ity is exempt under sub. (2) or (4). The operating license for a storage facility is transferable.

- (b) No person may operate or maintain a facility for the storage of residue produced by the burning of municipal solid waste unless the person has obtained an operating license from the department under this section.
- (c) All waste shall be stored in containers unless its volume precludes practical containerized storage in which case it shall meet the noncontainerized storage requirements of this section unless exempted under sub. (2).
- (2) EXEMPTIONS. The following storage facilities are exempt from licensing and all requirements of this section:
- (a) Garbage cans for household wastes located on the property where the waste is generated.
- (b) Containerized storage facilities such as lugger boxes and rolloff containers for solid waste serving apartments, commercial establishments, business establishments and industries which are located on the premises served.
- (c) Pit silos used for the storage of by-products from fruit, vegetable or grain processing operations where such by-products are to be used for animal feed.
- (d) Facilities for high volume industrial waste or wood residue where the waste is stored at the point of generation for less than 72 hours prior to being transported for disposal or beneficial reuse and the facility is operated and maintained in an environmentally sound and nuisance free manner.
 - (e) On site storage at a municipal solid waste combustor.
- (3) OPERATIONAL REQUIREMENTS FOR CONTAINERIZED STORAGE FACILITIES. No person may operate or maintain a containerized storage facility except in conformance with the following minimum requirements:
- (a) Storage containers shall be durable, rust resistant, nonabsorbent, leak-proof, easy to clean and effectively contain the stored waste. If garbage or similar putrescible wastes are stored, the containers shall have close-fitting, fly-tight covers and be constructed of light-weight durable material.
 - (b) Covers and containers shall be maintained in good condition.
- (c) Containers handling municipal solid waste shall be removed and emptied at least once per week, or more often if conditions warrant. Containers handling nonputrescible industrial waste shall be removed and emptied as necessary, but at least once every 90 days.
 - (d) All weather access shall be provided and maintained.
- (e) Effective means shall be provided to control flies, rodents and other vectors.
- (f) Objects too large for the containers shall be stored in a nuisance-free manner.

- (g) Periodic clean-up and maintenance of the storage container and surrounding area shall be conducted to keep it aesthetically pleasing and nuisance-free. This maintenance shall be the responsibility of the property owner where the containers are located as well as the owner of the containers.
- (h) Access restrictions including a lockable gate and attendant may be required by the department to prevent nuisance conditions or if mechanical compaction equipment is part of the facility.
 - (i) Disposal of solid waste is not allowed at a storage facility.
 - (j) No burning of solid waste may be conducted.
- (k) The facility shall be operated and maintained in a sanitary, nuisance-free manner so as to protect the environment and the public health.
- (4) Noncontainerized storage facilities. Facilities which meet the following criteria may be exempted in writing by the department from licensing and the plan submittal requirements of this section. All other noncontainerized storage requirements of this section shall apply. Any person intending to establish or construct a noncontainerized storage facility shall contact the department to arrange for an initial inspection. The department shall issue an exemption in writing if the operator demonstrates that the facility meets all the following criteria:
- (a) The solid waste does not include residue produced by the burning of municipal solid waste or putrescible waste such as garbage and municipal refuse.
- (b) The waste is free of noxious odors and not readily transported by wind or water unless it is stored to prevent such transport.
- (c) The facility exists less than 6 months from the time of initial storage to the removal of all waste.
- (d) The volume of waste stored at the facility does not exceed 2,500 cubic yards at any time during the 6 month period.
- (e) The total volume of waste stored at the facility during the allowable 6 month period does not exceed 5,000 cubic yards.
- (5) PLAN OF OPERATION. No person may establish or construct a solid waste storage facility or expand an existing facility unless the person has obtained a plan of operation approval from the department. The plan of operation shall specify the intent and objectives of the proposal and indicate methods and procedures to minimize adverse environmental impacts. Unless otherwise approved by the department in writing, the plan shall be submitted in accordance with s. NR 500.04 and shall contain, at a minimum, the following information:
 - (a) A legal description of the facility.
 - (b) The present ownership of the property.
- (c) The proposed facility size, property boundaries and present land use of the facility and the area within ¼ mile of the facility.
- (d) The area served, including population and major industries. Register, May, 1992, No. 437

- (e) The consistency of facility development with areawide solid waste plans and land use plans.
- (f) The predominant types of vegetation and wildlife within the proposed facility boundaries.
- (g) A complete materials balance for the storage facility, specifying amounts and characteristics of solid waste.
- (h) The types of vehicles and access routes used to transport solid waste to and from the facility including the estimated traffic flow patterns within the facility, and an estimate of the increased quantities of traffic on access routes to and from the facility.
- (i) The estimated quantities and characteristics of wastes containing free liquids resulting from facility operations and methods of their storage or disposal.
 - (j) The persons responsible for facility construction and operation.
- (k) Any additional procedures for the control of dust, odors, fire, windblown materials and potential explosions and for the handling of the waste in the case of major facility breakdown.
 - (1) The tentative operating schedule for the facility.
- (m) Provisions for protection of groundwater and surface waters during facility construction and operation.
- (n) A discussion of possible operational hazards and necessary safety precautions.
- (o) A discussion of design features and logic including the equipment capacity or size. Information shall be included to justify the size and configuration of the receiving area; methods of handling wastes containing free liquids resulting from operations such as floor drains, sewers and water treatment facilities; sizing of surface water drainage control structures; traffic flow patterns; design life of any building and facility equipment; methods of controlling windblown materials; and methods of screening the facility from the surrounding area.
- (p) An operations and maintenance manual which specifies the operating and maintenance procedures; operating personnel responsibilities; hours of operation; daily operating schedule; equipment maintenance schedules; methods of controlling explosions, fire, odors and windblown materials; special waste handling procedures; methods of controlling access; daily cleanup procedures; person responsible for operation; facility licensee and owner; record keeping procedures; emergency procedures for handling of freezeup during cold weather; methods to prevent solid waste from burning; and any other pertinent information.
- (6) ENGINEERING PLANS. The plan of operation shall include a set of engineering plans and maps which contain the following information unless an exemption is granted in writing by the department:
- (a) An existing conditions map, which shows the entire facility and the area within ½ mile. The minimum scale shall be 1" = 400'. This map shall include the proposed facility boundary, property lines, easements and right-of-way; building foundations, roads, utilities and other structures; topography, drainage swales, surface waters, wetlands, floodplains

