A person or site named in the plan.
 - (b) The types of medical waste handled or the methods of handling medical waste at the facility.
 - (4) Upon request, a producing facility shall make its medical waste management plan available to the department pursuant to a routine or unannounced inspection or the investigation of a complaint.
 - (5) Upon receipt of 24 hours' advance notice, a producing facility shall make its medical waste management plan available to an employee of the producing facility for inspection on the premises or provide a copy of the medical waste management plan to the employee.
 - (6) A producing facility shall comply with its medical waste management plan.
- History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13819 Medical waste management plan; modification; warning.

Sec. 13819. (1) Upon review of a medical waste management plan under section 13817(4), the department may require a producing facility to modify the medical waste management plan at any time the department determines the plan is not adequate to protect the public health or is inconsistent with state or federal law. Upon determining that the plan is inadequate or inconsistent under this section, the department shall notify the producing facility in writing of its determination and the specific modifications necessary for compliance. The producing facility shall modify the plan within 10 days after receipt of the notice from the department.

(2) The department may issue a warning to a producing facility that fails to modify a plan within the 10-day period.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13821 Manner of packaging medical waste.

Sec. 13821. A producing facility that transports medical waste off the premises of the producing facility shall package the medical waste in the following manner:

(a) Sharps that are not ground or incinerated as described in section 13811(d) shall be contained for disposal in individual leakproof, rigid, puncture-resistant containers that are secured to preclude loss of the contents. In addition, a container used to store or transport a number of individual sharps containers shall be leakproof. These containers shall be conspicuously labeled with the word "sharps". Sharps that are contained pursuant to this subdivision may be disposed of as solid waste pursuant to part 115 (solid waste management) of the natural resources and environmental protection act, Act No. 451 of the Public Acts of 1994, being sections 324.11501 to 324.11549 of the Michigan Compiled Laws. However, sharps shall not be compacted or handled during transport in a manner that will result in breakage of a sharps container.

(b) Medical waste other than sharps shall be contained in bags other than body pouches or other containers that are impervious to moisture and have a strength sufficient to resist ripping, tearing, breaking, or bursting under normal conditions of usage or handling. The bags or containers shall be secured so as to prevent leakage during storage, handling, or transport.

History: Add. 1990, Act 18, Eff. May 31, 1990;--Am. 1996, Act 67, Imd. Eff. Feb. 26, 1996.

333.13823 Investigation and confirmation of reported medical waste on land or water; report; protective measures; consultations; information on results of investigation.

Sec. 13823. (1) If suspected medical waste is discovered on any land or water in the state and reported to the department of natural resources, the department of public health, a local health department, the department of state police, or any other state or local governmental agency, the agency or department receiving the report shall promptly investigate to confirm the existence of medical waste. If the existence of medical waste is confirmed by a department or agency other than the department of natural resources, a report shall be transmitted immediately to the department of natural resources. The department of natural resources may, if appropriate, take measures to contain the medical waste, to close off the area, to remove the medical waste from the environment, and to do all things necessary to protect the public health, safety, and welfare and the environment. The department of natural resources may, if appropriate, conduct an investigation to determine the source of the medical waste.

(2) The department of natural resources may consult with the department of public health, the appropriate local health department, the department of state police, and the department of attorney general on the actions taken by the department of natural resources under this section.

(3) After the department of natural resources confirms the existence of medical waste under this section, the department of natural resources shall inform the legislature, the governor, the advisory council, and the public on the results of any investigation conducted within 30 days after the investigation is completed.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13825 Investigation and confirmation of violation; report; corrective and protective measures; consultations; assistance; information on results of investigation.

Sec. 13825. (1) If there is a suspected violation of this part on the premises of a health facility or agency or on the premises of an incinerator owned and operated by a

health facility or agency, the department of public health shall promptly conduct an investigation to confirm the violation. If the suspected violation is reported to the department of natural resources, a local health department, the department of state police, or any other state or local governmental agency, the report immediately shall be transmitted to the department of public health. If the investigation confirms the existence of a violation of this part, the department of public health may, if appropriate, take measures to correct the violation and to do all things necessary to protect the public health, safety, and welfare and the environment.

(2) The department of public health may consult with the department of natural resources, the appropriate local health department, the department of state police, and the department of attorney general on the actions taken by the department of public health under this section. If the suspected violation of this part is at an incinerator owned and operated by a health facility or agency, the department of public health immediately shall notify the department of natural resources and request the assistance of the department of natural resources in conducting the investigation.

(3) If the department of public health confirms the existence of a violation under this section, the department of public health shall inform the legislature, the governor, the advisory council, and the public on the results of the investigation conducted within 30 days after the investigation is completed.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13827 Interdepartmental medical waste advisory council; creation; appointment and qualifications of members; chairperson; duties of advisory council.

