

## Chapter NR 526

## MEDICAL WASTE MANAGEMENT

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**Note:** Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, August, 1997, No. 500.

**Subchapter I — General Provisions**

**NR 526.01 Purpose.** The purpose of this chapter is to provide definitions, submittal requirements, exemptions and other general requirements relating to infectious waste management and medical waste reduction. This chapter is adopted pursuant to ss. 227.11 (2) (a), 287.03 (1) (a), 287.07 (7) and (8), 289.05 (1), 289.06 and 299.51 (3), Stats.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.02 Applicability. (1)** Except as otherwise provided, the infectious waste management rules apply to all persons generating, handling, storing, transporting, shipping, treating and disposing of infectious waste.

**(2)** Except as otherwise provided, the medical waste reduction rules in this chapter apply only to medical facilities.

**(3)** Except as otherwise provided, this chapter governs all solid waste facilities as defined in s. 289.01 (35), Stats., except hazardous waste facilities as defined in s. 291.01 (8), Stats., and regulated under chs. NR 600 to 685, and metallic mining operations as defined in s. 293.01 (9), Stats., and regulated under ch. NR 182.

**(4)** This chapter does not apply to the design, construction or operation of industrial wastewater facilities, sewerage systems and waterworks treating liquid wastes approved under s. 281.41, Stats., or permitted under ch. 283, Stats., nor to facilities used solely for the disposal of liquid municipal or industrial wastes which have been approved under s. 281.41, Stats., or permitted under ch. 283, Stats., except for facilities used for the disposal of solid waste.

**(5)** Except as otherwise provided, this chapter does not apply to the handling, transportation, treatment or disposal of animal carcasses, animal tissue, blood and body fluids from animals, or animal excreta. In cases where the requirements of this chapter conflict with the requirements of s. 95.50, Stats., concerning the disposition of animal carcasses, the provisions of s. 95.50, Stats., shall take precedence.

**(6)** This chapter does not apply to medical waste mixed with radioactive material which is managed and disposed in a manner that does not violate the provisions of 10 CFR parts 20, 35, 60 and 61, and ch. HSS 157. Except as otherwise provided, this chapter shall apply after the radioactive component has decayed in storage as provided in 10 CFR 35.92 and ch. HSS 157 or is otherwise not regulated as radioactive material.

**(7)** Any provision of this chapter which deals with occupational health and safety does not apply to a person who is subject

to a federal standard for the same activity which is in effect under the federal occupational safety and health act of 1970 and standards promulgated thereunder by OSHA.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.03 Definitions.** The definitions in s. NR 500.03 apply to the terms used in this chapter unless the context requires otherwise.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.04 Exemptions. (1) GENERAL EXEMPTIONS.** In special cases, the department may grant exemptions in writing from non-statutory requirements of this chapter. A person may apply for an exemption under this section by providing the department with a written request along with appropriate documentation which demonstrates to the satisfaction of the department that the proposal will not cause environmental pollution as defined in s. 299.01 (4), Stats., and will protect waste handlers and other persons from exposure to infectious waste. The department will send an invoice for the exemption request fee specified in s. NR 520.04, Table 2, upon receipt of the exemption request. In making its decision, the department shall take into account factors such as the population of the area being served, the amount of waste being generated, the design of the facility, the operational history of the facility, the physical and chemical characteristics of the waste and any other information which may be appropriate. The department may grant exemptions under this section if the department finds that granting the exemption will not cause environmental pollution as defined in s. 299.01 (4), Stats., and that the exemption will protect waste handlers and other persons from exposure to infectious waste.

**(2) HOME GENERATOR EXEMPTIONS.** Home generators of infectious waste are exempt from the requirements of this chapter except the safety requirements applying to sharps under ss. NR 526.06, 526.07 (1), 526.08, 526.10 (3) and 526.13.

**(3) SHARPS COLLECTION STATION EXEMPTIONS.** Persons who operate sharps collection stations are exempt from the requirements of this chapter except the requirements under s. NR 526.09 (5).

**(4) EMERGENCY RESPONSE EXEMPTIONS.** Persons, including but not limited to law enforcement personnel, emergency medical personnel and fire fighters, who are responding to an emergency not occurring at a medical facility, including but not limited to vehicle accidents, fires and natural disasters, are exempt from the requirements of this chapter except the requirements under ss. NR 526.06 to 526.08, 526.09 (4), 526.10 (3) and 526.13.

**(5) FUNERAL DIRECTOR EXEMPTIONS.** Human tissue which is to be interred or cremated under the direction of a funeral director licensed under ch. 445, Stats., the university of Wisconsin medical

school or the medical school of Wisconsin, is exempt from the requirements of this chapter.

**(6) RESEARCH EXEMPTIONS.** Human tissue or animal tissue carrying an infectious agent which is used in research is exempt from the requirements of this chapter until it is no longer being used for research.

**(7) ANIMAL PRODUCT EXEMPTIONS.** Animal tissue which is processed by a rendering plant or incorporated into a consumer product is exempt from the requirements of this chapter.

**(8) WASTEWATER TREATMENT PLANT EXEMPTIONS.** Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment is exempt from the requirements of this chapter.

**Note:** Persons who generate or manage small quantities of infectious waste must follow all safety-related requirements found in this rule, but may be exempt from administrative requirements such as licensing and paperwork. Safety requirements are found in the following sections:

Section NR 526.06 for separating waste.

Section NR 526.07 for containing infectious waste.

Section NR 526.08 for handling infectious waste.

Section NR 526.09 (4) for storing and transferring infectious waste.

Section NR 526.10 (3) for transporting and shipping infectious waste.

Sections NR 526.11 and 526.12 (4) for treating infectious waste.

Section NR 526.13 for disposing of infectious waste.

Exemptions from administrative requirements are found in the following sections:

Section NR 526.09 (2) for storage and transfer licenses.

Section NR 526.10 (2) for transportation licenses.

Section NR 526.12 (2) for treatment licenses.

Section NR 526.14 (2) for infectious waste manifests and keeping records of amounts generated.

Section NR 526.15 (2) for infectious waste annual reports.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (1), Register, June, 1996, No. 486, eff. 7-1-96.

## Subchapter II — Infectious Waste Management

**NR 526.05 Infectious waste categories.** (1) A solid waste which is included in any of the following categories is presumed to be infectious waste unless methods of testing which are generally accepted by the medical profession demonstrate that the waste is not infectious:

(a) Sharps, as follows:

1. Contaminated sharps which are both infectious and may easily cause punctures or cuts in the skin, including but not limited to: hypodermic needles, syringes with needles attached, scalpel blades, lancets, broken glass vials, broken rigid plastic vials and laboratory slides.

2. Unused or disinfected sharps which are being discarded, including hypodermic needles, scalpel blades, lancets and syringes with needles attached.

(b) Bulk blood and body fluids from humans.

(c) Human tissue.

(d) Microbiological laboratory waste.

(e) Tissue, bulk blood or body fluids from an animal which is carrying a zoonotic infectious agent.