and similar drainage features; wooded areas; location of soil borings and test pits; features of historical and archaeological significance; and other features as appropriate.

- (b) A facility plan which shall include proposed facility access roads and traffic patterns, buildings, scales, utility lines, drainage diversion, screening, means of access control, final topography, areas to be cleared of vegetation, and other design features. The extent of coverage and scale shall be the same as that for the existing conditions map.
- (c) A proposed layout plan which shows the receiving, storage and loadout areas. The minimum scale shall be 1'' = 20'. Plan details shall include conceptual design for receiving area configuration and traffic flow patterns, storage area and equipment configuration, loadout area and equipment configuration, and other design features.
- (d) At least one cross section shall be drawn through the receiving, storage and loadout areas indicating existing topography, limits of excavation, proposed final grades and other pertinent design features. More cross sections may be necessary depending on the complexity of the facility design.
- (7) Construction documentation report for any noncontainerized storage facility. When a documentation report for required, it shall be prepared in accordance with the department's plan approval and s. NR 500.05. Operation of the facility may not commence until the report is approved in writing by the department and a license is issued. The department may issue a license prior to facility construction or construction documentation.
- (8) Locational criteria. Noncontainerized storage facilities shall meet the location and performance standards specified in s. NR 502.04. Exemptions from the requirements of s. NR 502.04 (2) (a), (b), (d), (e) and (f) and (3) (b), (e) and (f) may be granted only upon demonstration by the applicant of circumstances which warrant the exemption. Exemptions from compliance with s. NR 502.04 (3) (a) may be granted only in accordance with the standards in s. NR 1.95. Exemptions from compliance with s. NR 502.04 (3) (d) may be granted only according to the procedures in ch. NR 140. Exemptions from compliance with s. NR 502.04 (2) (c) and (3) (c) will not be granted.
- (9) OPERATIONAL REQUIREMENTS FOR NONCONTAINERIZED STORAGE FACILITIES. No person may operate or maintain a noncontainerized storage facility except in conformance with an approved plan of operation and the following minimum requirements:
 - (a) All weather access shall be provided and maintained.
- (b) Effective measures shall be taken to control flies, rodents and other vectors.
- (c) Periodic maintenance or clean-up of the facility shall be conducted to keep it aesthetically pleasing and nuisance-free.
- (d) Gates, fencing and an attendant shall be provided as specified by the department.
- (e) Solid waste shall be disposed of at a licensed facility approved by the department.

- (f) Solid waste shall not be burned.
- (g) The facility shall be operated and maintained in a sanitary, nuisance-free manner so as to protect the environment and the public health.
 - (h) Adequate drainage shall be maintained on and around the facility.
- (10) Monitoring. The department may require the owner or operator to perform surface water, groundwater, unsaturated zone or gas monitoring of noncontainerized storage facilities. Monitoring shall be conducted as specified by the department. Monitoring may be required after facility closure.
- (11) CLOSURE. Any person who owns or operates a noncontainerized storage facility or who permits the use of property for such purpose shall close the facility in accordance with any plan approval issued by the department and the following minimum practices:
- (a) The owner or operator shall notify the department in writing at least 60 days prior to the closing of the facility.
- (b) All solid waste shall be removed from the facility in accordance with the conditions of the approved plan of operation. The waste shall be properly utilized or disposed.
- (c) The surface of the facility shall be restored in conformity with the approved plan of operation, or restored to its original condition to the extent practicable.
- (12) Financial responsibility. The department may require that the owner or operator provide proof of financial responsibility for the removal, transportation and ultimate disposal of the stored material.
- (13) Storage of residue produced by burning municipal solid waste combustor approved under s. NR 502.14, no person may maintain or operate a storage facility for residue produced by burning municipal solid waste unless the person has obtained an operating license under sub. (1), and written approval of a plan of operation under sub. (5), for the facility. Residue storage areas shall be designed, operated and maintained in compliance with the applicable portions of this section.
- (b) The residue shall be wetted at all times during storage to prevent dust emissions. Alternative methods of dust control shall be approved by the department prior to implementation. Provisions shall be made to prevent the release of residue into the air in the residue handling areas.
- (c) The storage area shall have an impervious surface on which the residue is stored and a collection system for any liquids coming into contact with the residue. All liquid that comes into contact with the residue which is not used as makeup water in the quench tank shall be treated at a wastewater treatment plant approved by the department.
- (d) Access to the temporary storage areas shall be restricted to authorized personnel only. Fencing or other means of access control acceptable to the department shall be maintained around the storage facility.
- **History:** Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. (4) (a), renum. (1) (b) to be (1) (c), cr. (1) (b), (2) (e) and (13), Register, May, 1992, No. 437, eff. 6-1-92.

