Title 26 Department of Environment

Subtitle 04 Regulation of Water Supply, Sewage Disposal, and Solid Waste

Chapter 06 Sewage Sludge Management

Authority: Environment Article, Title 1 Subtitle 6 and Title 9 Subtitle 2, Part III, Annotated Code of Maryland

.01 Purpose and Scope.

- A. The purpose of this chapter is to establish requirements and control measures for the utilization of sewage sludge.
- B. These regulations specifically apply to all persons engaged in the following utilization activities of sewage sludge, or any product containing this material, which is either generated or utilized in the State of Maryland:
 - (1) Treatment facility, Regulations .12—.16 of this chapter;
 - (2) Composting facility, Regulations .17— .21 of this chapter;
 - (3) Transportation, Regulations .22—26 of this chapter;
 - (4) Storage facility, Regulations .27—.31 of this chapter;
 - (5) Distribution facility, Regulations .32—.36 of this chapter;
 - (6) Agricultural land, Regulations .37—.41 of this chapter;
 - (7) Marginal land, Regulations .42—.46 of this chapter;
 - (8) Energy generation or incineration, Regulations .47—.51 of this chapter;
 - (9) Marketing, Regulations .52—.55 of this chapter;
 - (10) Research project, Regulations .56—.60 of this chapter;
 - (11) Innovative project, Regulations .61—.65 of this chapter; and
 - (12) Disposal or alternative utilization at municipal landfill, Regulations .66—.70 of this chapter.
 - C. A person may not engage in sewage sludge utilization in a manner which will likely:
 - (1) Cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
 - (2) Create a nuisance;
 - (3) Be conducive to insect and rodent infestation or the attracting or harboring of animals or vectors;
 - (4) Pollute the air;
 - (5) Allow the physical transportation of sewage sludge outside the permitted site by any means; or
 - (6) Cause a discharge of constituents to waters of this State unless otherwise permitted by the Department.

.02 Incorporation by Reference.

In this chapter, the following documents are incorporated by reference:

- A. 40 CFR §503.32, as amended; and
- B. 40 CFR §503.33, as amended.

.03 Definitions.

- A. The following terms have the meanings indicated.
- B. Terms Defined.
- (1) "Aerobic digestion" means the biochemical decomposition of organic matter in sewage sludge by microorganisms in the presence of air.
 - (2) "Agricultural land" means as defined in COMAR 15.20.06.
- (3) "Agronomic rate" means the sewage sludge application rate, in dry weight basis, based on the nitrogen or phosphorus requirement of the crop or vegetation to be grown, whichever is determined to be the most limiting nutrient, that is designed to minimize the amount of the limiting nutrient in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the groundwater.
- (4) "Anaerobic digestion" means the biochemical decomposition of organic matter in sewage sludge by microorganisms in the absence of air.
- (5) "Aquifer" means a geologic formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.
- (6) "Base flood" means a flood that has a 1 percent chance of occurring in any given year (for example, a flood with a magnitude equaled once in 100 years).
 - (7) Biosolids.
 - (a) "Biosolids" means treated sewage sludge that meets the standards for Class A or B sewage sludge.
- (b) "Biosolids" does not mean grit and screenings collected at a wastewater treatment plant or ash generated by the incineration of sewage sludge.
- (8) "Bulk sewage sludge" means sewage sludge that is not sold or given away in a bag or other container for application to the land.
 - (9) "Cesspool" means a covered hole or pit to hold sewage.
 - (10) "Class A sewage sludge" means treated sewage sludge that meets the standards defined in 40 CFR §503.32(a).
 - (11) "Class B sewage sludge" means treated sewage sludge that meets the standards defined in 40 CFR §503.32(b).

- (12) "Collection" means any action involved in the gathering or subsequent placement of sewage sludge, or any other product containing sewage sludge, into a vehicle, container, or any other vessel for transportation.
- (13) "Composting" means the biological decomposition of organic matter under controlled thermophilic aerobic conditions.
- (14) "Constituent" means any component of sewage sludge that is an organic, inorganic, or combination of organic and inorganic substances, including pathogenic organisms.
 - (15) "Constituent limit" means a numerical value that describes the:
- (a) Amount of a constituent allowed per unit amount of sewage sludge, such as, for example, milligrams per kilogram of total solids;
 - (b) Amount of a constituent that can be applied to a unit area of land, such as, for example, kilograms per hectare; or
 - (c) Volume of a material that can be applied to a unit area of land, such as, for example, gallons per acre.
- (16) "Container" means either an open or closed receptacle with a load capacity of 1 metric ton or less that includes a bucket, box, carton, vehicle or trailer.
- (17) "Contaminate" means to introduce a substance that causes the maximum contaminant level for constituents as defined by the United States Environmental Protection Agency (USEPA) in 40 CFR 141.62(b) to be exceeded in surface or groundwater of the State or that causes the existing concentration of constituents in surface or groundwater to increase when the existing concentration of constituent in the surface or groundwater exceeds the maximum contaminant level for nitrate or other constituents as defined by the USEPA in 40 CFR 141.62(b).
- (18) "Contaminate an aquifer" means to introduce a substance that causes the maximum contaminant level for nitrate or other constituents as defined by the USEPA in 40 CFR 141.62(b) to be exceeded in the groundwater of the State or that causes the existing concentration of nitrate in the groundwater to increase when the existing concentration of nitrate in the groundwater exceeds the maximum contaminant level for nitrate as defined by the USEPA in 40 CFR 141.62(b).
 - (19) "County" means as defined in the Environment Article, §1-101(c), Annotated Code of Maryland.
- (20) "Cover" means soil or other material acceptable to the Department used to cover sewage sludge placed on a sewage sludge site.
- (21) "Cover crop" means a crop, such as cereal grains, that is planted following the harvest of summer crops for the purpose of the seasonal protection of soil, the assimilation of residual nitrogen left from a previous crop, and the continued mineralization of nitrogen.
- (22) "Crop residue" means vegetative matter remaining on the soil surface after harvest, which is capable of minimizing rainfall impact energy to reduce soil erosion potential.
- (23) "Crops for direct human consumption" means crops that are consumed by humans without processing to minimize pathogens before marketing to the consumer.
- (24) "Cumulative constituent loading rate" means the maximum amount of an inorganic constituent that can be applied to an area of land.
- (25) "CWA" means the Federal Clean Water Act (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.
- (26) "Density of microorganisms" means the number of microorganisms per unit mass of total solids in dry weight in the sewage sludge.
 - (27) "Department" means the Maryland Department of the Environment.
 - (28) Disposal.
- (a) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placement of sewage sludge into or on any land or water.
 - (b) "Disposal" includes incineration or landfilling.
 - (29) "Dried sewage sludge" means sewage sludge with total solids content greater than 35 percent.
- (30) "Dry weight basis" means a weight calculated on the basis of sewage sludge having been dried at 105°C until reaching a constant mass, which is essentially 100 percent solids content.
- (31) "Established crop" means a crop that has germinated and attained at least 70 percent surface coverage on the field as measured by the standard line-transect method.
 - (32) "Feed crops" means crops produced primarily for consumption by animals.
 - (33) "Fiber crops" means crops that produce fiber for processing into woven material, such as flax and cotton.
 - (34) "Field ditch" means a perennial or intermittent man-made drainage ditch that:
 - (a) Was never a natural stream;
- (b) Is distinguished from a natural stream by its landscape position and associated soil mapping units, as found in the USDA soil survey for the county; and
 - (c) Is not within a:
 - (i) Floodplain soil-mapping unit;
 - (ii) Hydric soil that is mapped as a narrow, elongated feature in a fluvial or floodplain position; and
 - (iii) Soil-mapping unit that has a slope class of "B" or steeper.
- (35) "Final utilization" means the complete and ultimate utilization of sewage sludge after which the sewage sludge receives no further treatment or processing.
 - (36) "Final cover" means the last layer of soil or other material placed on a sewage sludge site at closure.