**(2)** A solid waste which is not included in the definition of infectious waste, which is not mixed with infectious waste and which does not fall under one of the categories in sub. (1) is presumed not to be an infectious waste. Solid wastes presumed not to be infectious wastes include all of the following:

(a) Items soiled but not saturated with blood or body fluids from humans included in the definition of "bulk blood and body fluids".

(b) Items soiled with body fluids from humans not included in the definition of "bulk blood and body fluids".

(c) Intravenous tubing after needles have been detached.

(d) Tissue, blood, body fluids or cultures from an animal which is not known to be carrying or experimentally infected with a zoonotic infectious agent.

(e) Animal manure and bedding.

(f) Other solid wastes, including but not limited to containers, packages, waste glass, laboratory equipment and other materials which have had no contact with blood, body fluids, clinical cultures or infectious agents. When possible, use of these items shall be reduced, and the items shall be reused or recycled.

(g) Formerly infectious waste, after it has been treated according to s. NR 526.11.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; cr. (2) (g), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.06 Source separation.** (1) No person may mix infectious waste in the same bag or waste receptacle with solid waste which is not infectious waste, unless mixing the wastes is necessary to protect the health or safety of patients, employees or other persons.

(2) No person may separate infectious waste from solid waste which is not infectious waste unless adequate measures are taken to protect waste handlers and other persons from exposure. After separation, solid waste previously mixed in the same bag or waste receptacle with infectious waste shall be managed as infectious waste.

(3) No person may remove solid waste or infectious waste that has been placed in a bag or waste container labeled with the biohazard symbol or fail to manage the waste as infectious waste from the time of generation until the waste has been treated according to s. NR 526.11, unless the person follows waste management procedures which will protect waste handlers and other persons from exposure.

(4) No person may transport solid waste and infectious waste on the same cart or vehicle unless the wastes are in separate and identifiable bags or waste containers. If the wastes are transported on any roads, the requirements of ss. NR 502.06 and 526.10 shall also be met.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.07 Containment.** No person may transport infectious waste from the property where the waste was generated unless the person puts the waste in a container which protects waste handlers and other persons from exposure to the infectious waste and the person meets all of the following requirements:

(1) Sharps shall be contained in rigid, puncture-resistant labeled containers made of materials including but not limited to metal or rigid plastic, designed to prevent the loss of the contents and labeled with a visible bio-hazard emblem or with the visible words "bio-hazard", "sharps" or "infectious waste".

(2) Infectious waste other than sharps shall be contained according to all of the following:

(a) The waste shall be placed in a single plastic bag that meets or exceeds 165 grams resistance by the ASTM method D1709-91 and is tear resistant using method ASTM method D1922-89, or, if necessary, a double bag that meets the same standards, or a rigid reusable container.

**Note:** These testing methods are entitled "Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method" and "Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method" respectively. Copies are available for inspection at the central office of the department of natural resources and the offices of the secretary of state and the revisor of statutes. Copies may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.

(b) The bag or rigid reusable container shall be securely sealed to prevent leakage or expulsion of the contents under normal handling.

(c) Any bag containing infectious waste shall be placed in a rigid container, including but not limited to a corrugated cardboard container, a covered reusable container or a cart. The rigid container shall be labeled with a visible bio-hazard emblem and the word "bio-hazard". Bulk containers shall be small enough to be handled by a single person.

(d) All reusable containers shall be disinfected after being emptied.

(3) No person may open a secured container of infectious waste which is ready for transportation until immediately before treating the waste, unless repacking is necessary to prevent spills or leakage, or the person is conducting a waste audit or training session.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (intro.), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.08 Handling.** No person may handle, load, unload, process or treat infectious wastes unless adequate measures are taken to protect waste handlers and other persons from exposure to the infectious wastes and unless all of the following requirements are met:

(1) All containers shall be handled and transported to prevent the loss or spilling of the contents.

(2) Nuisance conditions shall be prevented from developing. Appropriate measures shall be taken to prevent odors, including but not limited to refrigerating the infectious waste below 42° Fahrenheit until treated.

(3) All infectious waste shall be loaded and unloaded by hand or by a safe mechanical method which does not damage containers or spill their contents.

(4) Untreated infectious waste may not be compacted.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (2), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.09 Storage and transfer.** No person may store infectious wastes unless the person protects waste handlers and other persons from exposure to the infectious waste and unless the requirements of this section are met. For the purposes of this chapter, storage also includes, but is not limited to the transfer of infectious waste. Infectious waste generators may temporarily accumulate infectious waste in individual containers near the place where the waste was generated, prior to moving the waste to an on-site infectious waste storage facility.

(1) **LICENSING.** Except as provided in sub. (2), no person may operate or maintain an infectious waste storage facility unless the person has obtained an operating license for storing solid waste under s. NR 502.05 and the storage facility meets all the requirements for handling infectious waste under s. NR 526.08 and storing infectious waste under this section. The department may require that the owner or operator provide proof of financial responsibility for the removal, transportation, treatment and ultimate disposal of the stored material. To apply for an operating license for an infectious waste storage facility, the applicant shall take all of the following actions:

(a) Contact the department to arrange an initial inspection.

(b) Prepare a plan of operation according to sub. (3).

(c) Submit the plan of operation to the department for approval, according to the requirements in s. NR 500.05. Upon receipt of the plan of operation, the department will send an invoice for the plan review fee for infectious waste storage facilities, as specified in s. NR 520.04, Table 2.

(d) After obtaining a plan of operation approval from the department, submit an application form for the operating license and the license fee, according to ss. NR 500.06 and 520.04, Table 2.

(2) **EXEMPTIONS.** Infectious waste storage facilities which meet any of the following conditions are exempt from the requirement to obtain an operating license under sub. (1) and preparing a plan of operation under sub. (3) for storing infectious waste, but shall meet the minimum operating requirements for storing infectious waste under sub. (4).

(a) Storage facilities which are located on the property where the infectious waste is generated.

(b) Storage facilities which are located on the property where the infectious waste is generated and which accept infectious waste from off-site generators, if the total quantity of infectious

waste, including items mixed with infectious waste, accepted from off-site is less than the quantity generated on-site or less than 500 pounds per month, whichever is less and if the waste is accepted on a not-for-profit and cost-only basis.

(c) Sharps collection stations which comply with all of the requirements under sub. (5).

(d) Storage facilities for infectious waste which also is hazardous waste under s. 291.01 (7), Stats., provided that the storage facility is regulated under ch. NR 630.

(3) **PLAN OF OPERATION.** No person may establish or construct an infectious waste storage facility or expand an existing facility unless the person has obtained a plan of operation approval from the department or unless the facility is exempt from licensing under sub. (2). The plan of operation shall specify the intent and objectives of the proposal and indicate methods and procedures to prevent and minimize adverse environmental and health impacts. Unless otherwise approved by the department in writing, the plan shall be submitted in accordance with s. NR 500.05 and shall contain, at a minimum, the information listed in s. NR 502.05 (8), except s. NR 502.05 (8) (e), and any other details necessary to address the requirements in this chapter, including but not limited to requirements for handling and containment and the requirements of sub. (4).