- NR 502.06 Collection and transportation service requirements. (1) GENERAL. (a) No person may operate or maintain a collection or transportation service unless the person has obtained an operating license from the department, unless the facility is exempt under sub. (2).
- (b) No person may maintain or operate a facility for the collection and transportation of residue produced by burning municipal solid waste unless the person has obtained a written approval of a plan of operation for the facility under sub. (4).
- (2) EXEMPTIONS. The following collection or transportation services are exempt from all requirements of this section:
- (a) Services for the collection and transportation of only gravel pit spoils, quarry materials, earth materials or salvageable materials other than those listed in s. 159.07 (3) or (4), Stats.
- (am) Services for the collection and transportation of the materials listed in s. 159.07 (3) and (4), Stats., after the materials have been processed for reuse or recycling by conversion into a consumer product or a product which is used as a raw material in a commercial or industrial process, or which are not part of an approved effective recycling program.
- (b) Services for the collection and transportation of only ordinary solid waste from a single household or ordinary household solid waste amounting to less than 20 tons per year.
- (c) Services for the collection and transportation of sludge from municipal wastewater or water supply treatment plants provided it is handled in accordance with ch. 147, Stats.
- (d) Services for the collection and transportation of only waste materials regulated and licensed under s. 146.20, Stats.
- (e) Governmental services consisting solely of vehicles used to collect and transport roadside litter from town, village, city, county, state and federal highway right-of-way. Litter shall be disposed of at a licensed disposal facility.
- (f) Services for the collection and transportation of dredge material regulated by permit or contract under s. 30.20, Stats.
- (g) Services for the collection and transportation of wastes generated by an industrial company which do not travel on public roads and which utilize vehicles owned by the company.
- (h) Services for the collection and transportation of whey or waste materials from fruit or vegetable processing operations.
- (3) Transportation of aspestos waste. All services collecting and transporting aspestos shall meet the minimum requirements of the applicable air management rules.
- (4) PLAN OF OPERATION FOR TRANSPORTATION OF RESIDUE PRODUCED BY BURNING MUNICIPAL SOLID WASTE. (a) No person may maintain or operate a facility for the collection and transportation of residue produced by burning municipal solid waste unless the person has obtained an operating license and written approval of a plan of operation for the facility.

- (b) The plan of operation shall specify the intent and objectives of the proposal and indicate methods and procedures to minimize adverse environmental impacts. Unless an exemption is granted by the department in writing, the plan shall be submitted in accordance with s. NR 500.05 (1) to (3) and shall contain, at a minimum, the following information:
 - 1. A legal description of the property and the facility boundaries.
 - 2. The present ownership of the proposed facility property.
 - 3. The operator of the facility.
- 4. The types of vehicles used to haul residue to a landfill or processing facility.
- 5. The names and locations of all solid waste disposal facilities to which residue may be hauled.
- 6. The names and locations of all facilities that residue produced by burning municipal solid waste will be collected from.
- 7. The method used to restrict access to the residue transport vehicles to authorized personnel only.
 - 8. The methods used to prevent spillage and wind blown residue.
- (c) Any licensed residue collection and transportation service which is in operation on June 1, 1992 shall submit a plan of operation in accordance with this subsection no later than 3 months after June 1, 1992.
- (d) No residue collection or transportation service may begin initial operation after June 1, 1992, unless a plan of operation under this section has been approved by the department.
- (5) Transportation of residue produced by burning municipal solid waste. (a) The transportation of residue produced by burning municipal solid waste shall be in accordance with the applicable portions of this section.
- (b) The residue shall contain sufficient moisture during transportation to prevent dust emissions. Alternative methods of dust control shall be approved by the department prior to implementation. Provisions shall be made to prevent the release of residue into air in the residue handling areas.
- (c) Prior to transportation of the residue, free liquids shall be drained until no more free liquids remain. All vehicles that transport the residue shall be designed and operated as necessary to prevent leakage during operation.
- (d) Access to the residue transport vehicles shall be restricted to authorized personnel only.
- (e) All transportation vehicles shall be covered to adequately prevent spillage and wind blown residue during transport.
- (6) OPERATIONAL REQUIREMENTS. No person may operate or maintain a solid waste collection and transportation service except in accordance with the following minimum requirements:
- (a) Each vehicle shall have "WDNR" followed by the license number lettered on the driver's door. The letters shall be at least 2 inches high

with a minimum ½ inch brush stroke. The lettering shall contrast with the background so it is easy to read.

- (b) Solid waste shall be transported only to facilities which are licensed or approved by the department, or to facilities which are exempt from regulation by the department.
- (c) Vehicles or containers used for the collection and transportation of solid waste shall be durable, easy to clean and leak-proof, if necessary, considering the type of waste and its moisture content. All vehicles and containers shall be cleaned as frequently as necessary to prevent nuisances or insect breeding and shall be maintained in good repair.
- (d) Vehicles or containers used for the collection and transportation of solid waste shall be loaded and moved in such a manner that the contents do not fall, spill or leak. Covers shall be provided to prevent littering and spillage. If spillage does occur, the operator shall immediately return spilled materials to the vehicle and shall properly clean the spill area. In the event of a spill of a hazardous substance the department shall be notified under s. 144.76, Stats., and the spill material shall be collected and the environment restored as provided in ch. NR 158.
- (e) Services for the collection and transportation of recyclable materials listed in s. 159.07, Stats., shall comply with the prohibitions on land disposal and incineration in that section.
- (f) Services for the collection and transportation of recyclable materials shall maintain the cleanliness of those materials for recycling purposes.
- (g) Upon the request of the department, a service for the collection and transportation of recomble materials shall provide satisfactory documentation to the department that the recyclable materials have been delivered to brokers, processors or end users of the materials. Records shall be retained for a period of 3 years from the time of delivery.