Sec. 13827. (1) The interdepartmental medical waste advisory council is created in the department. The council shall consist of the following members appointed as follows:

(a) One individual appointed by the director of public health representing the department.

(b) One individual appointed by the director of the department of natural resources representing the department of natural resources.

(c) One individual appointed by the director of the department of state police representing the department of state police.

(d) One individual appointed by the director of commerce representing the department of commerce, who has knowledge of tourism in the state.

(e) One individual appointed by the attorney general representing the department of the attorney general.

(2) The representative of the department shall serve as chairperson.

(3) The advisory council shall do all of the following: (a) Collect data pertaining to medical waste reports and investigations under this part.

(b) Annually report to the governor, the standing committees in the senate and house of representatives with jurisdiction over public health matters, the department of public health, and the department of natural resources on all of the following:

(i) The number of medical waste reports received and investigations conducted under this part.

(ii) The implementation and effectiveness of this part.

(iii) Changes in the overall regulatory scheme pertaining to medical waste, including, but not limited to, the enactment of pertinent federal law.

(iv) Recommendations, if any, that the advisory council has for changes to this part or any other state statute or rule that pertains to medical waste.

(v) Coordinate reports and investigations under this part between the department of public health and the department of natural resources.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13829 Medical waste emergency response fund; creation; deposits; investments; interest and earnings; no reversion to general fund; use of fund.

Sec. 13829. (1) The medical waste emergency response fund is created in the state treasury.

(2) The state treasurer shall deposit in the fund all money received pursuant to this act and all money received by the fund as otherwise provided by law.

(3) The state treasurer shall direct the investment of the fund. Interest and earnings of the fund shall be credited to the fund. Money in the fund at the close of the fiscal year shall remain in the fund and shall not revert to the general fund.

(4) Not more than 80% of the total amount in the fund shall be used by the department of public health for administrative expenses related to the implementation of this part, and the balance may be used by the department of natural resources for response activities necessitated by the release of medical waste into the environment.

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13830 Rules to prescribe training standards.

Sec. 13830. (1) The department shall promulgate rules to prescribe training standards for both medical and nonmedical personnel who handle medical waste in producing facilities.

(2) Each producing facility shall train its personnel who handle medical waste pursuant to the rules promulgated under subsection (1).

History: Add. 1990, Act 18, Eff. May 31, 1990.

333.13831 Violation; administrative fine; failure to register or have plan available for inspection; injunction.

Sec. 13831. (1) Except as provided in subsection (2), a person who violates this part or a rule promulgated under this part is subject to an administrative fine of not more than \$2,500.00 for each violation and an additional fine of not more than \$1,000.00 for each day during which the violation continues. For a first offense, the department of public health or the department of natural resources may postpone the levying of a fine under this subsection for not more than 45 days or until the violation is corrected, whichever occurs first.

(2) A person who fails to register with the department or have a medical waste management plan available for inspection in compliance with sections 13813 and 13817 is subject to an administrative fine of \$500.00.

(3) A person who violates this act may be enjoined by a court of competent jurisdiction from continuing the violation.

History: Add. 1990, Act 18, Eff. May 31, 1990.

ADMINISTRATIVE RULES

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE AND HAZARDOUS MATERIALS DIVISION
MEDICAL WASTE PRODUCING FACILITIES

Filed with the Secretary of State on November 14, 2000
These rules take effect 15 days after filing with the Secretary of State

(By authority conferred on the department of environmental quality by §2233 and §13830 of Act No. 368 of the Public Acts of 1978, as amended, being §§333.2233 and 333.13830 of the Michigan Compiled Laws)

R 325.1541 Definitions.

Rule 1. As used in these rules:

(A) "Act" means the medical waste regulatory act, part 138 of Act No. 368 of the Public Acts of 1978, as amended, being §§333.13801 to 333.13831 et seq. of the Michigan Compiled Laws.

(B) "Categories of medical waste," as defined in §13805(8) of the act, shall be considered as waste when the items are ready to be disposed. Sharps shall be considered as a medical waste and disposed of under §13811(d) of the act whether or not they have become contaminated with an agent infectious to humans.

(C) "Contiguous property" means the same or geographically adjacent property that may be divided by a public or private right-of-way. Parcels of property connected by a right-of-way which the property owner controls and to which the public does not have access shall also be considered as contiguous property.

(D) "Stained with blood or body fluids," as used in §13805(8)(b) of the act, means the contaminated item cannot release blood or body fluids in a liquid or semiliquid state when compressed, or caked and dried blood or body fluids are not capable of being released when handled.

(E) "Syringes," as included in the definition of "sharps" under §13807(7) of the act, includes all syringes with an attached needle and those parts of a syringe, with or without an attached needle, that are contaminated with a potentially infectious agent. Needles shall only be removed from a syringe in accordance with the procedures established by R 325.70007(2)(e) adopted under section 24 of Act No. 154 of the Public Acts of 1974, as amended.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1542 Packaging, labeling, storage, and transportation.