(4) **MINIMUM REQUIREMENTS FOR ALL PERSONS STORING INFECTIOUS WASTE.** No person may operate or maintain an infectious waste storage facility unless the storage area meets all of the following requirements:

(a) The storage area shall be kept clean and be impermeable to liquids. Carpeted areas or wooden floors may not be used in storage areas.

(b) The storage area designated for infectious waste may contain only infectious wastes and their containers. The storage area may be an area designated within a room.

(c) The storage area shall be in an enclosed building, container or vehicle so that the infectious waste is not exposed to weather.

(d) Access to the storage area shall be limited to authorized personnel.

(e) Nuisance conditions shall be prevented from developing. Appropriate measures shall be taken to prevent odors, including but not limited to refrigerating the infectious waste below 42° Fahrenheit until treated.

(f) If the infectious waste is to be treated off-site, the operator of the infectious waste storage facility shall relinquish the infectious waste only to an infectious waste transporter licensed by the department or to a person exempt from licensing under s. NR 526.10 (2).

(g) The containers of infectious waste shall be removed and emptied as necessary, but at least every 90 days.

(h) The operator of the infectious waste storage facility shall keep records of how much and where the infectious waste has been sent off-site. Records may consist of any of the following: copies of infectious waste manifests, invoices, logs or other written documentation of the amount of infectious waste sent off-site for treatment.

(5) **OPERATING REQUIREMENTS FOR SHARPS COLLECTION STATIONS.** No person may operate or maintain a sharps collection station unless the person complies with all of the following requirements:

(a) The person accepts only sharps and sharps containers from infectious waste generators, each of which generates less than 50 pounds of sharps per month, including items which may be mixed with the sharps.

(b) The person provides the service on a not-for-profit and cost-only basis.

(c) The person stores no more than 500 pounds of infectious waste in the sharps collection station at any one time.



(d) The person complies with the requirements in ss. NR 526.06 to 526.08, 526.09 (4) (a) to (g), 526.10 (3) and 526.13.

(e) The person registers the sharps collection station with the department by mailing or delivering a letter of registration to the chief of the solid waste management section, bureau of solid and hazardous waste management, department of natural resources, P.O. Box 7921, 101 S. Webster Street, Madison, Wisconsin 53707-7921. The person shall also send copies of the letter to the appropriate department district and area offices. The letter of registration shall state all of the following:

1. Name, street address, county and phone number, if any, of the place where the sharps collection station is located.
2. Name, mailing address and phone number of person responsible for operating the sharps collection station.
3. Name, mailing address and phone number of the owner of the sharps collection station, if different than the operator.
4. Fees charged for use of the sharps collection station and what costs the fees cover.

(f) The person notifies the department immediately in writing if the sharps collection station moves or ceases to operate.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (1) (c), (d), (3), (4) (e), (5) (e) 1., r. (5) (e) 4., renun. (5) (e) 5. to be (5) (e) 4., Register, June, 1996, No. 486, eff. 7-1-96; **correction in (5) (d) made under s. 13.93 (2m) (b) 7., Stats.**

**NR 526.10 Transportation and shipping.** No person may transport or ship infectious waste in Wisconsin unless adequate measures are taken to protect waste handlers, the public and the environment from exposure to the infectious waste, and all of the following requirements are met:

**(1) LICENSES.** Except as provided in sub. (2), no person may transport infectious waste or operate or maintain an infectious waste transportation service unless the person has obtained an infectious waste transportation license from the department for each vehicle and complies with both the minimum transportation requirements in sub. (3) and the operating requirements for licensed infectious waste transporters in sub. (4). To apply for an operating license, the applicant shall submit an application form and the infectious waste transportation license fee according to s. NR 520.04, Table 2.

**(2) EXEMPTIONS.** Persons who meet any of the following conditions are exempt from licensing under this section, but shall meet the minimum requirements for transporting infectious waste in sub. (3):

(a) Persons transporting infectious waste only on private roads on the same property where the infectious waste was generated and using vehicles owned or leased by the infectious waste generator.

(b) Persons transporting less than 50 pounds of infectious waste per calendar month.

(c) Persons operating vehicles owned or leased by the United States postal service and handling infectious waste sent through the mail.

(d) Persons operating vehicles owned by a parcel carrier service for which infectious waste constitutes an incidental portion of the carrier's business, if the infectious waste is handled in accordance with all applicable state and federal regulations.

(e) Persons transporting infectious waste through Wisconsin who are not stopping to collect, drop off or transfer the infectious waste, and who handle the infectious waste in accordance with all applicable state and federal regulations.

(f) Persons transporting infectious waste which is also a hazardous waste under s. 291.01 (7), Stats., provided that the transportation is regulated under s. 291.23, Stats., and ch. NR 620.

**(3) MINIMUM REQUIREMENTS FOR ALL PERSONS TRANSPORTING INFECTIOUS WASTE.** No person may transport infectious waste unless the person complies with all of the following minimum requirements:

(a) The infectious waste shall be contained according to the requirements of s. NR 526.07.

(b) The infectious waste shall be handled according to the requirements of s. NR 526.08.

(c) The vehicle used to transport the infectious waste shall meet all of the following requirements:

1. The portion of the vehicle where the infectious waste is contained shall be completely enclosed to prevent littering, spillage or leakage. The enclosed portion shall be leak-resistant, if necessary, considering the type of waste and its moisture content. Roll-off boxes or dumpsters may not be used to transport infectious waste.

2. The vehicle shall be maintained in good repair.

3. The vehicle shall be cleaned as frequently as necessary to prevent nuisances.

4. Nuisance conditions shall be prevented from developing. Appropriate measures shall be taken to prevent odors, including but not limited to refrigerating the infectious waste below 42° Fahrenheit until treated.

(d) The person shall transport the infectious waste only to solid waste facilities which are one of the following:

1. Licensed by the department to store or treat infectious waste.

2. Exempt from licensing by the department under the storage requirements in s. NR 526.09 (2) or under the treatment facility requirements in s. NR 526.12 (2) or are exempt from manifesting requirements under s. NR 526.14 (2), such as a registered sharps collection station.

**Note:** Other transportation regulations, such as federal department of transportation standards, may also apply.

**(4) OPERATING REQUIREMENTS FOR LICENSED INFECTIOUS WASTE TRANSPORTERS.** Infectious waste transporters which are required to be licensed by the department shall comply with all the following requirements in addition to those in sub. (3):

(a) Each vehicle shall have "WDNR" followed by the infectious waste transportation license number lettered on the driver's and passenger's doors. The letters shall be at least 2 inches high with a minimum of 1/2 inch brush stroke. The lettering shall contrast with the background so it is easy to read.

(b) Vehicles or containers used for the collection or transportation of infectious waste shall be durable and easy to clean.

(c) Each vehicle hauling infectious waste shall carry a written contingency plan for spills and accidents and shall carry tools and materials sufficient to implement the contingency plan. In case of spill or accident, the driver shall implement the contingency plan immediately after spillage occurs and follow the provisions of s. 292.11, Stats.

(d) The portion of the vehicle where the infectious waste is placed shall be cleaned and disinfected before hauling materials other than infectious waste, solid waste or supplies related to managing waste.