Note: A collection and transportation service which transports less than 20 tons of ordinary household solid waste per year is not required to be licensed under s. NR 502.06.

- (7) EXPANSION OR TERMINATION. The owner or operator shall notify the department in writing of any expansion or termination of a service or of any change in disposal facilities used at least 30 days prior to the effective date of such action.
- (8) RESPONSIBILITY. A person generating solid waste shall be responsible for the collection and transportation of the waste to a solid waste disposal facility licensed by the department unless the person contracts with a collection and transportation service licensed by the department for that purpose.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; renum. (1) and (4) to (6) to be (1) (a) and (6) to (8), cr. (1) (b), (4) and (5), Register, May, 1992, No. 437, eff. 6-1-92; am. (2) (a), cr. (2) (am) and (6) (e) to (g), Register, September, 1993, No. 453, eff. 10-1-93.

NR 502.07 Transfer facilities. (1) GENERAL. No person may operate or maintain a solid waste transfer facility unless the person has received an operating license from the department, except as otherwise provided in sub. (2). Any person intending to establish or construct a solid waste transfer facility shall contact the department to arrange for an initial inspection.

- (2) EXEMPTIONS. Transfer facilities at which waste from individual users or from hand unloaded vehicles not exceeding one ton in capacity are exempt from the plan approval requirements of this chapter and licensing but shall be operated and maintained in conformance with the following practices:
- (a) Containers shall be leak-proof and manufactured of nondegradable material such as metal, plastic or concrete.
- (b) Where mechanical equipment is a part of the operation, access shall be limited to those times that an attendant is on duty. Access restrictions and an attendant may be required by the department for a nonmechanical facility.
- (c) Containers shall be removed or emptied at least once per week and more frequently if conditions warrant.
- (d) The transfer station and adjacent area shall be kept clean and free of litter.
 - (e) Burning of solid waste may not be conducted.
- (f) Effective means shall be provided to control flies, rodents and other insects or vermin.

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- (g) An all-weather access road and parking area shall be provided and maintained.
- (h) If recycling facilities are provided, they shall be clearly labeled and maintained in a nuisance-free manner.
- (3) PLAN OF OPERATION. No person may establish or construct a transfer station prior to obtaining approval in writing from the department of a plan of operation for the facility. The plan of operation shall specify the intent and objectives of the proposal and indicate methods and procedures to minimize adverse environmental impacts. Unless an exemption is granted by the department in writing, the plan shall be submitted in accordance with s. NR 500.04 and shall contain, at a minimum the following information:
 - (a) A legal description of the property and the facility boundaries.
 - (b) The present ownership of the proposed facility property.
 - (c) Land use within ¼ mile of the proposed facility.
 - (d) The operator of the facility.
 - (e) The size of the facility.
- (f) A USGS 7½ minute or 15 minute quadrangle map of the facility property.
- (g) The proposed methods of screening waste handling operations from the surrounding area.
- (h) A discussion of the consistency of facility development with areawide solid waste management plans, land use plans or other areawide plans. Alternatives considered in the project planning phase shall be discussed.
- (i) The population and area to be served by the facility and projections for changes in use in the future.
- (j) The type and quantity of waste to be handled, and specific waste types which will not be accepted at the facility. The method for screening the incoming waste to eliminate unacceptable material such as asbestos, infectious waste, explosive wastes, hazardous waste or other materials from endangering the operators' safety shall be identified.
- (k) The persons responsible for structural improvements, building maintenance and daily operation and control of the facility.
- (1) The types of vehicles used to transport solid waste into and out of the facility.
- (m) The vehicle traffic routing at the facility and provisions for access to connecting roadways.
- (n) The source of the facility's water supply and the method of wastewater treatment.
- (o) The methods of volume reduction to be used such as compacting, grinding, compression or tamping.
- (p) The design criteria used to select equipment capacity and building configuration and sizing.

- (q) Daily clean-up procedures.
- (r) The names and locations of all solid waste disposal facilities to which waste from the transfer station may be hauled.
- (s) The procedures for alternate routing of waste during inoperable periods at the facility.
- (t) The procedures to handle heavy or bulky items and locations for storage of solid waste beyond the end of the working day.
- (u) The equipment and procedures designed to control dust, odors, noise, fire and windblown paper.
 - (v) The proposed life expectancy of the facility.
- (w) A detailed discussion of the safety equipment and procedures to be used at the facility.
- (4) ENGINEERING PLANS. The plan of operation shall include a set of engineering plans and maps which contain the following information unless an exemption is granted in writing by the department:
- (a) An existing conditions map, which shows the entire facility and the area within $\frac{1}{2}$ mile. The minimum scale shall be $\frac{1}{2}$ = 400°. This map shall include the facility boundary, property lines, easements and right-of-way; building foundations, roads, utilities and other structures; existing topography, drainage swales, surface waters, wetlands, floodplains and similar drainage features; wooded areas; location of soil borings and test pits; features of historical and archaeological significance; and other features as appropriate.
- (b) A facility plan which shall include the proposed facility access roads and traffic patterns, buildings, scales, utility lines, drainage diversion, screening, means of access control, final topography, areas to be cleared of vegetation and other design features. The extent of coverage and scale shall be the same as that for the existing conditions map.
- (c) A proposed process layout plan which shows the receiving, storage and loadout areas. The minimum scale shall be 1''=20'. The plans shall include design details for the receiving area configuration and traffic flow patterns, storage area and equipment configuration, loadout area and equipment configuration, and other design features.
- (5) Construction documentation report. The department may require the applicant to submit a construction documentation report for any transfer facility. When a documentation report is required, it shall be prepared in accordance with the department's plan approval and s. NR 500.05. Operation of the facility may not begin until the report is approved in writing by the department and a license is issued. The department may issue a license prior to facility construction or construction documentation.
- (6) LOCATIONAL CRITERIA. Transfer facilities shall meet the locational criteria specified in s. NR 502.04 (2) (c) and the performance standards specified in s. NR 502.04 (3). Exemptions from the requirements of s. NR 502.04 (3) (b), (e) and (f) may be granted only upon demonstration by the applicant of circumstances which warrant such exemptions. Exemptions from compliance with s. NR 502.04 (3) (a) may be granted only in accordance with the standards in s. NR 1.95. Exemptions from compli-

ance with s. NR 502.04 (3) (d) may be granted only in accordance with the procedures in ch. NR 140. Exemptions from compliance with s. NR 502.04 (2) (c) and (3) (c) will not be granted.