- (37) "Food chain crops" means crops grown for human consumption, crops grown as feed for animals that will be consumed by humans, and tobacco.
 - (38) "Food crops" means same as food chain crops.
 - (39) "Forest" means a tract of land thick with trees and underbrush.
- (40) "Grit" means sand, gravel, cinders, or other materials with a high specific gravity removed during the treatment of wastewater in a wastewater treatment plant.
 - (41) "Groundwater" means water below the land surface in a saturated zone.
 - (42) "Handle" means same as market.
 - (43) "Holding tank" means a watertight receptacle, which is used, or intended to be used, for the collection of sewage.
- (44) "Incineration" means the controlled combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.
- (45) "Incinerator" means a furnace or combustion unit that uses controlled flame combustion for the thermal destruction of sewage sludge with or without other wastes.
 - (46) "Incinerator ash" means the residual ash generated during the firing of a waste to energy facility or an incinerator.
- (47) "Label" means the display of all written, printed, or graphic material on the immediate container, or information accompanying the material.
- (48) "Land application" means the placement of sewage sludge, or any other product containing sewage sludge on or mixed with or injected into land used to support vegetative growth.
 - (49) Land with a High Potential for Public Exposure.
 - (a) "Land with a high potential for public exposure" means land that the public uses frequently.
- (b) "Land with a high potential for public exposure" includes a public contact site and a marginal land located in a populated area, such as a construction site located in a city.
 - (50) Land with a Low Potential for Public Exposure.
 - (a) "Land with a low potential for public exposure" means land that the public uses infrequently.
- (b) "Land with a low potential for public exposure" includes agricultural land, forest, and a marginal land located in an unpopulated area, such as a strip mine located in a rural area.
- (51) "Leachate" means any liquid that has percolated through solid waste including sewage sludge and may contain dissolved, miscible, or suspended material from the sewage sludge or solid waste pile.
 - (52) "Liquid byproducts" means liquid that:
 - (a) Is generated from the contact of precipitation with sewage sludge in storage;
 - (b) Separates from sewage sludge during storage, or
 - (c) Is generated from cleaning a treatment, composting, storage, or distribution facility.
- (53) "Liquid sewage sludge" means sewage sludge with solids content less that 15 percent or sewage sludge that fails the free liquids test described in Regulation .09C(4)(b) of this chapter..
- (54) "Local health official" means the county health officer, the Baltimore City Commissioner of Health, the Director of the Office of Environmental Protection at Montgomery County, other local officials as identified by the Department, or their designees.
- (55) "Lower explosive limits" means the lowest percent by volume of a mixture of explosive gases that will propagate a flame in air at 25°C and atmospheric pressure.
- (56) "Management unit" means an area sharing common characteristics, including soil type, nutrient content, and plant type or crop produced, so that nutrients can be recommended and managed in a uniform and consistent manner.
 - (57) Marginal land.
- (a) "Marginal land" means land where the soil characteristics provide poor support for normal vegetative growth over time, and are being, or are proposed to be, revegetated.
- (b) "Marginal land" land may include land regraded after surface mining activities, abandoned strip mine areas, areas where topsoil has been removed, filled areas, a landfill closure cap, and closed and capped landfills.
 - (58) *Market*.
- (a) "Market" means to barter, sell, offer for sale, consign, furnish, provide, or otherwise supply a material as part of a commercial enterprise or a giveaway program.
- (b) "Market" does not mean marketing to a distribution facility regulated by the Department under Regulation .32--.36 of this chapter.
- (59) "Mineralization" means the process that converts unavailable organic forms of nutrient elements to an available inorganic state as a result of bacterial decomposition.
 - (60) "Municipal landfill" has the meaning stated in COMAR 26.04.07.
- (61) "Nuisance" means unreasonable interference with the quality of life of the public because of the characteristics of noise, odor, solids, vapors, liquids, or gases, which causes distress or potential health impacts to members of the public or residents or users of properties adjacent to a site where sewage sludge is being utilized or has been utilized, as determined by the Department
 - (62) "Nutrient Management Plan" has the meaning stated in COMAR 15.20.08.
 - (63) "Pasture land" means land on which animals feed directly on feed crops, such as legumes, grasses, or grain stubble.
- (64) "Pathogenic organisms" means organisms capable of causing disease in humans that include certain bacteria, protozoa, viruses, and viable helminth ova.

- (65) "Permanent facility" means a facility that is designed primarily for sewage sludge treatment or sewage sludge composting.
 - (66) "Permitting Authority" means the Maryland Department of the Environment.
 - (67) "Permittee" means a person who holds a Sewage Sludge Utilization Permit.
- (68) "Person" means the federal government, the State, any county, municipal corporation, or other political subdivision of the State, or any of their units, or an individual, receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, or any partnership, firm, association, public or private corporation, or any other entity.
 - (69) "PFRP" means a process to further reduce pathogens.
- (70) "pH" means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25°C or measured at another temperature and then converted to an equivalent value at 25°C.
- (71) "Privy" means an earth or watertight pit or receptacle for receiving non-water-carried human wastes over which is placed a privy house containing a toilet seat or seats.
 - (72) "PSRP" means a process to significantly reduce pathogens.
 - (73) Public Contact Site.
 - (a) "Public contact site" means land with a high potential for contact by the public.
 - (b) "Public contact site" includes public parks, athletic fields, cemeteries, plant nurseries, turf farms, and golf courses.
- (74) "Qualified groundwater scientist" means an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in groundwater hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding groundwater monitoring, constituent fate and transport, and corrective action to the satisfaction of the Department.
 - (75) "Reclamation site" means same as a "marginal land."
- (76) "Runoff" means any precipitation, leachate, or other liquid that drains over land from any part of a site that is derived from precipitation.
- (77) "Screenings" means materials such as rags or debris collected during the primary treatment of wastewater in a wastewater treatment plant.
- (78) "Sewage sludge" means any thickened liquid, suspension, settled solid, or dried residue that a sewage treatment plant extracts from sewage.
 - (79) "Sewage sludge cake" means sewage sludge with total solids content between 15 and 35 percent.
- (80) "Sewage sludge compost" means a sewage sludge produced by the decomposition of a mixture of sewage sludge and a bulking agent, such as wood chips, that destroys primary pathogenic and malodorous components.
 - (81) Sewage Sludge Generator.
- (a) "Sewage sludge generator" means a person who owns or operates a facility that receives and processes sewage in this State or produces sewage sludge to be utilized in this State.
 - (b) "Sewage sludge generator" includes:
 - (i) The Washington Suburban Sanitary Commission; and
 - (ii) The Maryland Environmental Service;
 - (c) "Sewage sludge generator" does not include the owner or operator of a septic system.
 - (82) "Sewage Sludge Utilization Permit" means a permit, issued by the Department, to utilize sewage sludge.
 - (83) "Sewage sludge utilizer" means any person who utilizes sewage sludge in this State.
 - (84) "Sewage treatment plant" means a wastewater treatment plant.
- (85) "SOUR" means the specific oxygen uptake rate that represents the mass of oxygen consumed per unit time per unit mass of total solids, in dry weight basis, in the sewage sludge.
 - (86) "State" means the State of Maryland unless otherwise specified.
- (87) "Storage" means the containment of sewage sludge, or any other product containing sewage sludge after removal from a wastewater treatment plant and before utilization.
 - (88) "Surface water" means all waters of the State that are not groundwater.
 - (89) "Tidal wetland" has the meaning stated in COMAR 26.04.02.02.
- (90) "Total solids" means the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105°C.
- (91) "Transportation" means the movement or conveyance of sewage sludge or any other product containing sewage sludge by air, rail, road, pipeline, or water.
- (92) "Treatment" means a process, which alters, modifies, or changes the biological, physical, or chemical characteristics of sewage or sewage sludge.
- (93) "Unstable area" means land subject to natural or human-induced forces including land on which soils are subject to mass movement, areas underlain by limestone or marble, ("karst terrain"), and areas subject to dissolution features, such as the formation of sinkholes.
 - (94) "USDA-NRCS" means the United States Department of Agriculture-Natural Resources Conservation Service.
- (95) "User" means a person other than a sewage sludge utilizer whom does not require a Sewage Sludge Utilization Permit to use a Class A sewage sludge as fertilize or soil conditioner in residential or commercial property.
- (96) Utilize Sewage Sludge.