(e) The person transporting the infectious waste shall sign all manifests which accompany the infectious waste, even if the waste is exempt from manifesting under s. NR 526.14 (2), and deliver the manifests to the next person who handles the waste.

(f) If infectious waste is not accompanied by an infectious waste manifest, the person transporting the waste shall initiate an infectious waste manifest for that waste, unless the person transporting the waste hauls less than 50 pounds of unmanifested infectious waste per month.

**(5) CHANGES IN SERVICE.** Licensed infectious waste transporters shall notify the department in writing of all significant changes in service. The written notice shall be given to the department's area or district office at least 30 days prior to the effective date of the change. If the change was not anticipated, the written notice shall be sent within 30 days after the change first occurred. Changes in service to individual clients or in the routes driven are

not significant changes in service. All of the following actions are "significant changes in service":

- (a) Adding a vehicle.
- (b) Replacing a vehicle.
- (c) Changing the destination to which the infectious waste is hauled.
- (d) Expanding the service area into another county.
- (e) Terminating service.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94, am. (1), (3) (c) 4., Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.11 Treatment methods.** Except as provided in s. NR 526.04, no person may dispose of infectious waste in a solid waste disposal facility unless the infectious waste has undergone treatment in accordance with this section. The treatment method shall effectively render the waste non-infectious. The treatment method shall be chosen by considering the properties of the waste being treated and the degree of microbial contamination.

**Note:** The treatment method may also need to comply with air standards for control of hazardous pollutants in ch. NR 445 and with state or federal regulations for wastewater and occupational health and safety.

**(1) METHODS.** Except as provided in s. NR 526.04, all infectious waste shall be treated by one or more of the following infectious waste treatment methods:

(a) *Incineration.* Treatment by incineration shall consist of incineration in a controlled air, multi-chambered incinerator which provides complete combustion of the waste to carbonized or mineralized ash. The incinerator shall be one that is regulated by the department under s. NR 502.09 or 502.13.

(b) *Steam disinfection.* Treatment by steam disinfection, including but not limited to autoclaving, shall subject all the waste to a combination of operational temperature, pressure (if applicable) and time proven to render the waste non-infectious at the design capacity of the installed equipment.

(c) *Chemical disinfection.* Treatment by chemical disinfection shall expose the infectious waste to an appropriate type and concentration of disinfectant for a period of time sufficient to render the waste non-infectious. The chemical disinfectant shall be chosen based on the manufacturer's recommended use of the disinfectant, the cleanliness of the surface of the waste, the contact time, the physical and chemical properties of the waste, the concentration of the disinfectant and the degree of microbial contamination.

(d) *Mechanical grinding and chemical disinfection.* Treatment by mechanical grinding and chemical disinfection shall expose all of the waste to the chemical disinfectant for a period of time sufficient to render the waste non-infectious. The chemical disinfectant shall be chosen based on the use of the disinfectant in medical situations, the cleanliness of the surface of the waste, the contact time, the physical and chemical properties of the waste, the concentration of the disinfectant and the degree of microbial contamination. Treatment by mechanical grinding and chemical disinfection shall prevent the release of infectious liquid or infectious gaseous discharges into the environment.

(e) *Mechanical grinding and heat disinfection.* Treatment by mechanical grinding and heat disinfection, including but not limited to low frequency wave radiation and microwave radiation, shall expose all of the waste to heat for a period of time sufficient to render the waste non-infectious. Treatment by mechanical grinding and heat disinfection shall prevent the release of infectious liquid or infectious gaseous discharges into the environment.

(f) *Gas disinfection.* Treatment by gas disinfection shall allow gas to penetrate all the infectious waste and shall render the waste non-infectious. The unit shall be operated in a manner that does not pose an occupational risk of exposure to the gas.

**Note:** For ethylene oxide sterilizers, refer to OSHA regulations in 29 CFR 1910.1047. Air toxic rules in ch. NR 445 may also apply.

(g) *Other methods.* Treatment by other treatment methods and processes shall render the waste non-infectious and shall be

appropriate with respect to all of the following: the properties of the waste being disinfected, the manufacturer's recommended use of the disinfectant, the cleanliness of the surface of the waste, the contact time, the physical properties of the waste, the concentration of the disinfectant and the degree of microbial contamination.

**(2) SPECIAL CONSIDERATIONS.** No person may treat the following categories of infectious waste except as follows:

(a) *Human tissue.* Human tissue shall be treated by any of the following methods:

1. Methods which render the tissue both non-infectious and unrecognizable as human tissue.

2. Incineration where the tissue is transformed into an ash which would not be recognized as being from a human being.

(b) *Animal tissue.* Animal tissue known to be carrying or experimentally infected with a zoonotic infectious agent shall be treated by any of the following methods:

1. Methods which render the tissue non-infectious.

2. Incineration.

3. Burial on the land on which the animal was kept, in accordance with s. 289.43 (9), Stats., for animals infected with scrapie or s. 289.43 (8), Stats., or s. NR 503.08 for other animals.

4. Rendering or other methods which incorporate the animal into a consumer product in accordance with all other applicable state and federal regulations.

**Note:** For animals and animal waste used in HIV and HbV research, refer to OSHA blood-borne pathogen standard 29 CFR 1910.1030 (e).

(c) *Sharps.* Sharps shall be treated by any of the following methods:

1. A method which both renders the sharp non-infectious and renders the sharp broken and not able to be reused, such as by a grinding or shredding process.

2. Incineration.

(d) *Bulk blood.* Bulk blood shall be treated by any of the following methods:

1. Biological treatment in a municipal or industrial wastewater treatment facility which has been approved under s. 281.41, Stats., or permitted under ch. 283, Stats. Bulk blood may be transported to the wastewater treatment facility through the sewer system.

2. Methods which render the blood non-infectious.

3. Incineration.

(e) *Body fluids and blood-contaminated urine and feces.* Body fluids and blood-contaminated urine and feces shall be treated by any of the methods listed in par. (d) or by disposal in a septic system.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (1) (a), (2) (b) 3., (e), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.12 Treatment facilities. (1) LICENSES.** Except as provided in sub. (2), no person may operate or maintain an infectious waste treatment facility unless the person has obtained an operating license from the department under s. NR 502.08 as a solid waste processing facility and the facility meets all the requirements in this chapter for containing, handling, storing and treating infectious waste. To apply for an operating license, the applicant shall do all of the following:

(a) Contact the department's district or area office as appropriate to arrange an initial site inspection for the purpose of evaluating compliance with the requirements of s. NR 502.08(3).

(b) Prepare a plan of operation as described in sub. (3).

(c) Submit the plan of operation to the department for approval, according to the requirements in s. NR 500.05. Upon receipt of the plan of operation, the department shall send an invoice for the plan review fee for solid waste processing facilities and the additional fee for processing facilities which treat infectious waste, as specified in s. NR 520.04, Table 2.

(d) After obtaining a plan of operation approval from the department, submit an application form for the operating license

and the license fee for a solid waste processing facility, according to ss. NR 500.06 and 520.04, Table 2.