- (7) OPERATIONAL REQUIREMENTS. No person may operate or maintain a transfer facility except in conformance with an approved plan of operation and the following minimum requirements:
- (a) A sign shall be prominently posted at the entrance to the facility, which indicates the name, license number, the hours of operation, waste types accepted, necessary safety precautions and any other pertinent information specified by the department.
- (b) A building, roofed and enclosed on at least 3 sides or otherwise enclosed to satisfactorily control dust, papers, and other waste materials, shall be provided.
- (c) Screening of waste handling operations shall be provided for a transfer facility located within 500 feet of any residence, unless a signed waiver is received from all residents located within 500 feet of the facility.
- (d) The facility shall be operated under the direct supervision of responsible individuals who are thoroughly familiar with the requirements and the operational procedures of the transfer facility.
 - (e) Access shall be restricted except when an attendant is on duty.
- (f) There may be no storage of solid waste on the premises for a period greater than 24 hours except in conformance with s. NR 502.05 or unless the waste is contained in vehicles used by a licensed collection and transportation service. Longer storage periods may be authorized by the department for certain industrial and commercial waste depending on the design of the facility.
- (g) Unloading of solid waste shall take place only within the enclosed structure and only in approved designated areas.
- (h) Solid waste shall be confined to the unloading, loading and handling area.
- (i) The transfer facility and adjacent area shall be kept clean and free of litter.
- (j) Sewage solids, sludge or wastes containing free liquids may not be accepted unless special handling plans for these wastes have been submitted to the department and approved in writing. Asbestos, infectious or hazardous waste may not be accepted under any circumstances.
- (k) Dust and odor generated by the unloading of solid waste and the operation of the transfer facility shall be controlled at all times.
 - (1) Burning of solid waste may not be conducted.
- (m) Solid waste which is burning or is at a temperature likely to cause fire or is flammable or explosive may not be accepted.
- (n) Equipment shall be provided to control accidental fires and arrangements shall be made with the local fire protection agency to provide immediate services when needed.

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- (o) Means shall be provided to control flies, rodents and other insects or vermin.
- (p) Provisions shall be made for adequate maintenance of the transfer facility after each day of operation.
- (q) Means of communication shall be provided for emergency purposes.
- (r) An approved alternative method of waste processing or disposal shall be provided in the event that the transfer facility is rendered inoperable.
- (s) Recyclable material may be separated from the incoming waste and stored provided that no fire hazard or nuisance conditions are created.
- (8) CLOSURE. Any person who operates or maintains a transfer facility or who permits the use of property for such purpose shall close the facility in accordance with any plan approval issued by the department and the following minimum practices:
- (a) The operator shall notify the department and all users of the facility in writing at least 60 days prior to closure.
- (b) Access shall be restricted through the use of a fence, gate, plantings or other appropriate means upon closure of the facility.
- (c) The operator shall post a sign in a prominent location notifying users of the date at which the facility will close.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88.

- NR 502.08 Solid waste processing facilities. (1) GENERAL. No person may operate or maintain a solid waste processing facility unless the person has obtained an operating license from the department, except as provided in sub. (2). An applicant intending to establish or construct a solid waste processing facility shall contact the department to arrange for an initial inspection. This section does not apply to incinerators, air curtain destructors, wood burning facilities or municipal solid waste combustors which are regulated under ss. NR 502.09 to 502.11 or 502.14.
- (2) EXEMPTIONS. The following facilities are exempt from licensing and the requirements of this section:

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- (a) Composting facilities used for processing solid waste from a single family or household, a member of which is the owner, occupant or lessee of the property used for the solid waste processing operation and the facility is operated in a nuisance free and environmentally sound manner.
- (b) Composting facilities used for processing grasses, leaves, yard and food waste which do not exceed 50 cubic yards per year provided the facility is operated in a nuisance free and environmentally sound manner.
- (c) Facilities for the processing of scrap iron, steel or nonferrous metal using large machines to produce a principal product of scrap metal for sale or use for remelting purposes and facilities which use large machines to sort, grade, compact, bale or process clean wastepaper, textiles, clean wood, glass, rubber, demolition debris, pavement or plastics, not mixed with other solid waste, for sale or use for recycling purposes.
- (d) Private alcohol fuel production systems provided the waste product is stored in an environmentally sound storage facility and disposed of using an environmentally safe land spreading technique and the disposal is confined to the property of the owner.
- (e) Facilities utilizing fly ash that conforms to ASTM-C618 Class F and C specifications provided the testing, reporting, storage and other requirements specified by the department in writing are complied with.
- (3) Facilities for the reuse of high volume industrial wastes. Except for those facilities which are exempt under sub. (2), facilities where solid wastes are processed for reuse or recycling by being incorporated into a structural material such as a concrete or asphalt or converted into a consumer product which is used as a raw material in a commercial or industrial process are exempt from licensing and all other requirements of this section. The solid waste generator must obtain written approval from the department to use the waste for these purposes, comply with the performance standards specified in s. NR 502.04 (3), unless an exemption is granted, and operate the facility in a nuisance-free and aesthetic manner. To obtain approval, the solid waste generator shall submit the necessary laboratory and field tests to show that the specific waste types to be used would not release quantities of contaminants into the environment such that a potential hazard to public health or the environment would be created.
- (4) Composting operations for grass clippings, leaves, chipped wood and yard waste which exceed 50 cubic yards per year but do not exceed 20,000 cubic yards. Except as provided in sub. (2) (a), no person may establish or construct a composting operation for processing more than 50 cubic yards per year but less than 20,000 cubic yards of grass clippings, leaves, chipped wood or yard waste at one location unless the person can demonstrate compliance with s. NR 502.04 and obtain approval in writing from the department of a report prepared in accordance with s. NR 500.05 and this section. The report shall contain, at a minimum, the following information:
- (a) The location of the property where the facility is proposed to be located.
- (b) A brief description of the project, including the area served, an estimate of the volume of material to be processed and a brief description of the operational practices.