 (a) "Utilize sewage sludge" means to collect, handle, burn, store, treat, or transport sewage sludge to or from a sewage sludge generator or utilizer in this State, to apply sewage sludge to land, or to dispose of sewage sludge.

- (b) "Utilize sewage sludge" includes composting, distribution, generating energy, marketing, conducting innovative or research projects, disposing or alternatively utilizing at a municipal landfill, or constructing and operating a landfill for sewage sludge, or any product containing sewage sludge, which is either generated or utilized in the State.
- (97) "Vector attraction" means the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.
- (98) "Volatile solids" means the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550°C in the presence of excess air.
- (99) "Wastewater treatment plant" or "WWTP" means a facility designed and constructed to receive, treat, or store sewage or sewage combined with other waterborne waste.

.04 Right of Entry.

The person applying for a Sewage Sludge Utilization Permit shall agree, as a condition for the issuance of the permit or any other authorization or approval issued by the Department, to allow the Secretary of the Department of the Environment, the local health official, or their authorized representatives, at reasonable times and upon presentation of credentials, to:

- A. Enter upon the premises or a location where any records are required to be maintained under the terms and conditions of the Sewage Sludge Utilization Permit, authorization, or approval issued by the Department;
- B. Have access to and copy any records required to be maintained under the terms and conditions of the Sewage Sludge Utilization Permit, authorization, or approval issued by the Department;
- C. Inspect any monitoring equipment or monitoring procedures required in the Sewage Sludge Utilization Permit, authorization, or approval issued by the Department;
- D. Inspect any collection, transport vehicles, treatment, pollution management, or control facilities required under the Sewage Sludge Utilization Permit, authorization, or approval issued by the Department;
 - E. Sample any ground or surface waters, soils, vegetation, sewage sludge, or other materials on the site;
- F. Perform any activities to determine compliance status with the terms and conditions of the Sewage Sludge Utilization Permit, authorization, or approvals issued by the Department or the applicable regulations; and
 - G. Obtain any photographic documentation or evidence.

.05 Constituent Limits for Sewage Sludge.

- A. Specific Constituent Limitations for Sewage Sludge.
 - (1) The following constituent limitations apply to application of sewage sludge:
- (a) Bulk sewage sludge may not be applied to the land if the concentration of any constituent in the sewage sludge exceeds the ceiling concentration for the constituent in Table 1 of $\S B(1)$ of this regulation;
 - (b) Bulk sewage sludge may not be applied to agricultural or marginal land, forest, or a public contact site if either:
- (i) The cumulative loading rate for any constituent exceeds the cumulative constituent loading rate for the constituent in Table 2 of §B(2) of this regulation; or
- (ii) The concentration of any constituent in the sewage sludge exceeds the concentration for the constituent in Table 3 of §B(3) of this regulation;
- (c) Bulk sewage sludge may not be applied to a lawn or a home garden if the concentration of any constituent in the sewage sludge exceeds the concentration for the constituent in Table 3 of §B(3) of this regulation.
 - (d) Sewage sludge may not be sold or given away in a bag or other container for application to the land if:
- (i) The concentration of any constituent in the sewage sludge exceeds the concentration for the constituent in Table 3 of §B(3) of this regulation; or
- (ii) The product of the concentration of any constituent in the sewage sludge and the whole annual sewage sludge application rate for the sewage sludge causes the annual constituent loading rate for the constituent in Table 4 of B(4) of this regulation to be exceeded.
 - $(2)\ Determination\ of\ Annual\ Whole\ Sewage\ Sludge\ Application\ Rate\ (AWSAR).$
- (a) The following equation expresses the relationship between the AWSAR in metric tons per hectare per 365 day period on a dry weight basis and the annual constituent loading rate (ACLR) in kilograms per hectare per 365 day period for a constituent:

Equation # 1: AWSAR = ACLR/(C x 0.001)

Where:

- $C = Constituent\ concentration\ in\ milligrams\ per\ kilogram\ of\ total\ solids,\ in\ dry\ weight\ basis;\ and.$
- 0.001 = A conversion factor.
 - (b) To determine the AWSAR for sewage sludge, a person shall sequentially do the following:
- (i) Step I analyze a sample of the sewage sludge to determine the concentration for each of the constituents listed in Table 4 of \$B(4) of this regulation;
- (ii) Step 2 using the constituent concentrations from Step 1 and the ACLRs from Table 4 of $\S B(4)$ of this regulation, calculate an AWSAR for each constituent using Equation # 1 from $\S A(2)(a)$ of this regulation; and
 - (iii) Step 3 identify as the AWSAR for the sewage sludge the lowest AWSAR calculated in Step 2.
 - B. Constituent Concentrations and Loading Rates-Sewage Sludge.
 - (1) Ceiling Concentrations.

Table 1 - Ceiling Concentrations

| Constituent | Ceiling Concentration |
|-----------------|----------------------------|
| | (milligrams per kilogram)* |
| Arsenic (As) | 75 |
| Cadmium (Cd) | 85 |
| Chromium (Cr) | 3,000 |
| Copper (Cu) | 4,300 |
| Lead (Pb) | 840 |
| Mercury (Hg) | 57 |
| Molybdenum (Mo) | 75 |
| Nickel (Ni) | 420 |
| Selenium (Se) | 100 |
| Zinc (Zn) | 7500 |
| PCBs | 10 |

| PCBs | 10 | | | |
|--|---|--|--|--|
| *Dry Weight Basis | | | | |
| ve Constituent Loading Rates. | | | | |
| Table 2 - Cumulative Constituent Loading Rates | | | | |
| Constituent | Cumulative constituent loading rates | | | |
| | (kilograms per hectare) | | | |
| Arsenic (As) | 41 | | | |
| Cadmium (Cd) | 39 | | | |
| Chromium (Cr) | 3,000 | | | |
| Copper (Cu) 1500 | | | | |
| Lead (Pb) | 300 | | | |
| Mercury (Hg) | 17 | | | |
| Nickel (Ni) | 420 | | | |
| Selenium (Se) | 100 | | | |
| Zinc (Zn) | 2800 | | | |
| | *Dry Weight Basis ve Constituent Loading Rates. Table 2 - Cumulative Co Constituent Arsenic (As) Cadmium (Cd) Chromium (Cr) Copper (Cu) Lead (Pb) Mercury (Hg) Nickel (Ni) Selenium (Se) | | | |

(3) Constituent Concentrations.

Table 3 - Constituent Concentrations

| Constituent | Monthly Average Concentrations |
|---------------|--------------------------------|
| | (milligrams per kilogram)* |
| Arsenic (As) | 41 |
| Cadmium (Cd) | 39 |
| Chromium (Cr) | 1,200 |
| Copper (Cu) | 1500 |
| Lead (Pb) | 300 |
| Mercury (Hg) | 17 |
| Nickel (Ni) | 420 |
| Selenium (Se) | 36 |
| Zinc (Zn) | 2800 |

^{*}Dry Weight Basis

(4) Annual Constituent Loading Rates.