(2) **EXEMPTIONS.** Persons who operate the following infectious waste treatment facilities are exempt from the requirements for obtaining an operating license and submitting a plan of operation for a solid waste processing facility, but shall comply with the following specified requirements:

(a) Individual infectious waste treatment facilities which are located on the property where the infectious waste was generated and which treat less than 500 pounds of infectious waste per day. These treatment facilities may accept infectious waste from other infectious waste generators if the waste is accepted on a not-for-profit and cost-only basis. Persons operating these infectious waste treatment facilities shall follow all the requirements in sub. (4) for operating and testing the treatment unit and for keeping records.

(b) Incinerators and municipal solid waste combustors, which are regulated under s. NR 502.09 or 502.13. In addition to what is required under those sections, persons operating incinerators and municipal solid waste combustors shall follow the requirements in sub. (4)(a) and (c) for operating an infectious waste treatment unit and for keeping records.

(3) **PLAN OF OPERATION.** Except as provided in sub. (2), no person may establish or construct an infectious waste treatment facility or expand an existing facility unless the person has met the applicable requirements of s. NR 502.08 for solid waste processing facilities and has obtained from the department a plan of operation approval and applied for an operating license as a solid waste processing facility. The plan of operation shall specify the intent and objectives of the proposal and indicate methods and procedures to prevent and minimize adverse environmental and health impacts. Unless otherwise approved by the department in writing, the plan shall be submitted in accordance with s. NR 500.05 and shall contain, at a minimum, the information listed in s. NR 502.08(3) to (5) and any other details necessary to address the requirements in this chapter, including but not limited to requirements for handling, containment and storage and the requirements in subs. (4) and (5).

(4) **MINIMUM REQUIREMENTS FOR ALL TREATMENT FACILITIES.** No person may operate or maintain an infectious waste treatment facility unless all of the following requirements are met:

(a) *Operating.* The person shall demonstrate that the treatment unit renders infectious waste non-infectious. The operator shall follow a written operational manual or documented quality assurance procedures for operating the treatment unit. The operational procedures shall be available to the operator at all times the treatment unit is in operation.

(b) *Testing.* At a minimum, the person shall ensure that a qualified person tests the treatment unit at the frequency specified by the manufacturer's instructions or after every 100 hours of operation, whichever is more frequent. Test methods shall be appropriate for the treatment method and shall be based on medically-accepted procedures and the manufacturer's instructions. Acceptable test methods may be physical, chemical or microbiological in nature, as appropriate for the treatment method.

(c) *Keeping records.* The person shall maintain an operating log for each treatment unit in the treatment facility and retain the operating log for at least 3 years. If the 3-year period expires during an unresolved enforcement action, the period is automatically extended until resolution of the pending enforcement action. For treatment units treating 50 pounds or more of infectious waste per month, the operating log shall be kept for all test cycles and treatment cycles. For treatment units treating less than 50 pounds of infectious waste per month, the operating log shall be kept for test cycles only. The operating log shall contain all of the following information for all test cycles and, if required, treatment cycles:

1. Date.

2. Clock time of start of cycle.

3. Operating parameters, including any of the following that apply to the treatment method being used: temperature, pressure, type of disinfectant, concentration of disinfectant, duration of treatment cycle and contact time.

4. Approximate amount of waste treated, unless this information has already been recorded on an infectious waste manifest.

5. Generator of waste treated, if other than the owner or operator of the treatment facility, unless the waste is accompanied by an infectious waste manifest.

6. Results of any tests run to verify disinfection.

(d) *Using manifests.* When treating infectious waste which is accompanied by an infectious waste manifest, the operator of an infectious waste treatment facility shall certify that the infectious waste has been treated according to s. NR 526.11 by doing all of the following:

1. The operator shall sign the infectious waste manifest according to s. NR 526.14 (1) (b).

2. The operator shall send a copy of the signed infectious waste manifest form along with the treated infectious waste to the solid waste disposal facility where the waste is disposed. The department may approve alternative procedures for verifying that waste has undergone infectious waste treatment before being disposed.

3. Within 30 days of when the infectious waste was treated, the operator shall return to the generator the signed original infectious waste manifest form which certifies to the infectious waste generator that the infectious waste has been treated according to s. NR 526.11. The department may approve alternative procedures for certifying that waste has undergone infectious waste treatment.

(5) **OPERATING REQUIREMENTS FOR LICENSED TREATMENT FACILITIES.** In addition to the requirements in sub. (4), persons who operate infectious waste treatment facilities which are required to be licensed as solid waste processing facilities under sub. (1) shall meet the requirements in ss. NR 502.08(6) to (8), 502.04 and 502.05.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (1) (a), (c), (d), (2) (b), (3), (5), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.13 Disposal.** No person may dispose of infectious waste in a solid waste disposal facility unless the infectious waste has undergone infectious waste treatment according to s. NR 526.11. Infectious waste generators shall ensure that infectious waste generated by them has undergone infectious waste treatment before disposal.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.14 Records and infectious waste manifests.**

(1) **ACTIVITIES.** (a) *Records.* Except as provided in sub. (2), all infectious waste generators shall keep records of the amount of infectious waste sent off-site for treatment. Records may consist of any of the following: copies of infectious waste manifests, invoices or records received from the infectious waste treatment facility, logs or other written documentation of the amount of infectious waste sent off-site for treatment. These records shall be kept for at least 3 years after they were created. If the 3-year period expires during an unresolved enforcement action, the period is automatically extended until resolution of the pending enforcement action.

(b) *Manifests.* Except as provided in sub. (2), no person may store, transfer, transport or treat infectious waste beyond the property where the waste was generated unless the waste is accompanied by an infectious waste manifest. The infectious waste manifest may either be a Wisconsin infectious waste manifest form supplied by the department or an alternative manifest form which includes all the information required in sub. (3). After an infectious waste manifest has been initiated, all persons who store,



transfer, transport or treat the waste shall sign the infectious waste manifest form, even if the infectious waste generator is exempt from manifesting under s. NR 526.14 (2), and shall deliver the infectious waste manifest form to the next person who handles the waste.

**Note:** Wisconsin infectious waste manifest forms (DNR form 4400-176) may be obtained from the department of natural resources by writing to: DNR forms, 2421 Darwin Road, Madison, Wisconsin, 53704. It is not possible to order forms by telephone.

**(2) EXEMPTIONS.** (a) The following persons are exempt from all the requirements of this section:

1. Home generators of infectious waste.
2. Owners and operators of sharps collection stations.

(b) The following persons are exempt from the requirements to use infectious waste manifests under this section, but shall follow the requirement for keeping records under sub. (1) (a):

1. An infectious waste generator transporting infectious waste only on private roads on the same property where the infectious waste was generated and using vehicles owned or leased by the infectious waste generator or by one of the generators in the group.

2. An infectious waste generator transporting less than 50 pounds per calendar month of untreated infectious waste away from the property where the waste was initially generated, including items which are mixed with the infectious waste.

