- (2) The department shall consider the following factors when reviewing an alternative design in consideration of granting an exemption:
- (a) Physical characteristics of the site, such as soil texture, soil permeability, depth to groundwater and depth to and type of bedrock.
 - (b) Age and condition of an existing structure.
- (c) Analytical data from existing groundwater monitoring wells or any that may be installed as part of the demonstration.
- (d) The quantity and composition of the materials stored or treated at the facility.
- (e) The compatibility between the materials stored or treated and the lining of the storage or treatment unit:
- (f) Any other information relevant to the environmental impacts of the facility's operations.
- (3) SUBMITTING AN EXEMPTION REQUEST-NEW OR MODIFIED STRUCTURES. The owner or operator of a new or modified lagoon, storage structure or treatment structure may request an exemption from the design standards and material requirements of this chapter by submitting facts to the department:
- (a) In the application for issuance, reissuance or modification of $\ensuremath{\mathsf{WPDES}}$ permit, or
- (b) In plans and specifications for a new or expanded lagoon, storage structure or during the 90-day plan approval period as specified in s. 144.04, Stats., or
- (c) During the 30-day public comment period following public notice by the department of intent to issue, reissue or modify a WPDES permit under s. 147.09, Stats., or
 - (d) At a public hearing held under s. 147.13 or 147.20, Stats.
- (4) SUBMITTING AN EXEMPTION REQUEST-EXISTING STRUCTURES. The owner or operator of a lagoon, storage structure or treatment structure in existence prior to July 1, 1990 may request an exemption from the design standards and material requirements of this chapter. If an exemption is not granted, the department shall propose to issue a new WPDES permit or modify the existing WPDES permit to include a schedule of compliance to achieve the purpose of this chapter.

History: Cr. Register, June, 1990, No. 414, eff. 7-1-90.

NR 213.07 Abandonment. Lagoons, storage structures and treatment structures which will no longer be used, shall be properly abandoned within 2 years of the date on which waste material was last stored or treated. A plan outlining the proposed method of abandonment shall be submitted to the department for approval. This plan shall contain a procedure to properly identify the presence and characteristics of any accumulated solid waste and provide appropriate removal, disposal or recycling or treatment alternatives in accordance with applicable solid and hazardous waste laws. All recycling, treatment and disposal shall be conducted so as to protect public health and the environment. The plan shall also address site restoration and any landscaping that will prevent accumulation of standing water or runoff. The department may require groundwater monitoring for a period of time after abandonment of the

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land treatment system to assess groundwater impacts. The design, installation, construction, abandonment and documentation of all monitoring wells shall be in accordance with the requirements of ch. NR 141.

History: Cr. Register, June, 1990, No. 414, eff. 7-1-90; am., Register, April, 1994, No. 460, eff. 5-1-94.

NR 213.08 General design requirements. (1) Location. (a) Lagoons, storage structures and treatment structures may not be located closer than:

- 1. 1,000 feet from a well serving a community public water supply system.
 - 2. 250 feet from other potable water supply wells.
- 3.500 feet from an inhabited dwelling except that this distance may be reduced with written permission from the owner and occupants of the residence. The department may require a greater distance depending on the type of lagoon, storage structure or treatment structure and potential for aesthetic impacts and public health impacts.
- (b) Lagoons, storage structures and treatment structures may not be located in the floodway and shall conform with the requirements of ch. NR 116.
- (c) Lagoons, storage structures and treatment structures may not be located within wetlands.
- (d) Lagoons, storage structures and treatment structures shall be designed and operated to minimize the level of substances in the groundwater and to prevent exceedance of the groundwater preventive action limits (PAL) to the extent technically and economically feasible. Groundwater preventive action limits are listed in ss. NR 140.10 and 140.12.
- (2) Basic construction design. (a) Effective erosion protection of exterior slopes of lagoons shall be provided by appropriate means, such as riprap or seeding with grass.
- (b) Lagoons shall be maintained as necessary to prevent scouring of the liner and liner cover, discourage vegetative growth, and avoid desiccation and cracking of the liner.
- (c) A minimum separation of 5 feet shall be maintained between the bottom of the lagoon liner or subbase of a storage structure and either bedrock or the groundwater level, whichever is higher.
- (3) GROUNDWATER MONITORING. (a) A groundwater monitoring system designed and constructed in accordance with ch. NR 141 may be required by the department to provide information on the long term effects of a lagoon, storage structure or treatment structure on groundwater.
- (b) When a groundwater monitoring system is required, the parameters to be monitored and the monitoring frequency will be established on a case-by-case basis.
- (4) ADDITIONAL DESIGN REQUIREMENTS. In cases where critical groundwater, geologic or construction conditions warrant, the department may require construction specifications or testing requirements

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