Table 4 - Annual Constituent Loading Rates

| Constituent | t Annual Constituent Loading Rates | |
|---------------|--|--|
| Constituent | (kilograms per hectare per 365 day period) | |
| Arsenic (As) | 2.0 | |
| Cadmium (Cd) | 1.9 | |
| Chromium (Cr) | 150 | |
| Copper (Cu) | 75 | |
| Lead (Pb) | 15 | |
| Mercury (Hg) | 0.85 | |
| Nickel (Ni) | 21 | |
| Selenium (Se) | 5.0 | |
| Zinc (Zn) | 140 | |

 $.06\ Sampling\ and\ Testing\ Requirements\ for\ a\ Sewage\ Sludge\ Generator.$

- A. Except for owners or operators of on-site sewage disposal systems as defined in COMAR 26.04.02.02B(27), each sewage sludge generator shall submit to the Department the results of laboratory analysis of representative composite sewage sludge samples from each wastewater treatment plant located in State and out-of-State in accordance with the following requirements:
- (1) All sample analyses shall be performed by an independent laboratory or another laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department; and
- (2) The analysis shall include, at a minimum, percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorus, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), the dry weight concentration of total Kjeldahl nitrogen, and any analysis demonstrating that the sewage sludge meets the requirements for Class A or Class B.
- B. Unless the Department specifies an alternative schedule, as provided in C(3) of this regulation, the analysis required in A of this regulation shall be performed in accordance with the frequency specified in the following Table 1:

| Table 1 | | |
|--|--|--|
| Amount of sewage sludge generated | | |
| (per 365 day period – dry weight basis) | Testing Frequency | |
| Greater than zero but less than 290 metric tons. | Once every year | |
| (Greater than zero but less than 319.67 short tons) | | |
| Equal to or greater than 290 but less than 1,500 metric tons. | Once every quarter (four times every year) | |
| (Equal to or greater than 319.67 but less than 1,653.47 short tons) | | |
| Equal to or greater than 1,500 but less than 15,000 metric tons. | Once every 60 days (6 times every year) | |
| (Equal to or greater than 1,653.47 but less than 16,534.67 short tons) | | |
| Equal to or greater than 15,000 metric tons. | Once every month (12 times every year) | |
| (Equal to or greater than 16,534.67 short tons) | | |

C. The Department may:

- (1) Require analyses for sewage sludge constituents other than those identified in A(2) of this regulation to adequately assess the quality of sewage sludge;
- (2) Require more frequent analysis than is specified in §B of this regulation to adequately assess the quality of sewage sludge;
- (3) Approve a request to discontinue analyzing for any of the constituents identified in §A(2) of this regulation or to reduce the testing frequency specified in §B of this regulation if a sufficient number of sewage sludge samples have been analyzed by the sewage sludge generator to characterize sewage sludge quality on an annual as well as seasonal basis;
 - (4) Require that laboratory results be accompanied by a description of the method of analysis; and
 - (5) Reject an analysis if it determines that the method of analysis is inaccurate, or for any other good cause.
 - D. The Department may consider the failure to submit the analysis required in $\S\S A-C$ of this regulation to be grounds for:
- (1) Revocation or modification of any Sewage Sludge Utilization Permit, authorization, or approval previously issued by the Department for the utilization of that generator's sewage sludge; and
- (2) Denial of any new, material alteration or extension, modification, or renewal application for a Sewage Sludge Utilization Permit, authorization, or approval issued by the Department for the utilization of that generator's sewage sludge.
- E. The Department may establish a plant available nitrogen value for a generator's sewage sludge using the equation in §F of this regulation if the sewage sludge generator submits to the Department the following:
- (1) A written request to establish a plant available nitrogen value for the generator's sewage sludge to be utilized in the following calendar year:
- (2) A certification that the sewage sludge treated by the generator during the preceding calendar year meets the standards for Class A or B sewage sludge and that the sewage sludge was treated under the direction and supervision of a responsible municipal official, the generator's wastewater treatment plant owner, or other responsible official in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the certification information submitted to the Department;
- (3) A written statement that the approved treatment process that has been authorized by the Department has not been changed during the preceding calendar year; and
- (4) The results of laboratory analysis of representative composite samples of the sewage sludge which was obtained from the wastewater treatment plant that is generating the sewage sludge in accordance with $\S A C$ of this regulation or as determined by the Department.
- F. The pounds of plant available nitrogen per ton of sewage sludge (PAN lbs/ton) shall be calculated using the following equation:

 $PAN(lbs/ton) = [(\% NH_4-N * Kv) + \% NO_3 + (\% N-org * F) 20]$

where:

PAN (lbs/ton) = pounds of plant – available nitrogen per ton of dry sewage sludge. % NH_4 -N = percent ammonium nitrogen in sewage sludge.

Kv = volatilization factor where

Kv = 0.5 for surface-applied liquid sewage sludge; or

Kv = 1 for liquid sewage sludge incorporated into the soil and for dewatered sewage sludge

applied in any manner.

% NO₃ = percent nitrate nitrogen in sewage sludge.

% N-org = percent organic nitrogen in sewage sludge, which equals the percent total nitrogen minus nitrate and ammonium nitrogen.

F = mineralization factor for organic nitrogen as determined by the Department;

- G. The Department may revoke an authorization to land apply a generator's sewage sludge with an established plant available nitrogen value if:
 - (1) The generator does not comply with the treatment standards for Class B sewage sludge;
 - (2) The generator does not comply with the sampling and testing requirements specified in this regulation;
- (3) The generator does not comply with the recordkeeping and reporting requirements specified in Regulations .07 of this chapter;
- (4) The generator does not comply with the sewage sludge generator fees requirements specified in Regulation .08 of this chapter;
- (5) The generator does not comply with the terms and conditions of the Sewage Sludge Utilization Permit, authorization, or approval issued by the Department for the generator's wastewater treatment plant;
- (6) The sewage sludge has been generated in a state in which the laws or the application of these laws do not result in the land application of sewage sludge in that state; or
 - (7) For any other good cause as determined by the Department.

.07 Recordkeeping and Reporting Requirements for a Sewage Sludge Generator.

- A. Except for owners or operators of on-site sewage disposal systems as defined in COMAR 26.04.02.02B(27), each sewage sludge generator shall submit to the Department a generator's report on a form provided by the Department.
- B. A sewage sludge generator whose wastewater treatment plant is located out-of-State shall submit to the Department a generator's report for that portion of the generator's sewage sludge that is utilized in the State as a condition for reauthorizing the utilization of that generator's sewage sludge in Maryland under a Sewage Sludge Utilization Permit.
- C. The sewage sludge generator shall maintain records of the destination and final utilization of the sewage sludge leaving that generator's wastewater treatment plant. At a minimum, the records shall include the following:
 - (1) The date the sewage sludge leaves that generator's wastewater treatment plant;
 - (2) The amount of sewage sludge leaving that generator's wastewater treatment plant;
 - (3) The sewage sludge utilization method; and
 - (4) The county and site where the sewage sludge is being utilized.
- D. The sewage sludge generator shall submit to the Department the generator's report in accordance with a schedule established by the Department.
- E. A responsible municipal official, the generator's wastewater treatment plant owner, or other responsible official as stipulated on the generator's report form shall sign the sewage sludge generator's report.
- F. The sewage sludge generator shall provide the sewage sludge utilizer with an annual certification as required in Regulation .06E(2) of this chapter.
- G. The sewage sludge generator shall inform the sewage sludge utilizer of any changes to the sewage sludge treatment process at the generator's wastewater treatment plant that requires the Department's authorization.
- H. Failure to submit the required generator's report may constitute grounds for revocation or modification of any Sewage Sludge Utilization Permit, authorization, or approval previously issued by the Department for that generator's sewage sludge, and denial of any new, modification, or renewal application for a Sewage Sludge Utilization Permit, authorization, or approval to be issued by the Department for that generator's sewage sludge.

.08 Sewage Sludge Generator Fees.