3. Infectious waste generators located on the same property who manage their infectious waste together and who, as a group, transport less than 50 pounds per calendar month of untreated infectious waste away from the property.

**(3) FORMAT.** The infectious waste manifest form shall include all of the following information:

(a) The place of origin of the infectious waste, including the name, address, telephone number, and name of contact person and type of facility where the infectious waste was generated, including but not limited to: hospitals, clinics, nursing homes, sharps collection stations and other facilities.

(b) The route for the infectious waste, including the name, address, telephone number, license number and name of contact person for any and all persons storing, transporting or treating the infectious waste beyond the location where the infectious waste was generated.

(c) The destination for disposal of the treated infectious waste, including the name, address, telephone number, solid waste disposal facility license number and name of a contact person.

(d) The composition of the infectious waste, including the type or types of infectious waste listed in s. NR 526.05 (1).

(e) The quantity of the infectious waste, including both the number of containers and the total weight, whether known or estimated, of infectious waste including waste which is mixed with the infectious waste.

(f) The signature of an authorized representative of each facility or licensed transporter handling the waste from generation through treatment.

**(4) RETENTION.** Infectious waste manifests and related records shall be retained as follows:

(a) The infectious waste generator shall retain the original infectious waste manifest and the certification of infectious waste treatment for at least 3 years after the waste has been treated and provide the department copies of manifests upon request. If the 3-year period expires during an unresolved enforcement action, the period is automatically extended until resolution of the pending enforcement action.

**Note:** Hospitals, clinics and nursing homes should keep records for at least 5 years to comply with s. NR 526.19(9)(a) and (g).

(b) Each licensed infectious waste transporter and each owner or operator of a storage or transfer facility, combustor, incinerator or infectious waste treatment facility which handles or disinfects infectious waste shall retain a copy of each manifest for at least 3

years after delivering the waste to the next destination and shall provide the department copies of the manifests upon request. If the 3-year period expires during an unresolved enforcement action, the period is automatically extended until resolution of the pending enforcement action.

(c) The owner or operator of a solid waste disposal facility which receives treated infectious waste shall retain a copy of the infectious waste manifest for at least 3 years after disposal of the waste and shall provide the department copies of the manifest upon request. If the 3-year period expires during an unresolved enforcement action, the period is automatically extended until resolution of the pending enforcement action.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (2) (b) 2., Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.15 Infectious waste annual reports.** An infectious waste generator which is either required to use manifests under s. NR 526.14 or to submit progress reports on medical waste reduction under s. NR 526.21 shall submit an annual report to the department on a form supplied by the department and the annual filing fee for the infectious waste annual report, as specified in s. NR 520.04, Table 2. Infectious waste generators who manifest infectious waste as a group may choose to submit a single annual report on behalf of the group and which is signed by a representative of each generator in the group. Except as required under s. NR 526.21(1), the annual report shall be submitted by March 1 for activities performed during the preceding calendar year. The annual report shall contain the information on the department's form and shall be signed by the administrator or chief executive officer of the infectious waste generator.

**Note:** Infectious waste annual report forms (DNR form 4400-177) may be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707-7921. Phone number (608) 266-2111.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am., Register, June, 1996, No. 486, eff. 7-1-96.

### Subchapter III — Medical Waste Reduction

**NR 526.16 General. (1) PURPOSE.** The purpose of this subchapter is to require medical facilities, except those exempted under sub. (2), to implement policies which will do all of the following: reduce the amount of medical waste generated by medical facilities, prevent the mixing of infectious waste with non-infectious waste, promote practical alternatives to disposable items in medical facilities, and maintain effective waste reduction programs. Waste reduction efforts initiated prior to November 1, 1994 may be incorporated into the policy and plan.

**Note:** Medical waste does not mean all of the waste produced in a medical setting. Waste materials from a medical setting which do not meet the definition of "infectious waste" in statutes are considered to be "medical waste" only if the generator mixes them with infectious waste or manages them as though they are infectious waste.

**(2) EXEMPTIONS.** Directors of all medical facilities are encouraged to audit their waste management practices and to reduce medical waste whenever possible. The following directors of medical facilities are exempt from the requirements of this subchapter, provided they keep records of the amount of medical waste generated in order to verify whether or not they are exempt from the requirements of this subchapter and they retain the records for 5 years:

(a) Directors of medical facilities which generate less than 50 pounds of medical waste per calendar month, regardless of where the waste is treated.

(b) Directors of medical facilities which generate more than 50 pounds of medical waste during only one calendar month of a calendar year, regardless of where the waste is treated, and which average less than 50 pounds of medical waste per month for the same calendar year.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.17 Medical waste reduction policy.** Except as provided in s. NR 526.16 (2), each director shall adopt a written medical waste reduction policy which commits the medical facil-

ity to the process of reducing the amount of medical waste generated at the source. A group of directors may work together to develop a policy which each individual director will subsequently adopt. The director shall review and update the medical waste reduction policy as necessary or at least every 5 years. The medical waste reduction policy shall, at a minimum, commit the medical facility to the process of waste reduction, which consists of all of the following:

(1) Auditing current practices for managing solid waste generated by the medical facility and repeating the waste audit as necessary, according to s. NR 526.18.

(2) Preparing a medical waste reduction plan and updating the plan as necessary, according to s. NR 526.19.

(3) Implementing the medical waste reduction plan, according to s. NR 526.20 (1).

(4) Assessing the medical waste reduction plan and the progress toward goals annually, according to s. NR 526.20 (2), and submitting progress reports to the department, according to s. NR 526.21.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.18 Waste audit.** Before completing or updating the medical waste reduction plan required in s. NR 526.19, each director or director's designee shall audit the medical facility's current solid waste management practices. Each director or director's designee shall repeat the audit at least every 5 years for the whole medical facility or more frequently for any part of the facility where there has been a significant change in solid waste characteristics or amounts of solid waste due to major remodeling, expansion of service or other factors. Each director or director's designee shall keep a copy of the results of the initial audit and all subsequent audits at the medical facility. The department may review these records upon request. The waste audit shall address all of the following:

(1) **SOURCE AREAS.** The waste audit shall identify all areas within the medical facility where solid waste, not just medical waste, is generated.

(2) **WASTE TYPES.** The waste audit shall identify the types of waste that are generated within each source area. It is not necessary to determine how much of each waste type is generated in each source area. The waste types are: medical waste, including infectious waste items listed in s. NR 526.05 and items which are either being mixed with infectious waste or handled as infectious waste; hazardous waste, including but not limited to hazardous chemotherapy waste; radioactive waste; non-hazardous chemotherapy waste; recyclable materials; wastes which may have to be managed separately because they are any combination of infectious, hazardous or radioactive waste; and other solid waste.

**Note:** Hazardous waste which is also infectious waste is regulated by the department under hazardous waste rules. See chs. NR 600 to 685. Radioactive waste which is also infectious is regulated by the department of health and social services under ch. HSS 157 and the federal government under Title 10 CFR.

(3) **QUANTITY OF MEDICAL WASTE.** The waste audit shall identify how many pounds of medical waste the medical facility, as a whole, generated during the previous 12 months.