Rule 2. (1) In addition to the requirements established in section 13821 of the act, containers used for packaging, shipping, and transportation of regulated medical waste shall comply with the requirements of Michigan's motor carrier safety act, Act No. 181 of the Public Acts of 1963, as amended, being §§480.11 to 480.22 of the Michigan Compiled Laws.

(2) Identifying labels that are placed on containers containing decontaminated medical waste mixed with other solid waste, as required in §13809(e) of the act, shall be a minimum of 1 inch high.

(3) The 90-day period for "storage" of medical waste, as required in §§13809(h) and 13810(d) of the act, shall begin when use of the storage container is initiated.

(4) When being transported to a sanitary landfill for disposal, packaged medical waste that is not decontaminated shall not be mixed with non-medical wastes.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1543 Treatment of medical waste.

Rule 3. (1) Blood and blood products and body fluids that are solidified, but not decontaminated during the solidification process, shall be packaged and disposed of as medical waste as specified in §§13809, 13811(b), and 13821(b) of the act.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1544 Equipment maintenance; record retention.

Rule 4. (1) Medical waste producing facilities shall perform testing of their decontamination or sanitization equipment to demonstrate the continued effective operation of the equipment. Testing frequency and procedures shall be pursuant to the manufacturer's recommendations or methods and frequencies approved by the department.

(2) Facilities shall retain and make available testing data and results from the most recent test performed for inspection by the department.

(3) Testing frequency and procedures shall be contained in the producing facility's medical waste management plan.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1545 Registration of multiple producing facilities; medical waste management plan content; registrations for school districts; registration fee.

Rule 5. (1) Multiple producing facilities that are owned by 1 entity and located on contiguous property that is owned by the same entity, such as college campuses and large hospital corporations, may register under one registration. The registrant shall maintain a list of the location of all producing facilities located upon the contiguous properties and the type of medical waste produced at each respective facility. The registrant shall maintain the list of producing facilities and their respective types of medical waste in the registrant's medical waste management plan. Each producing facility shall have a copy of the medical waste management plan on site.

(2) A school district, private school, or charter school system that generates or stores medical waste shall register as a medical waste producing facility. The name and location of all schools producing medical waste within the school district, private school, or charter school system and the type or types of medical waste produced or stored at the respective schools shall be contained in the school district, private school, or charter school system medical waste management plan. A school district, private school, or charter school shall maintain a copy of the plan at each school producing medical waste.

(3) The applicable multiple facility, or school district, private school, or charter school system registration fee shall be the greater of the fees established in §13813(2) or §13815 of the act that would apply to any individual facility located on the contiguous property or school within the school district, private school, or charter school system if it is registered separately.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1546 Fee payment for producing facilities with expired registrations; change of ownership.

Rule 6. (1) Registration fee payments received from producing facilities with expired registrations shall have the fees applied by the department back to the date when the last registration expired.

(2) If a change in ownership of a producing facility occurs, then the new owner shall notify the department and register as a new producing facility and pay the designated fee in accordance with §13813(1) and (2) of the act.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1547 Training requirement; training schedule; record of training.

Rule 7. (1) Each facility that produces medical waste shall provide instruction in the proper handling of medical waste according to the facility's medical waste management plan to its employees who generate and/or dispose of medical waste. The plan shall be in compliance with the requirements prescribed in §13817 of the act.

(2) A facility shall assure that an employee who handles medical waste is trained before the employee assumes duties that involve the handling of medical waste to enable the employee to handle and dispose of medical waste in a safe and proper manner.

(3) A facility shall assure that current employees who handle medical waste are trained within 90 days after the effective date of these rules. A facility shall assure that a new employee is trained before assuming duties that involve the handling of medical waste to enable the employee to handle and dispose of medical waste in a safe and proper manner. All employees shall receive refresher training when a change in the producing facility's medical waste management plan occurs that directly affects the employee's duties.

(4) A facility that produces medical waste shall create and retain a record of the training of employees who handle medical waste. The record shall include all of the following information with respect to each employee:

- (a) Employee's name.
- (b) Job classification.
- (c) Dates of training.

(5) A facility that produces medical waste shall retain its training records for a minimum period of 3 years.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1548 Remedies and penalties.

Rule 8. A person who violates any of the provisions of these rules shall be subject to the remedies and penalties under the act.

History: 2000 MR 19, Eff. Nov. 30, 2000.

R 325.1549 Contested cases; applicable law.

Rule 9. Administrative procedures in contested cases and judicial review shall be in accordance with, and subject to, chapters 4, 5, and 6 of Act No. 306 of the Public Acts of 1969, as amended, being §§24.271 to 24.306 of the Michigan Compiled Laws.

History: 2000 MR 19, Eff. Nov. 30, 2000.