- A. Each sewage sludge generator shall pay the Department an annual sewage sludge generator fee for each wet ton of sewage sludge generated by the sewage sludge generator during the previous calendar year as reported on the Sewage Sludge Generator Report Form provided by the Department.
 - B. The sewage sludge generator fee shall be determined based on:
 - (1) The amount of sewage sludge generated;
- (2) A per ton fee rate that may vary depending on the sewage sludge utilization option, whether the source of the sewage sludge is in-State or out-of-State, and the Department's anticipated costs of monitoring and regulating sewage sludge utilization activities and anticipated costs for program implementation.
 - C. Annual Generator Fee Schedule.
 - (1) Base Fee Rate.
- (a) The base fee rate to be used in calculating the annual generator fee for a sewage sludge generator shall be \$1.00 for each wet ton of sewage sludge generated.
- (b) The Department may modify the base fee rate on an annual basis for the next applicable State fiscal year to provide adequate revenue to cover the Department's anticipated costs of monitoring and regulating sewage sludge utilization activities and anticipated costs for program implementation.
 - (2) Base Fee Rate Adjustment Factors.
 - (a) For in-State sources of sewage sludge:

(i) The base fee rate shall be adjusted depending on how the sewage sludge is utilized by using the appropriate base fee rate adjustment factor in Table 1 of SC(2)(a)(ii) of this regulation, as explained in SC(3) of this regulation.

(ii) Table 1 – Base Fee Rate Adjustment Factors.

| Utilization option | Base Fee Rate Adjustment | |
|---|--------------------------|-------------------|
| | Factor | |
| | Meets | Does not |
| | Class A or Class | meet Class A or |
| | B Treatment | Class B Treatment |
| Transported out of State | 0.5 | 0.6 |
| Transported to another WWTP | 0.3 | 0.4 |
| Land Application | 1.00 | N/A |
| Energy Generation or Incineration/Disposal or | 1.55 | 1.55 |
| alternative utilization at a municipal landfill | | |
| Distributed/Marketed | 0.5 | N/A |
| Stored at an off-site Storage Facility | 1.00 | 1.00 |
| Other | 1.00 | 1.00 |

- (b) For out-of-State sources of sewage sludge, the base fee rate shall be adjusted by a factor of 2.0, as explained in C(4) of this regulation.
- (3) Fee Calculation In-State Sources of Sewage Sludge. To determine the annual generator fee for a sewage sludge generator located in Maryland, the following process shall be followed:
 - (a) Calculate a utilization option fee for each utilization option applicable to the generator by:
- (i) Identifying the base fee rate adjustment factor for a given utilization option from Table 1 of C(2)(a)(ii) of this regulation; and
- (ii) Calculating the utilization option fee as (the number of wet tons of sewage sludge generated during the reporting period) x (the base fee rate for the reporting period as determined by the Department) x (the base fee rate adjustment factor for the utilization option);
- (b) Determine a tentative annual sewage sludge generator fee by adding together the utilization option fees determined in accordance with SC(3)(a) of this regulation; and
- (c) Set the annual sewage sludge generator fee at either the tentative annual sewage sludge generator fee determined in accordance with C(3)(b) of this regulation or \$50, whichever is greater.
- (4) Fee Calculation Out-of-State Sources of Sewage Sludge. To determine the annual sewage sludge generator fee for a sewage sludge generator whose source or sources of sewage sludge is located outside of Maryland, the following process shall be followed:
- (a) Calculate the tentative annual sewage sludge generator fee as (the number of wet tons of sewage sludge generated during the reporting period) x (the base fee rate for the reporting period as determined by the Department) x (2.0); and
- (b) Set the annual sewage sludge generator fee at either the tentative annual generator fee determined in accordance with \$C(4)(a) of this regulation or \$50, whichever is greater.
- (5) Annual Billing. Billing for the annual generator fee shall be based on the generation of sewage sludge by a generator during the previous calendar year as reported on the generator's Sewage Sludge Generator Report as required in Regulation .07 of this chapter.
- D. Failure to pay the annual generator fee may constitute grounds for revocation or modification of any Sewage Sludge Utilization Permit, authorization, or approval issued by the Department for the utilization of that generator's sewage sludge, and denial of any new, modification, or renewal application for a Sewage Sludge Utilization Permit, authorization, or approval for the generator for the utilization of that generator's sewage sludge.
- E. The Department may inspect and audit all records or files associated with the annual generator fee required in §C of this regulation.
 - F. If an audit reveals that any amount of money was improperly withheld from the Department:
 - (1) A generator shall remit that amount to the Department within 30 days of notification of the error by the Department;
- (2) A generator shall be liable for any expenses incurred by the Department in collecting money owed to the Department; and
 - (3) A generator may be subject to other penalties as provided by law or regulation.

.09 Sewage Sludge Utilization Permits.

- A. Except as provided under the provisions of §C of this regulation, a person may not engage in the following utilization activities of sewage sludge, or any product containing this material, without first obtaining a Sewage Sludge Utilization Permit from the Department: treatment, composting, transportation, storage, distribution, application on agricultural land or marginal land, energy generation or incineration, marketing, conducting innovative or research projects, or disposal or alternative utilization at a municipal landfill.
- B. The Department may not issue a Sewage Sludge Utilization Permit for the purpose of utilizing sewage sludge to grow tobacco.
 - C. Sewage Sludge Utilization Permits issued under this regulation are not required for the following persons or activities:

- (1) A person who is engaged in the transportation or land application on agricultural or marginal land of Class A sewage sludge subject to the following conditions:
- (a) The Class A sewage sludge shall only be transported from the facility that generated the Class A sewage sludge to the marketing destination in accordance with the transportation requirement in Regulation .22 of this chapter;
- (b) The Class A sewage sludge may not be field stockpiled (staged) or land applied in a manner that will cause an undue risk to the environment or public health, safety, or welfare, or in a manner that causes or is likely to cause a discharge of constituents to the waters of the State;
- (c) The Class A sewage sludge shall only be stockpiled (staged) in accordance with Section 1D of the Maryland Nutrient Management Manual incorporated by reference into COMAR 15.20.07.02 and in compliance with other applicable State, federal, and local laws and regulations.
- (d) The Class A sewage sludge shall only be land applied on agricultural land in accordance with a nutrient management plan prepared by a certified and licensed nutrient management consultant or a certified operator in accordance with the Maryland Department of Agriculture requirements in COMAR 15.20.04 and in compliance with COMAR 15.20.07 and 15.20.08;
- (e) If the Class A sewage sludge stockpiled (staged) at a site is otherwise regulated by an individual or general NPDES Permit, the provisions of that permit will supersede the requirements in $\S C(1)(a) (c)$ of this regulation; and
- (f) In the event of an odor problem, the Department will notify the person who is applying the Class A sewage sludge that corrective measures shall be implemented, such as the temporary cessation of Class A sewage sludge application, or the application of odor control agents, such as lime, potassium permanganate, or other odor control agents. For the purpose of this requirement, an "odor problem" is defined as the receipt of at least one odor complaint regarding the Class A sewage sludge utilization followed by verification of the objectionable off-site odors by the Department, or a finding by the Department that odors caused by the utilization of the Class A sewage sludge are occurring offsite and are sufficiently strong as to be the likely cause of a complaint;
- (2) A person transporting sewage sludge that was generated in another state for utilization outside of the State of Maryland;
- (3) A person requesting to transport sewage sludge from a wastewater treatment plant to another wastewater treatment plant to be utilized for seeding as determined by the Department if:
 - (a) A fee of \$100 is paid to the Department;
- (b) The person receives a written authorization from the Department before the transportation of sewage sludge from one wastewater treatment plant to the wastewater treatment plant requiring seeding; and
 - (c) The period of transportation does not exceed 30 days unless specifically authorized by the Department;
- (4) A person requesting to transport sewage sludge from a wastewater treatment plant during inclement weather conditions, or as a result of a process failure, equipment breakdown, or any other emergency conditions at the wastewater treatment plant as determined by the Department to a permitted sewage sludge or municipal landfill for disposal or alternative utilization if:
 - (a) A fee of \$100 is paid to the Department;
 - (b) The sewage sludge does not contain free liquid, with the presence of free liquid determined by:
- (i) Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (ii) A comparable test approved by the Department;
- (c) The person receives written authorization from the Department before the transportation of sewage sludge from the wastewater treatment plant to a permitted municipal landfill for disposal or alternative utilization is commenced;
- (d) The person complies with the requirements for transportation and disposal or alternative utilization at the municipal landfill established by the Department or out-of-State authority; and
 - (e) The period of transportation does not exceed 30 days unless specifically authorized by the Department;
- (5) A person requesting the transportation of liquid sewage sludge from a wastewater treatment plant during inclement weather conditions, or as a result of a process failure, equipment breakdown, or any other emergency conditions at the wastewater treatment plant as determined by the Department to another wastewater treatment if:
 - (a) A fee of \$100 is paid to the Department;
- (b) The person receives written authorization from the Department before the transportation of sewage sludge from one wastewater treatment plant to the other wastewater treatment plant;
 - $(c) \ \textit{The person complies with the requirements for transportation established by the \textit{Department; and} \\$
 - (d) The period of transportation does not exceed 30 days unless specifically authorized by the Department;
- (6) A person who constructs and operates a sewage sludge-to-energy facility or a sewage sludge incinerator if the sewage sludge-to-energy facility or the sewage sludge incinerator is regulated by an air quality permit issued by the Department in accordance with the requirements in COMAR 26.11.02;
- (7) A person who constructs and operates a sewage sludge landfill if the sewage sludge landfill is regulated by a refuse disposal permit issued by the Department in accordance with the requirements in COMAR 26.04.07;
- (8) A person mixing sewage sludge that has been classified by the Department as Class A sewage sludge with other material if:
- (a) The person demonstrates to the Department that the final utilization of the mixture will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department; and
 - (b) The person receives a written authorization from the Department before the mixing may commence;