- (c) The proposed size of the facility, including property boundaries and present land use within ½ mile of the facility.
 - (d) Potential markets for the compost.
- (e) Names and location of solid waste disposal facilities at which any waste generated from the composting operation will be disposed.
- (5) Plan of operation nonexempt processing facilities. No person may establish or construct a solid waste processing facility prior to obtaining approval in writing from the department of a plan of operation for the facility. 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 following information:
 - (a) A legal description of the property and the facility boundaries.
 - (b) The present ownership of the proposed facility property.
- (c) Land use within ¼ mile of the proposed facility. Particular note shall be made of parks, hospitals, nursing homes and areas of archaeological and historical significance.
 - (d) The areas served, including population and major industries.
- (e) The consistency of facility development with areawide solid waste plans and land use plans. All alternatives considered shall be discussed.
- (f) The predominant types of vegetation and wildlife within the proposed facility boundaries.
- (g) A complete materials balance for the facility, specifying amounts and characteristics of solid waste received and amounts and characteristics of products and wastes generated by the facility.
- (h) The types of vehicles and access routes used to transport solid waste to and from the facility including the estimated traffic flow patterns within the facility, and an estimate of increased quantities of traffic on access routes to and from the facility.
- (i) The estimated quantities and characteristics of wastes containing free liquids resulting from facility operation and methods of their treatment or disposal.
 - (j) The persons responsible for plant construction and operation.
- (k) The quality and quantity of air discharge from plant operations and the need for any permits.
- (1) Any additional procedures for the control of dust, odors, fire, windblown materials and potential explosions and for the handling of the waste in the case of major processing facility breakdown.
- (m) The names and locations of all solid waste disposal facilities at which solid waste from the processing plant will be disposed.
- (n) Overall facility layout including conceptual building design, sizing of receiving areas, methods of processing, and the size of major process equipment and process areas.
- (o) Potential markets for recovered solid wastes and potential contractual arrangements for recovered products.

- (p) A timetable for facility construction, shakedown and operation.
- (q) The tentative operating schedule for the facility.
- (r) Provisions for protection of groundwater and surface waters during facility construction and operation.
- (s) A discussion of possible operational hazards and necessary safety precautions.
- (t) A discussion of design features and logic including equipment capacity or size. Information shall be included to justify the size and configuration of the receiving area; size and configuration of processing equipment and areas, conveyors, blowers or other transport equipment; air pollution control units and associated duct work; methods of handling wastes containing free liquids resulting from operations such as floor drains, sewers and water treatment facilities; heat balances, residence time and process temperature for thermal processing equipment; size and configuration of loadout and storage facilities for process outputs; sizing of surface water drainage control structures; traffic flow patterns; design life of any building and facility equipment; methods of controlling wind-blown materials; and methods of screening the facility from the surrounding area.
- (u) A discussion of personnel training; solid waste sources, quantities and characteristics of the waste to be processed; process line startup procedures and equipment performance evaluations; process raw materials on hand at startup; process outputs testing; and other appropriate startup procedures.
- (v) A discussion of operating personnel responsibilities; hours of operation; daily processing schedule; routine process monitoring including monitoring quantity and quality of waste input; process output testing; equipment maintenance schedules; methods of controlling explosions, fire, odors, and windblown materials; special waste handling procedures; methods of controlling access; daily cleanup procedures; facility bypass procedures during major breakdowns and alternative means of disposal; persons responsible for operation; facility licensee and owner; record keeping; emergency procedures for handling of freezeup during cold weather; methods to prevent solid waste from burning; and other pertinent information.
- (6) Engineering plans. The plan of operation shall include a set of engineering plans and maps which contain the following information unless an exemption is granted by the department in writing.
- (a) An existing conditions map, which shows the entire facility and the area within ½ mile. The minimum scale shall be 1''=400'. This map shall include the proposed facility boundary, property lines, easements and right-of-way, buildings foundations, roads, utilities and other structures; topography, drainage swales, surface waters, wetlands, floodplains and similar drainage features; wooded areas; location of soil borings and test pits; features of historical and archaeological significance; and other features as appropriate.
- (b) A facility plan which includes the proposed facility access roads and traffic patterns, buildings, scales, utility lines, drainage diversion, screening, means of access control, final topography, areas to be cleared

of vegetation, and other design features. The extent of coverage and scale shall be the same as that for the existing conditions map.

