

Delaware Department of Natural Resources and Environmental Control
Division of Water
Groundwater Discharges Section
7 Del.C. Ch. 60

DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF WATER
GROUNDWATER DISCHARGES SECTION

Statutory Authority
7 Delaware Code Chapter 60

**REGULATIONS GOVERNING THE DESIGN, INSTALLATION AND OPERATION OF
ON-SITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS**

ADOPTED: January 4, 1985

EFFECTIVE: January 4, 1985 Sections 1.00000, 2.00000, 3.00000, 7.00000, 9.00000 and Exhibits
May 1, 1985 Section 4.00000
July 10, 1985 Sections 5.00000, 6.00000, 8.00000 and 10.00000

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5.3.31.11 If the Department finds the operation of the system is unsatisfactory; the owner, upon written notification by the Department shall promptly repair or modify the system, replace it with another acceptable system, or abandon the system.

5.3.31.12 The system will be monitored by the Department and/or the Department's designee in accordance with a schedule contained in the permit and the operation and maintenance requirements in 5.5.5.

5.3.31.13 Should any additional guidelines be developed by the Department, the permittee would be responsible for meeting these guidelines.

→ 5.3.32 Transportation of Non-Hazardous Liquid Waste

5.3.32.1 No person shall haul, convey or transport any non-hazardous liquid waste in any container without a Class F liquid waste haulers license and a Non-Hazardous Liquid Waste Transporters Permit issued by the Department in accordance with 7 Del.C. §6003 (a)(2).

5.3.32.2 In order to obtain a Non-Hazardous Liquid Waste Transporters Permit, the applicant must submit a completed application, demonstrate proof of bonding (see Section 5.3.32.4) and adhere to the transportation requirements (see Section 5.3.32.5).

5.3.32.3 The completed application shall include, at a minimum, the following information:

5.3.32.3.1 Company and owner information.

5.3.32.3.2 A list of all Class F licensees working for company.

5.3.32.3.3 A description of all equipment to include collection, short-term holding, handling, and wash down equipment.

5.3.32.3.4 A detailed description of the transport vehicles to include vehicle type, make and model, vehicle year, license number, state of registration, capacity size, number, and all modifications made to prevent spills and leaks.

5.3.32.3.5 Type(s) of non-hazardous liquid waste being transported.

5.3.32.3.6 An operations plan to include transportation route, days and hours of operation, spill reporting and cleanup plans, plans to keeping transportation vehicles clean, and recordkeeping procedures.

5.3.32.3.7 Bonding certification in accordance with Section 5.3.32.4.

5.3.32.3.8 A description of the non-hazardous liquid waste to include; the source of the non-hazardous liquid waste, the quantity to be transported, and any treatment the non-hazardous liquid waste has undergone before transportation.

5.3.32.3.9 The destination of the non-hazardous liquid waste and a description of what is to be done with the non-hazardous liquid waste at the destination and a copy of permit/authorization letter from each disposal facility.

5.3.32.3.10 A permit fee and advertisement fee are required upon submittal of a permit application, in accordance the latest DNREC fee schedule.

5.3.32.3.11 All vehicles used to transport biosolids, septage or non-hazardous liquid waste shall be operated and maintained so as to be in compliance with all state and federal regulations and not present a hazard to human health or the environment through unsafe vehicle conditions. The permittee is responsible for the operation and maintenance of all vehicles operated under the permit.

5.3.32.3.12 All transporters of biosolids, septage or non-hazardous liquid waste shall submit to the Department a plan for the prevention, control, and cleanup of

accidental discharges. No transportation permit will be issued until such a plan has been submitted to and approved by the Department.

5.3.32.3.13 All transporters shall at all times maintain commercial automobile liability insurance with a combined single limit of at least \$100,000, and shall submit a Certificate of Insurance demonstrating compliance with this regulation.

5.3.32.3.14 A copy of the Non-Hazardous Liquid Waste Transporters Permit must be kept in each vehicle used to transport non-hazardous liquid waste.

5.3.32.3.15 At all times, and in all phases of operations, Class F licensees and/or Non-Hazardous Liquid Waste Transporters shall comply with all laws and regulations regarding the activities associated with on-site wastewater system maintenance and disposal of materials removed therefrom.

5.3.32.3.16 Other information requested by the Department.

5.3.32.4 Bonding requirements

5.3.32.4.1 A Non-Hazardous Waste Transporter shall execute as a requirement for obtaining and keeping a Non-Hazardous Liquid Transporters Permit under these Regulations, a person shall file with the Department a bond, Letter of Credit or other security in a form approved by the Department.

5.3.32.4.2 The bond shall be payable to the Department and the obligation of the bond shall be conditioned upon the fulfillment of all requirements related to the permit.

5.3.32.4.3 The amount of the bond shall be at least \$5,000.

5.3.32.4.4 Liability under the bond shall remain in effect until the expiration date of the permit. The Department shall release the bond after the Department determines that all of the conditions of the permit covered by the bond have been fulfilled.

5.3.32.4.5 The bond shall be executed by the applicant and by a corporate surety licensed to do business in this State. Instead of having a bond executed by a corporate surety, the applicant may elect to deposit, with the Department, cash or negotiable bonds of the federal government or of this State or a Letter of Credit to the Department. The amount of the cash deposit or the market value of any securities shall be at least equal to the required sum of the bond. The Department shall receive and hold the cash or securities in trust, for the purposes for which the deposit is posted.

5.3.32.4.6 The obligation of the applicant and of any corporate surety under the bond shall become due and payable, and all or any part of any cash or securities shall be applied to payment of the costs of properly fulfilling any requirement of the permit if the Department has:

5.3.32.4.6.1 Notified the applicant and any corporate surety that the conditions of the permit have not been fulfilled, and specified in the notice the particular deficiencies in the fulfillment of the permit conditions;

5.3.32.4.6.2 Given the applicant and any corporate surety 60 days to correct the deficiencies and to fulfill all of the conditions of the permit.