- (9) A person who stores bagged sewage sludge that has been classified by the Department as Class A sewage sludge as part of commercial activities, such as hardware stores, garden centers, and nurseries, if:
 - (a) The period of storage does not exceed 90 days; and
- (b) The storage does not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (10) A person who constructs and operates a sewage sludge-to-energy facility or a sewage sludge incinerator at a wastewater treatment plant if:
- (a) The wastewater treatment plant is regulated by and is incompliance with the sewerage construction permit issued for the wastewater treatment plant by the Department in accordance with the requirements in COMAR 26.03.12; and
- (b) The sewage sludge-to-energy facility or the sewage sludge incinerator is regulated by an air quality permit issued by the Department in accordance with the requirements in COMAR 26.11.02;
- (11) A person who installs, materially alters, or materially extends a sewage sludge storage or distribution facility at a wastewater treatment plant if the wastewater treatment plant is regulated by and is in compliance with the sewerage construction permit issued for the wastewater treatment plant by the Department in accordance with the requirements in COMAR 26.03.12; and
 - (12) A person who conducts an innovative or research project to utilize sewage sludge at a wastewater treatment plant if:
- (a) The innovative or research projects, such as the utilization of sewage sludge in brickmaking, as fuel, in resource recovery projects, or other projects is conducted in a manner that it will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (b) The wastewater treatment plant is regulated by and is incompliance with the sewerage construction permit issued for the wastewater treatment plant by the Department in accordance with the requirements in COMAR 26.03.12;
- (c) If applicable, the innovative or research project is regulated by an air quality permit issued by the Department in accordance with the requirements in COMAR 26.11.02; and
 - (d) The innovative or research project is regulated by any other applicable permits issued by the Department.

.10 Performance Bonds, Liability Insurance, or Other Form of Security.

- A. Except as provided under the provisions of §B of this regulation, a person applying for a Sewage Sludge Utilization Permit shall file with the Department a performance bond on a form prescribed or approved by the Department, liability insurance, or other form of security. The performance bond, liability insurance, or other form of security shall be payable to the Department and the obligation of the performance bond, liability insurance, or other form of security shall be conditioned upon the compliance with the terms and conditions of the Sewage Sludge Utilization Permit.
 - B. A performance bond, liability insurance, or other form of security is not required for the following persons or activities:
- (1) An applicant proposing to dispose of or utilize sewage sludge at a municipal landfill if it is determined by the Department that the municipal landfill is regulated by a Refuse Disposal Permit issued in accordance with Environment Article, §9-204, Annotated Code of Maryland, and that the financial assurance requirement in Environment Article, §9-211, Annotated Code of Maryland, has been met:
- (2) Users of sewage sludge that comply with the requirements of Regulations .09 and .52 of this chapter, and market Class A sewage sludge in accordance with a Sewage Sludge Utilization Permit issued by the Department; or
 - (3) Any local, State, or federal governmental agency or unit.
 - C. The amount of the performance bond, liability insurance, or other form of security shall be:
- (1) \$10,000 for a Sewage Sludge Utilization Permit for the transportation or marketing of sewage sludge, or for utilizing sewage sludge as part of a research project;
 - (2) \$30,000 for a Sewage Sludge Utilization Permit to apply sewage sludge on agricultural land;
 - (3) \$50,000 for a Sewage Sludge Utilization Permit to apply sewage sludge on marginal land;
 - (4) \$75,000 for a Sewage Sludge Utilization Permit for utilizing sewage sludge as part of an innovative project; or
- (5) \$125,000 for a Sewage Sludge Utilization Permit for an in-State sewage sludge treatment, composting, storage, or distribution facility.
- D. The amount of the performance bond, liability insurance, or other form of security for combined activities is the highest amount of all utilization activities listed in the Sewage Sludge Utilization Permit Application;
- E. The Department may allow a permittee obtaining several Sewage Sludge Utilization Permits to apply sewage sludge on agricultural or marginal land to file one performance bond, liability insurance, or other form of security to satisfy the security requirements for more than one utilization site. The amount of the performance bond, liability insurance, or other form of security shall be the amount required in §C of this regulation for the first site plus 40 percent of the amount required in §C of this regulation for each additional site up to a maximum amount of \$200,000.
- F. Liability under the performance bond, liability insurance, or other form of security shall remain in effect until all terms and conditions of the Sewage Sludge Utilization Permit have been met. The Department may release the performance bond, liability insurance, or other form of security after the Department has determined that all terms and conditions of the Sewage Sludge Utilization Permits covered by the performance bond, liability insurance, or other form of security have been complied with.
- G. The performance bond, liability insurance, or other form of security shall be executed by the person applying for a Sewage Sludge Utilization Permit and obtained from a corporate surety licensed to do business in this State. Instead of a performance bond, liability insurance, or other form of security executed by a corporate surety, the person may elect to deposit with the Department cash or negotiable bonds of the federal government or of this State or any other securities acceptable 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 performance bond, liability insurance, or other form of security. The Department shall receive and hold the cash or securities in trust, for the purposes for which the deposit is posted.

- H. The obligation of the person applying for a Sewage Sludge Utilization Permit and of any corporate surety under the performance bond, liability insurance, or other form of security shall become due and payable, and all or any part of any cash or securities shall be applied to payment of the costs of complying with any requirement of the Sewage Sludge Utilization Permit if the Department has:
- (1) Notified the permittee and any corporate surety that the terms and conditions of the Sewage Sludge Utilization Permit have not been complied with, and has specified in the notice the particular non-compliance with the Sewage Sludge Utilization Permit terms or conditions;
- (2) Given the permittee a reasonable opportunity to correct the deficiencies and to comply with all of the terms and conditions of the Sewage Sludge Utilization Permit; and
- (3) Determined that, at the end of a reasonable length of time, some or all of the non-compliance specified under $\S H(1)$ of this regulation remain uncorrected.

.11 Denial of Sewage Sludge Utilization Permit Application.