- (c) A proposed process layout plan which shows the receiving, processing, and loadout areas. The minimum scale shall be 1''=20'. Plan details shall include conceptual design for receiving area configuration and traffic flow patterns, processing area and equipment configuration, loadout area, equipment configuration, and other design features.
- (d) At least one cross section shall be drawn through the receiving area, each process line, and the loadout area indicating existing topography, limits of excavation, proposed final grade, and other pertinent design features. More cross sections may be necessary depending on the complexity of the facility design.
- (7) LOCATIONAL CRITERIA. (a) Processing facilities not located within a building shall meet the location and performance standards specified in s. NR 502.04. Processing facilities located within a building shall meet the locational criteria specified in s. NR 502.04 (2) (c) and the performance standards specified in s. NR 502.04 (3). Exemptions from the requirements of s. NR 502.04 (2) (a), (b), (d), (e) and (f) and (3) (b), (e) and (f) may be granted only upon demonstration by the applicant of circumstances which warrant such an exemption. Exemptions from compliance with s. NR 502.04 (3) (a) may be granted only in accordance with the standards in s. NR 1.95. Exemptions from compliance with s. NR 502.04 (3) (d) may be granted only according to the procedures in ch. NR 140. Exemptions from compliance with s. NR 502.04 (2) (c) and (3) (c) will not be granted.
- (8) MINIMUM DESIGN REQUIREMENTS FOR NEW FACILITIES. A plan of operation for a solid waste processing facility shall be prepared in accordance with s. NR 500.05 and the following requirements:
- (a) Screening shall be provided for any processing facility located within $\frac{1}{2}$ mile of any residence.
- (b) Dust within a facility shall be controlled so that operators are not exposed to undue health risk.
- (c) Access to the processing facility shall be limited by means of fencing, natural barriers or other methods. Access roads utilized shall be of all-weather construction.
- (d) All wastewater resulting from the process shall be discharged into a sanitary sewer or other system approved by the department.
- (e) Thermal processing facilities shall be designed to provide adequate temperature and residence time in the reaction chambers to assure complete processing and shall be equipped with the necessary air pollution control equipment to meet state air pollution control regulations.

Note: These facilities may be subject to other regulations including OSHA requirements.

- (9) MINIMUM OPERATIONAL REQUIREMENTS FOR NEW AND EXISTING FACILITIES. No person may operate or maintain a solid waste processing facility except in conformance with any approved plan of operation and the following minimum requirements:
- (a) A sign, acceptable to the department, shall be posted at the entrance to the facility which indicates the name, license number, the hours Register, January, 1988. No. 385

of operation, a list of all prohibited wastes, the penalty for unauthorized use, all necessary safety precautions and other pertinent information.

- (b) Access to the processing facility shall be limited to those times that an attendant is on duty.
- (c) A processing facility shall be operated under the close supervision of responsible individuals who are thoroughly familiar with the requirements and operational procedures of the plant.
- (d) All solid waste, with the exception of that in the process line, shall be stored in conformance with s. NR 502.05.
- (e) Unloading of solid waste shall take place only in approved, designated areas.
- (f) The processing facility and adjacent area shall be kept clean and free from litter.
- (g) All operators shall be trained to use appropriate safety equipment and who to contact in case of an emergency.
- (h) Waste containing free liquids and sludge waste shall be excluded unless plans specifically addressing the handling of these materials have been submitted to the department and approved in writing.
- (i) Equipment shall be provided to control accidental fires and arrangements shall be made with the local fire protection agency to provide immediate services when needed.
- (j) Effective means shall be taken to control flies, rodents and other insects or vermin.
- (k) The operation shall be conducted in a manner to prevent public health hazards and nuisances.
- (1) Asbestos or solid waste which is infectious, flammable or explosive shall not be accepted.
 - (m) Open burning of solid waste may not be conducted.
- (n) Materials resulting from composting or similar processes and offered for sale shall be stabilized to eliminate pathogenic organisms, and to not reheat upon standing, and shall be free of sharp particles which could cause injury to persons handling the compost.
- (o) Means of communication with emergency facilities shall be provided.
- (p) Dust generated by the unloading of solid waste and the operation of the processing facility shall be controlled in accordance with the state air management rules so as not to create nuisance conditions.
- (q) The department may require that permanent records of facility performance be maintained and submitted to the department with the relicensing application or as specified in the plan approval. Records shall indicate types, sources and amounts of solid waste processed, minor plant modifications performed, process monitoring data, amounts and characterization testing of process outputs, and other data as required by the department when granting the license.

- (r) An approved solid waste disposal facility shall be provided for use in the event that the processing facility is rendered inoperable or is not able to completely process the solid waste.
- (s) By-products or residues shall be disposed of in facilities approved to receive such waste or shall be handled by an alternative method approved by the department.
- (10) Additional design requirements applicable to New and expanding facilities. A plan of operation for a solid waste processing facility shall be prepared in accordance with ss. NR 500.05, 502.08 (5) and the following additional requirements:
- (a) All access roads shall be constructed with a maximum grade no greater than 10%. The intersection of the access road with an existing highway shall be designed to provide sufficient sight distance and provide for minimum interference with traffic on existing highways.
- (b) All installed processing equipment shall be enclosed to prevent nuisance conditions from developing.
- (c) All buildings enclosing processing equipment shall have a sloped concrete floor with floor drains connected to a sanitary sewer or other system approved by the department.
- (d) Maximum soil slopes for disturbed areas shall be 3 horizontal to one vertical.
- (e) All areas disturbed during facility construction shall be graded, covered with 6 inches of topsoil and seeded or otherwise protected from soil erosion.
- (f) Processing, receiving or storage areas not enclosed by a building shall be graded at minimum 1% slope and surfaced with a material which will adequately support heavy equipment, resist frost action, provide a wearing surface and prevent contamination of groundwater. Runoff from these areas shall be directed to a sanitary sewer or other system approved by the department.
- (g) Explosion-prone equipment such as primary shredders shall be placed in a separate room with explosion venting or explosion suppression equipment.
- (h) The receiving area and all dry processing units such as shredders, screens, air classification devices, magnetic separators and similar equipment and all conveyor transfer points where dust is generated shall be shrouded and equipped with dust collection and removal equipment. Any air collected in this manner shall be directed through appropriate air pollution control equipment before being discharged.
- (11) ADDITIONAL OPERATING REQUIREMENTS FOR NEW AND EXPANDED FACILITIES. No person may operate or maintain a new solid waste processing facility or expand an existing facility except in accordance with the requirements of s. NR 502.08 (9), the terms and conditions of any plan of operation approval, and the following additional requirements:
- (a) All borrow areas shall be abandoned in accordance with Wisconsin department of transportation procedures.