(4) **MEDICAL WASTE GENERATION RATE.** The waste audit shall identify the rate at which the medical facility generated medical waste during the 12 months covered by the audit. The waste generation rate shall be calculated according to the appropriate formula in s. NR 526.21 (1).

(5) **WASTE MANAGEMENT PRACTICES.** The waste audit shall identify how medical waste is collected, stored, transported and treated from the point of generation to the point of final disposal, including any medical waste discharged to a publicly-owned wastewater treatment system. The audit shall identify how non-infectious waste is prevented from being mixed with infectious waste. The audit shall include any waste types that are currently mixed with or may be mixed with infectious waste. The audit may

also identify waste management practices for waste types that are not mixed with medical waste.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.19 Medical waste reduction plan. (1) GENERAL PROVISIONS.** Unless exempt under s. NR 526.16 (2), each director or director's designee shall prepare a medical waste reduction plan for separating, reducing and managing the medical waste generated, for evaluating alternatives to disposable products and for maintaining waste reduction efforts. The director or director's designee shall do all of the following when preparing the medical waste reduction plan:

(a) Include all of the information required in subs. (3) to (10) in the medical waste reduction plan.

(b) Assess the medical waste reduction plan and its results annually and update the plan at least every 5 years.

(c) Keep a copy of the most recent medical waste reduction plan and make it available for the department to review upon request according to s. NR 526.22 (2). The department may require the director to submit a copy of the plan and related materials to the department for its review and approval. The department may approve the plan with conditions, including but not limited to specifying goals, objectives and schedules.

(d) Consider the following priorities in developing the medical waste reduction plan:

1. Waste reduction, including but not limited to: reducing the amount of packaging and the use of disposable items, substituting other products and materials, changing or modifying equipment, changing purchasing policies or procedures, changing house-keeping practices, providing more effective ways to separate infectious wastes from all other waste types, and selling or donating unused items and equipment to others.

2. Reuse by appropriate reprocessing, including but not limited to: sterilizing, disinfecting, decontaminating, laundering, recharging, exchanging waste or equipment with others, and selling or donating reprocessed items or equipment to others.

3. Recycling of recyclable materials.

(e) Consider all of the following factors when evaluating waste management strategies and alternatives to disposables:

1. Costs, including benefits, savings and reduced liabilities.

2. Probable adverse effects on patient care and worker safety posed by the alternatives.

3. Probable effects of transferring waste disposal to other media, including land, air and water.

4. State recycling laws and rules and local recycling ordinances.

5. Recycling options available in the area.

6. Compliance with other rules and regulations that apply to or within the medical facility, such as occupational health and safety regulations, state and federal air management regulations, state and federal wastewater regulations and state and federal hazardous waste regulations.

7. Availability of products or equipment needed to implement an alternative.

8. Other considerations specific to the medical facility.

(2) **OPTIONAL PROVISIONS.** (a) The director or director's designee may also address the waste types listed in s. NR 526.18 (2) in the medical waste reduction plan, or incorporate the medical waste reduction plan within a comprehensive waste management plan for the medical facility.

(b) The medical waste reduction plan may describe, incorporate or refer to waste reduction policies or waste minimization plans adopted prior to November 1, 1994 or to applicable waste handling and management policies or plans developed under other rules, such as s. NR 615.09 or 544.05 (2) (c), or under the requirements of other agencies such as OSHA or the joint commission on accreditation of healthcare organizations.



(c) If the medical facility manages its infectious waste with other infectious waste generators, the director or director's designee may work together with those generators to develop a single medical waste reduction plan.

(d) The medical waste reduction plan may describe incentives which are offered to encourage staff to participate actively in implementing, evaluating and improving the plan.

(e) When setting goals in sub. (3), the director or director's designee may recognize and maintain past accomplishments in reducing medical waste. The plan may list other goals, including other numerical goals, which encourage continuous improvement in medical waste reduction. Numerical goals may be modified over time to reflect changing conditions.

**(3) GOALS AND OBJECTIVES.** The medical waste reduction plan shall list the medical facility's internal goals, objectives and a timetable for reducing the amount of medical waste generated by the medical facility. Goals shall include, but are not limited to, all of the following:

(a) Meeting a specific numerical goal expressed in terms of a medical waste generation rate calculated according to s. NR 526.21 (1). If a medical facility has already significantly reduced its medical waste generation rate and has implemented policies which meet all of the goals in pars. (b) to (d), the numerical goal may be to maintain the current medical waste generation rate.

(b) Preventing the mixing of non-infectious waste with infectious waste by separating waste at the source according to s. NR 526.06 and by implementing the waste management procedures developed under sub. (5).

(c) Reducing the use of disposable items when it is practical to do so, by implementing the procedures for evaluating alternatives to disposables developed under sub. (6).

(d) Maintaining an effective program for reducing medical waste through education, training, monitoring and assessment, according to subs. (7), (8) and (9).

**(4) BASELINE AND PAST PRACTICES.** The medical waste reduction plan shall briefly describe the practices related to medical waste management that were in effect during the most recent waste audit and any past efforts to reduce medical waste. Descriptions of baseline practices shall include but not be limited to all of the following: the waste management practices identified during the most recent waste audit under s. NR 526.18 (5); how alternatives to disposables were being evaluated; how medical waste management costs were being estimated; where any records of total medical waste generation, on-site treatment and off-site transportation were kept, and which positions were responsible for implementing each of these activities. Descriptions of past practices shall include what the medical facility has done to reduce medical waste from November 1, 1994 until the most recent audit and may include waste reduction efforts prior to November 1, 1994.

**(5) WASTE MANAGEMENT.** The director or director's designee shall consider the priorities in sub. (1) (d) and the factors in sub. (1) (e) when evaluating alternative waste management practices and developing waste management policies or procedures. The medical waste reduction plan shall briefly describe how the director or director's designee intends to prevent the mixing of non-infectious waste with infectious waste. The plan shall include or refer to written policies or procedures for collecting, storing, transporting and treating medical waste from the point of generation to the point of disposal, including any medical waste discharged to a publicly-owned wastewater treatment system.

**(6) ALTERNATIVES TO DISPOSABLE ITEMS.** The medical waste reduction plan shall include or refer to written policies or procedures for evaluating alternatives to disposables when purchasing medical materials, supplies and equipment. The policies or procedures shall specify how alternative products, replacement costs, treatment costs, disposal costs, the priorities in sub. (1) (d) and the factors in sub. (1) (e) will be evaluated prior to purchasing.

**(7) PUBLIC EDUCATION.** The medical waste reduction plan shall include or refer to specific written policies and procedures for informing volunteers, patients and their guests about waste disposal in order to prevent non-infectious waste from being put in containers meant only for infectious waste. Education is required only in areas where volunteers, patients and their guests have access to infectious waste containers. Education may include but is not limited to any one or more of the following: labels placed on or signs near infectious waste containers indicating who may place waste in those containers or what may be placed in them, pamphlets, notices, verbal education or other means.