- A. The Department shall deny an application for a Sewage Sludge Utilization Permit if the Department finds that:
- (1) The person applying for a Sewage Sludge Utilization Permit cannot utilize sewage sludge without causing an undue risk to the environment or the public health, safety, or welfare as may be determined by the Department;
- (2) The person applying for a Sewage Sludge Utilization Permit is violating Environment Article, §§9-230 251, 9-269, or 9-270, Annotated Code of Maryland;
- (3) The sewage sludge generator from which the sewage sludge was generated has not paid the applicable generator's fee specified in Regulation .08 of this chapter; or
- (4) The sewage sludge has been generated in a state in which the laws or the application of those laws do not result in the land application of sewage sludge in that state;
 - B. The Department may deny an application for a Sewage Sludge Utilization Permit if the Department finds that:
- (1) The sewage sludge generator from which the sewage sludge was generated is not in compliance with the sampling and testing requirements specified in Regulation .06 of this chapter;
- (2) The sewage sludge generator from which the sewage sludge was generated is not in compliance with the recordkeeping and reporting requirements specified in Regulation .07 of this chapter;
- (3) The person applying for a Sewage Sludge Utilization Permit has insufficient resources to meet the performance bond or other financial securities requirements of the Sewage Sludge Utilization Permit;
- (4) The person applying for a Sewage Sludge Utilization Permit has failed to submit the applicable Sewage Sludge Utilization Permit Application fee;
- (5) The person applying for a Sewage Sludge Utilization Permit has failed to submit information requested by the Department; or
 - (6) For any other good cause as determined by the Department.
- C. The Department shall send to the local health official and the local soil conservation district a notice of the denial of an application in the County for a Sewage Sludge Utilization Permit.

.12 Treatment Facility.

- A. The Department may issue a Sewage Sludge Utilization Permit to construct and operate a treatment facility to generate Class A or B sewage sludge and to market the Class A sewage sludge in Maryland if the person applying for a permit demonstrates that the following conditions and requirements will be met:
 - (1) The treatment process shall meet, at a minimum, the applicable requirements for Class A or B sewage sludge;
- (2) A 1,000-foot buffer zone shall be maintained between the treatment facility property boundary lines and the nearest inhabited off-site dwelling, except that this buffer distance may be reduced if the Department determines that the treatment facility has adequate odor control measures;
- (3) The treatment facility shall be designed, constructed, and operated to safely treat the sewage sludge in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department; and
- (4) For marketing Class A sewage sludge in Maryland that is generated by a wastewater treatment plant in Maryland, the person applying for a permit demonstrates that the following conditions will be met:
- (a) The sewage sludge to be marketed will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department, or in a manner that causes or likely to cause a discharge of constituents to the waters of the State; and
 - (b) The sewage sludge to be marketed is free of liquid, with the presence of free liquid determined by
- (i)Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the U.S. EPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (ii) A comparable test approved by the Department.
- B. A written quality control monitoring plan approved by the Department shall be implemented to ensure that the Class A sewage sludge to be marketed meets the Department's standards regarding the destruction of primary pathogenic organisms, reduction of vector attraction, and limitations for heavy metals and other constituents.

C. The Department may issue a Sewage Sludge Utilization Permit to construct and operate a sewage sludge treatment facility by processes other than those used to classify the material as Class A or B sewage sludge if the applicant demonstrates, at a minimum, that the requirements specified under §A of this regulation will be met.

.13 Treatment Facility - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge treatment facility is to be located. A person shall submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter. The application shall include the following completed information:
 - (1) A written authorization signed by the legal owners of the site where the treatment facility is to be located;
- (2) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed treatment facility structures, the location of any wells on the site and within ½ mile of the site, any residences or buildings on site and within ½ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses:
- (3) Tax maps and liber and folio numbers for the parcels of land on which the treatment facility will be located and the names of the legal owners of the site;
- (4) A current site specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within $\frac{1}{2}$ mile of the site;
- (5) A site specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (6) A description of the source, type, and quantity of the sewage sludge to be treated, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (7) A detailed description of the treatment methods, processes, and monitoring procedures;
- (8) Detailed engineering plans and specifications for the treatment facility prepared, signed, and bearing the seal of a registered professional engineer;
 - (9) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be treated;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the treated sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events;
 - (g) Methods and procedures for restricting public access to the site; and
- (h) For marketing Class A sewage sludge, a marketing plan and strategy for the treated sewage sludge with a description of the marketing system to include an identification of the final utilization of the Class A sewage sludge;
- (i) For marketing Class A sewage sludge, documentation that the marketing and final utilization of the Class A sewage sludge:
- (i) Will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department, and
 - (ii) Will not cause or likely cause a discharge of constituents to the waters of the State;
 - (j) For marketing Class A sewage sludge, a label that shall accompany the marketed sewage sludge, which:
- (i) Includes identification of the product as Class A sewage sludge or biosolids, sources of the sewage sludge, instructions for proper use with specific amounts and type of use (rate of application), field stockpiling (staging) and storage requirements, odor control measures, warnings, and restrictions necessary for utilization;
- (ii)Advises the person who is utilizing the product that the authorization to market the product does not relieve the person from civil or criminal liabilities or penalties for non-compliance with the Environment Article, Title 9, Annotated Code of Maryland, or any local, State, federal, or other state laws or regulations; and
- (iii) Includes any specific restrictions, warnings, or cautionary statements that the Department requires to be included on the label, and
- (k)For marketing Class A sewage sludge, a demonstration of how the applicant will implement any additional conditions and management practices to market the Class A sewage sludge that the Department may require as it determines necessary;
 - (10) Quality control monitoring plans;
 - (11) Information on protection of water resources, including:
 - (a) A detailed discussion of the methods to be used for the protection of ground and surface waters of the State; and
- (b) If required by the Department, a proposed ground and surface water monitoring plan that meets the following requirements:
- (i) The plan shall include a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site, including the location and type of monitoring stations, and the method of construction of monitoring wells; and
- (ii) The plan shall provide for monitoring wells to be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - ${\it (12) Plans for storage of treated sewage sludge on site;}$

- (13) An assessment of the potential environmental impact of the treatment facility;
- (14) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (15) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §A(14) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$350; and
 - (b) For a Renewal Permit Application, \$350.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.14 Treatment Facility - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall:
- (1) Publish a notice of the receipt of the Sewage Sludge Utilization Permit Application in a local newspaper having a substantial circulation in the county where the sewage sludge treatment facility is to be constructed and operated that contains the following information:
 - (a) Name of the person applying for the permit;
 - (b) A brief description of the project;
 - (c) Sources of the sewage sludge;
 - (d) Project type;
 - (e) Location of the site;
 - (f) A list of the persons within the local jurisdiction who have been sent copies of the application;
- (g) A statement of the right of the county or municipal corporation, if applicable, to request a public hearing within 15 calendar days after receipt of the application; and
 - (h) Provisions for examination of the application by interested parties; and
 - $(2) \textit{ Mail a copy of the application and the public notice published in accordance with \$A(1) \textit{ of this regulation to:} \\$
- (a) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge treatment facility is to be constructed and operated;
- (b) The chairman of the legislative body and any elected executive of any other county within 1 mile of the sewage sludge treatment facility; and
 - (c) The local health official.
- B. Within 15 calendar days of receipt of the application and the public notice, the chairman of the legislative body or any elected executive of the county or municipal corporation where the sewage sludge treatment facility is to be constructed and operated may request in writing that the Department conduct a public hearing.
- C. If the Department receives a request for a public hearing in accordance with §B of this regulation, or if the Department determines that a public hearing would serve the public interest, the Department shall hold a public hearing in the affected subdivision where the facility is to be constructed and operated. The Department shall notify the person applying for the Sewage Sludge Utilization Permit and shall give the person the opportunity to present information at the public hearing.
- D. After the Department has established the date, place, and time for a public hearing, the Department shall publish a notice of the public hearing in a local newspaper having a substantial circulation in the county where the sewage sludge treatment facility is to be constructed and operated. The notice shall contain the following information:
- (1) A statement of the legal authority and jurisdiction under which the public hearing is to be held, and a reference to the particular statutes and regulations involved;

- (2) Name of the person applying for the permit;
- (3) A brief description of the project;
- (4) Sources of the sewage sludge;
- (5) Project type;
- (6) Location of the site;
- (7) The date, time, and place of the public hearing; and
- (8) Provisions for examination of the application by interested parties.