- (b) All facilities operated more than 4 hours per day shall be equipped with a toilet and wash basin or have such facilities available within a reasonable distance.
- (12) Construction documentation. The department may require that a registered professional engineer document facility construction and render an opinion whether the facility has been constructed in substantial conformance with the approved plan. When a documentation report is required, it shall be prepared in accordance with the department's plan approval and s. NR 500.05. Operation of the facility may not commence until the report is approved in writing by the department and a license is issued. The department may issue a license prior to facility construction or construction documentation.
- (13) Monitoring. Specific monitoring requirements and testing procedures for new, expanded and existing processing facilities will be determined by the department based on a review of the potential for environmental pollution. The department may require the owner or operator of any processing facility or any person who permits the use of property for such purpose to conduct monitoring as follows:
 - (a) Air quality monitoring.
- (b) Product testing and waste characterization. The frequency of testing and parameters to be analyzed will be determined based on a review of the proposal and complexity of the product. The quality control program will correlate with the nature of the solid waste to be processed and final uses proposed for the material.
- (c) Groundwater and surface water monitoring. The frequency and type of monitoring and analysis will be determined based on a review of the project.
- (d) Periodic assessments of plant operation, process feasibility and marketability analyses of processed materials.
- (14) CLOSURE. Any person who maintains or operates a processing facility or who permits the use of property for such purpose shall close the facility in accordance with the following practices unless otherwise specified by the department in writing:
- (a) The operator shall notify the department and all users of the facility in writing at least 120 days prior to ceasing to accept solid waste.
- (b) A sign shall be placed at the entrance to the facility notifying all users that the facility is no longer accepting solid waste.
- (c) Access to the facility shall be restricted through the use of a fence, gate or other appropriate means.
- (d) The department may require the continuance of groundwater, surface water and air quality monitoring after closure of the facility.
- (e) The operator shall submit to the department for approval at least 120 days prior to facility closure, a plan for facility closure. The department shall review the plan and notify the operator of the acceptability and completeness of the plan. If additional items are needed to properly close the facility the operator shall be notified and appropriate additions shall be made to the closure plan.

- (f) All aspects of facility closure other than monitoring shall be completed within 6 months after ceasing to accept solid waste.
- (15) Management of residue produced by burning municipal solid waste. (a) No person may operate or maintain a facility for the treatment of residue produced by burning municipal solid waste unless the person has obtained an operating license from the department and a written plan approval under sub. (5). Residue treatment areas shall be designed, operated and maintained in accordance with the applicable portions of this section.
- (b) All treatment or mixing shall be performed in a manner which controls air and water emissions.

History: Cr. Register, January, 1988, No. 385, eff. 2-6-88; am. (1), cr. (15), Register, May, 1992, No. 437, eff. 6-1-92.

- NR 502.09 Incinerators. (1) GENERAL. No person may operate a solid waste incinerator unless the person has obtained an operating license from the department, except as provided in sub. (2), and a written approval from the department of a plan of operation under sub. (4), for the facility. An applicant intending to establish or construct a solid waste incinerator shall contact the department to arrange for an initial inspection.
- (2) EXEMPTIONS. (a) Incinerators having a capacity of 500 pounds per hour or less are exempt from all requirements of this section except sub. (5). The facility shall be designed and operated in conformance with emission limitations of state air pollution control regulations.
- (b) Incinerators burning only clean wood waste are exempt from all requirements of this section except sub. (5).
- (c) Incinerators which are regulated under s. NR 502.14 are not subject to regulation under this section.
- (3) Location criteria. Incinerators shall meet the locational criteria specified in s. NR 502.04 (2) (c) and the performance standards specified in s. NR 502.04 (3). Exemptions from the requirements of s. NR 502.04 (3) (b), (e) and (f) may be granted only upon demonstration by the applicant of circumstances which warrant such exemptions. Exemptions from compliance with s. NR 502.04 (3) (a) may be granted only in accordance with the standards in s. NR 1.95. Exemptions from compliance with s. NR 502.04 (3) (d) may be granted only in accordance with the procedures in ch. NR 140. Exemptions from compliance with s. NR 502.04 (2) (c) and (3) (c) will not be granted.
- (4) PLAN OF OPERATION. No person may establish or construct an incinerator facility or expand an existing incinerator after June 1, 1992 prior to obtaining approval in writing from the department of a plan of operation for the facility. An operator of a solid waste incinerator which is in operation on June 1, 1992 shall submit a plan of operation in accordance with this section no later than 3 months after June 1, 1992. The plan of operation for an incinerator shall contain, at a minimum, the following information.
- (a) A map or aerial photograph of the area showing land use and zoning within ¼ mile of the site. The map or aerial photograph shall be of sufficient scale to show all homes, industrial buildings, roads and other Register, May, 1992, No. 437