**(8) STAFF TRAINING.** The medical waste reduction plan shall provide for the training of all employees and medical personnel who work within the medical facility, as follows:

(a) *Initial training.* Initial training shall include, at a minimum, the waste management practices, policies and procedures for medical waste and for any other waste types generated in the source areas in the areas in which they work.

1. Existing employees and medical personnel who work within the medical facility shall receive training regarding the waste management policies and practices within 6 months after the medical waste reduction policy goes into effect. If the director or director's designee has implemented a medical waste reduction plan prior to November 1, 1994, initial training done to implement the plan will meet the intent of this subdivision.

2. New employees and medical personnel who work within the medical facility shall be trained as part of their initial orientation.

(b) *Annual updates.* All employees and medical personnel who work within the medical facility shall receive training annually on waste handling and management policies, procedures and practices for the waste types generated in the source areas in which they work.

**(9) MONITORING AND ASSESSMENT.** The medical waste reduction plan shall describe how the director or director's designee will monitor and assess waste reduction efforts. The plan shall include or refer to policies or procedures, where appropriate, for doing all of the following:

(a) Keeping records of total medical waste generation, on-site treatment and off-site shipment of medical waste for at least 5 years in order to meet the requirement in par. (g).

(b) Inspecting the medical facility periodically and enforcing the medical waste reduction plan.

(c) Monitoring the medical facility annually for changes which would make it necessary for the facility to repeat the waste audit according to s. NR 526.18.

(d) Reviewing the process of plan implementation annually.

(e) Assessing progress toward goals and objectives annually.

(f) Reviewing the contents of the medical waste reduction policy every 5 years and the medical waste reduction plan annually.

(g) Updating the policy and plan as necessary or at least every 5 years.

(h) Preparing and submitting progress reports according to s. NR 526.21.

**(10) POSITIONS.** The medical waste reduction plan shall identify the employee positions that will be responsible for each of the following activities in the plan: preparing the plan, evaluating and implementing alternative waste management practices, evaluating and implementing alternatives to disposables, education and training, and the activities associated with monitoring and assessment under sub. (9).

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.20 Implementation and assessment.** Unless exempt under s. NR 526.16, a director shall implement the medical waste reduction plan and assess the plan and the results of its implementation annually. If the department determines that a rea-

sonable effort has not been made to follow the process outlined in this subchapter or to reduce waste, the department may require the director to submit the plan for review and require changes to the plan, which may include but are not limited to changes in goals, objectives, objective waste generation rate, schedules and waste management practices.

(1) IMPLEMENTATION. A director shall implement the medical waste reduction plan by the following dates:

(a) For a medical facility which generates 500 pounds or more of medical waste per month, within 12 months of November 1, 1994.

(b) For a medical facility which generates 200 pounds or more but less than 500 pounds of medical waste per month, within 24 months of November 1, 1994.

(c) For a medical facility which generates 50 pounds or more but less than 200 pounds of medical waste per month, within 36 months of November 1, 1994.

(2) ASSESSMENT. Each director or director's designee shall assess annually both the medical waste reduction plan and the results of implementation of the plan, unless the medical facility is exempt under s. NR 526.16 (2). After completing each annual assessment, the director shall submit a progress report to the department according to s. NR 526.21.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94.

**NR 526.21 Progress reports.** Unless exempt under s. NR 526.16 (2), each director shall submit progress reports to certify that the director has adopted a medical waste reduction policy, prepared and implemented a medical waste reduction plan and is maintaining efforts to reduce medical waste. The director shall submit progress reports to the department using the infectious waste annual report form required in s. NR 526.15 and supplied by the department, regardless of whether or not infectious waste manifests have been used during the preceding calendar year.

**Note:** Infectious waste annual report forms (DNR form 4400-177) may be obtained from the department of natural resources, bureau of waste management, 101 S. Webster Street, P.O. Box 7921, Madison, WI 53707-7921. Phone number (608) 266-2111.

(1) FIRST PROGRESS REPORT. The first progress report shall be submitted to the department within 4 months of the date specified in s. NR 526.20(1) for implementation of the plan. The first progress report shall include all of the following:

(a) Selected information required on the infectious waste annual report form provided by the department.

(b) Type of medical facility.

(c) Rate of medical waste generated. For waste audits and the first progress report, the year used shall be the audited year. For annual progress reports, the year used shall be the calendar year on which the progress report is based. The medical waste generation rate shall be expressed as follows:

1. For hospitals and nursing homes, in pounds per patient-day, according to the following formula, unless the department approves an alternative formula in writing:

$$\text{Pounds/(patient-day)} = \frac{\text{(total pounds of medical waste generated in year)}}{\text{(total patient-days in same year)}}$$

2. For clinics, in pounds per day per treatment area, according to the following formula, unless the department approves an alternative formula in writing:

$$\text{(Pounds/day)/area} = \frac{\text{(total pounds medical waste generated in year)/365 days}}{\text{(number of treatment areas)}}$$

(d) Dates and titles of the medical waste reduction policy and the medical waste reduction plan and of any revisions to the policy or plan.

(e) An executive summary of the medical waste reduction plan, including goals and objectives.

(f) A brief description of progress toward meeting goals and implementing objectives, including but not limited to: the impact of waste reduction efforts on waste generation weight and rates; impacts of other factors on waste generation weight and rates, such as changes in types of treatment performed or acuity level of patients; benefits and problems with implementation; and how the problems have been addressed.

(g) Certification by the director that the information on the form is true and accurate.

(h) Filing fee for an infectious waste annual report as specified in s. NR 520.04, Table 2.

(2) ANNUAL PROGRESS REPORTS. After the first progress report, the director shall submit annual progress reports for each calendar year by March 1 of the following year. Annual progress reports shall:

(a) Include all of the information required in sub. (1), except sub. (1) (e).

(b) Indicate whether or not the policy and plan have been revised in the previous year, specify the dates of any revisions and briefly describe the revisions.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (1) (intro.), (h), Register, June, 1996, No. 486, eff. 7-1-96.

**NR 526.22 Availability.** Unless exempt under s. NR 526.16 (2), each director shall make its medical waste reduction policy and medical waste reduction plan available as follows:

(1) Each director shall submit copies of the most recent medical waste reduction policy and plan, any amendments to the policy or plan, and all progress reports to the operator of each medical waste incinerator used to burn medical waste generated by the medical facility.

(2) Each director shall make available copies of the most recent medical waste reduction policy and plan, any amendments to the policy or plan, the results of all waste audits, and all progress reports to the department for review upon request. The department may require the director to provide a copy of this material to the department without charge to the department. Upon receipt of the plan, the department will send an invoice for the medical waste reduction plan review fee required in s. NR 520.04, Table 2.

(3) Each director shall make available copies of the most recent medical waste reduction policy and plan, any amendments to the policy or plan, and the progress reports, to other persons for review upon request, during normal administrative business hours. Each director shall provide copies of the policy, plan, annual assessments or amendments to any person who requests these documents either in writing or in person. The director may charge the person a reasonable fee to cover the cost of copying and mailing the documents.

**History:** Cr. Register, October, 1994, No. 466, eff. 11-1-94; am. (2), Register, June, 1996, No. 486, eff. 7-1-96.