5.3.32.4.6.3 Determined that, at the end of 60 days, some or all of the deficiencies specified above remain uncorrected.

5.3.32.5 Transportation requirements for non-hazardous liquid wastes:

5.3.32.5.1 Display the name, address and permit number of the permittee in standard block letters no less than three (3) inches high on both sides of each vehicle used for hauling purposes.

5.3.32.5.2 Equip every vehicle used for hauling purposes with a watertight tank or body.

5.3.32.5.3 Maintain every vehicle used for transporting in a clean and sanitary condition.

5.3.32.5.4 Liquid wastes shall not be transported in an open body vehicle unless contained within suitable receptacles.

5.3.32.5.5 All pumps and hose lines shall be free of leaks.

5.3.32.5.6 Assure all receptacles used for transporting liquid or solid wastes are watertight, equipped with tight fitting lids and are cleaned daily.

5.3.32.5.7 Obtain prior approval in writing from the Department for every site at which a hauler plans to discharge a specified amount of waste material collected.

5.3.32.5.8 No waste material shall be discharged on any site without such prior approval. Written approval will be based upon the applicant having satisfied the requirements of all applicable regulations.

5.3.32.5.9 Waste material collected by the hauler shall not be discharged into ditches, watercourses, lakes, ponds, tidewater or at any point where it can pollute any watercourse, water supply source, bathing area, or shellfish growing area. It shall not be deposited within 300 feet of any highway, except as provided in Section 5.3.32.5.10.

5.3.32.5.10 Discharge liquid wastes into approved wastewater treatment facilities unless otherwise authorized by the Department, provided such facilities have sufficient capacity, capability to handle such liquid wastes and have authorized discharge.

5.3.32.5.11 Fit all truck pumping and discharge hoses with automatic shutoff valves.

5.3.32.6 Transportation of biosolids

5.3.32.6.1 For the purpose of this section, biosolids and septage are divided into three types:

<u>Biosolid Type</u>	<u>Percent Solids</u>
Liquid	< 15%
Cake	15 – 35%
Dried	> 35%

5.3.32.6.2 Liquid biosolids or septage can be pumped and transported by pipeline. If liquid biosolids are transported by truck, rail, or barge, closed watertight vessels shall be used such as tank trucks and railroad tank cars or other vessels which can provide equivalent protection against spills and leakage.

5.3.32.6.3 Cake may be transported in watertight boxes, such as dump trucks properly sealed to prevent leaks, or cement type vehicles. Unless the applicant demonstrates equivalent protection against spills and leakage, when biosolid cake is transported in dump trucks, the following standards shall be met:

5.3.32.6.3.1 The trucks shall be equipped with splash guards firmly attached horizontally at the front and rear of the trailer.

5.3.32.6.3.2 Each splash guard shall cover at least 25% of the trailer's open area.

5.3.32.6.3.3 A minimum two (2) feet of freeboard shall be maintained between the biosolids and the top of the trailer unless the top of the trailer is completely sealed.

5.3.32.6.4 The Department may require certain cake biosolids to be transported as liquid biosolids.

5.3.32.6.5 Dried biosolids may be transported in open boxes, such as dump trucks, which are properly sealed to prevent leakage. The trucks shall be covered with tarps or the equivalent.

5.3.32.7 Transportation of source separated materials as defined in Section 3.0 of the Regulations Governing Solid Waste, for reuse or recycling, does not require a Non-Hazardous Liquid Waste Haulers Permit, only if the material remains separated throughout the transport routes and are not recombined.

5.4 Installation Requirements

5.4.1 Excavation

5.4.1.1 Clearing and Grubbing: All vegetation shall be cut and removed from the grade surface at a distance of 10 feet beyond the perimeter of the disposal area (see Lot Clearing Guidelines). Trees and shrubs shall be cut and removed at grade level while roots may be left in place. All cut materials shall be removed from the disposal area.

5.4.1.2 Special care should be taken when clearing vegetation from an approved disposal area as disturbance of the soil surface may render the site unsuitable.

5.4.1.3 All unsuitable excavation materials shall be discarded and the excavation shall be kept dry and de-watered from surface drainage until backfilling is completed.

5.4.1.4 Excavation machinery shall be of such type and operated in such a manner that they will not compact or smear the trench or bed sidewall soils. If smearing does occur, the smeared surfaces (trench/bed sidewalls and bottoms) shall be hand-raked (scarified) to expose an unsmearred soil interface. Trenchers are required for excavation of LPP trenches. Tracked vehicles are preferred in most installation situations.

5.4.1.5 Excavations below the design depth shall be brought up to proper elevation with approved fill materials installed in accordance with these Regulations and the requirements for sand-lined systems. Additional aggregate may only be used when a minimum of three (3) feet of undisturbed soil can be maintained between the bottom of the aggregate and the limiting zone. In no case shall more than one (1) foot of additional aggregate be used.

5.4.1.6 The sides of the trenches or beds shall be practically plumb and scarified.

5.4.1.7 The bottom of the trench or bed area shall be practically level as determined by using a transit, or laser level, with a maximum grade tolerance of two (2) inches per 100 feet.

5.4.1.8 All trench or bed excavations shall be kept free of water and dry. Tamping of trench sides and bottoms is not permitted.

5.4.2 Materials

5.4.2.1 Sandy fill and filter aggregate materials must come from a supplier whose in-house certification either meets or exceeds gradation requirements as listed in the first two tables below. Random inspection of supply pits and supplier's storage