.15 Treatment Facility - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 10 years:
 - (1) The source, type, and quantity, including documentation of sewage sludge received and treated at the treatment facility;
 - (2) The sewage sludge treatment methods;
- (3) Process monitoring and operating information demonstrating that the treated sewage sludge meets the requirements as specified in the applicable Sewage Sludge Utilization Permit;
 - (4) A summary of the results of laboratory analysis that includes:
- (a) Copies of all analyses of chemical quality of the treated sewage sludge generated at the facility and the water quality for all constituents listed in the applicable Sewage Sludge Utilization Permit; and
 - (b) In the event that a constituent exceeded the allowable level, a discussion or explanation of the exceedance;
 - (5) The time periods during which the treatment facility is inoperational;
 - (6) The quantity, including documentation of treated and untreated sewage sludge transported from the treatment facility;
 - (7) The dates of transportation of treated and untreated sewage sludge from the treatment facility;
 - (8) The destinations and final utilization of treated and untreated sewage sludge;
 - (9) Descriptions of problems encountered and their solutions;
- (10) Other related information regarding the treatment facility as required by the applicable Sewage Sludge Utilization Permit; and
 - (11) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.16 Treatment Facility - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are minor modifications to a Sewage Sludge Utilization Permit for a sewage sludge treatment facility:
 - (1) Modification to the treatment facility's operation plan;
 - (2) Addition of new sewage sludge sources or types of sewage sludge received at the treatment facility;
 - (3) Modification to the treatment facility's water quality monitoring plans;
 - (4) The permittee's name change; or
 - (5) Other modifications as determined by the Department.
 - D. The following are major modifications to a Sewage Sludge Utilization Permit for a sewage sludge treatment facility:
 - (1) Extension of the size of the structures or buildings used for the treatment of sewage sludge;
 - (2) Modification to the types of treatment authorized by the Sewage Sludge Utilization Permit for the treatment facility; or
 - (3) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.

G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit, or for other good cause as determined by the Department.

.17 Composting Facility.

- A. The Department may not issue a Sewage Sludge Utilization Permit to install, materially alter, or materially extend a sewage sludge composting facility until:
- (1) The composting facility meets all zoning and local land use requirements of the county where the composting facility is to be located: and
- (2) The Department has received a written statement that the board of county commissioners or the county council of the county where the composting facility is to be located does not oppose the issuance of the Sewage Sludge Utilization Permit.
- B. The Department may issue a Sewage Sludge Utilization Permit to install, materially alter, or materially extend a sewage sludge composting facility and to market the Class A sewage sludge compost if the person applying for a Sewage Sludge Utilization Permit demonstrates that the following conditions and requirements will be met:
 - (1) The composting process shall meet, at a minimum, the applicable requirements for Class A or B sewage sludge;
- (2) A 1,000-foot buffer zone shall be maintained between the composting facility property boundary lines and the nearest inhabited off-site dwelling, except that this buffer distance may be reduced if the Department determines that the composting facility has adequate odor control measures;
- (3) The composting facility shall be designed, constructed, and operated to safely compost the sewage sludge in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (4) The composting process shall be conducted in a vessel approved by the Department, or inside a roofed structure with an impervious floor with drains connected to a sanitary sewer system or other permitted treatment facility;
- (5) The composted sewage sludge shall be placed on an impervious floor with drains connected to a sanitary sewer system or other permitted wastewater treatment facility; and
- (6) For marketing Class A sewage sludge compost in Maryland that is generated by a composting facility in Maryland, the person applying for a permit shall demonstrate that the following conditions will be met:
- (a) The sewage sludge to be marketed will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department; and
 - (b) The sewage sludge does not contain free liquid, with the presence of free liquid determined by:
- (i) Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (ii) A comparable test approved by the Department.
- C. A written quality control monitoring plan approved by the Department shall be implemented to ensure that the Class A sewage sludge to be marketed meets the Department's standards regarding the destruction of primary pathogenic organisms, reduction of vector attraction, and limitations for heavy metals and other constituents.

.18 Composting Facility - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge composting facility is to be installed, materially altered, or materially extended. A person shall submit to the Department seven completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter. The application shall include the following completed information:
- (1) A written authorization signed by the legal owners of the site where the composting facility is to be installed, materially altered, or materially extended;
- (2) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed composting facility structures, the location of any wells on the site and within $\frac{1}{2}$ mile of the site, any residences or buildings on site and within $\frac{1}{2}$ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses;
- (3) Tax maps and liber and folio numbers for the parcels of land on which the composting facility will be located and the names of the legal owners of the site;
- (4) A current site specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within $\frac{1}{2}$ mile of the site;
- (5) A site specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (6) A description of the source, type, and quantity of sewage sludge to be composted, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (7) A detailed description of the composting methods, processes, and monitoring procedures;
- (8) Detailed engineering plans and specifications for the installation, material alteration, or material extension of the composting facility prepared, signed, and bearing the seal of a registered professional engineer;
 - (9) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be composted;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;

- (c) Days and hours of operation;
- (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
- (e) Methods and procedures for utilizing the composted sewage sludge;
- (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events;
- (g) Methods and procedures for restricting public access to the site; and
- (h) For marketing Class A sewage sludge, a description of the marketing system to include an identification of the final utilization of the Class A sewage sludge;
- (i) For marketing Class A sewage sludge, documentation that the marketing and final utilization of the Class A sewage sludge will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department, and it does not cause or likely cause a discharge of constituents to the waters of the State;
 - (j) For marketing Class A sewage sludge, a label that shall accompany the marketed sewage sludge, which:
- (i) Includes identification of the product as Class A sewage sludge or biosolids, sources of the sewage sludge, instructions for proper use with specific amounts and type of use (rate of application), field stockpiling (staging) and storage requirements, odor control measures, warnings, and restrictions necessary for utilization;
- (ii) Advises the person who is utilizing the product that the authorization to market the product does not relieve the person from civil or criminal liabilities or penalties for non-compliance with the Environment Article, Title 9, Annotated Code of Maryland, or any local, State, federal, or other state laws or regulations; and
- (iii) Includes any specific restrictions, warnings, or cautionary statements that the Department requires to be included on the label, and
- (k) For marketing Class A sewage sludge, a demonstration of how the person will implement any additional conditions and management practices to market the Class A sewage sludge that the Department may require as it determines necessary;
 - (10) Quality control monitoring plans;
 - (11) Information on protection of water resources, including:
 - (a) A detailed discussion of the methods to be used for the protection of ground and surface waters of the State; and
- (b) If required by the Department, a proposed ground and surface water monitoring plan that meets the following requirements:
- (i) The plan shall include a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site, including the location and type of monitoring stations, and the method of construction of monitoring wells; and
- (ii) The plan shall provide for monitoring wells to be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - (12) Plans for storage of composted sewage sludge on site;
 - (13) An assessment of the potential environmental impact of the composting facility;
 - (14) Fire prevention and control plan;
- (15) A marketing plan and strategy for the composted sewage sludge with a description of the marketing system to include an identification of the final utilization of the Class A sewage sludge;
- (16) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (17) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with \$A(16) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$350; and
 - (b) For a Renewal Permit Application, \$350.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.19 Composting Facility - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall:
- (1) Publish a notice of the receipt of the Sewage Sludge Utilization Permit Application in a local newspaper having a substantial circulation in the county where the sewage sludge composting facility is to be installed, materially altered, or materially extended that contains the following information:
 - (a) Name of the person applying for the permit;
 - (b) A brief description of the project;
 - (c) Sources of the sewage sludge;
 - (d) Project type;
 - (e) Location of the site;
 - (f) A list of the persons within the local jurisdiction who have been sent copies of the application;
- (g) A statement of the right of the county or municipal corporation, if applicable, to request a public hearing within 15 calendar days after receipt of the application; and
 - (h) Provisions for examination of the application by interested parties; and
 - (2) Mail a copy of the application and the public notice published in accordance with §A(1) of this regulation to:
- (a) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge composting facility is to be installed, materially altered, or materially extended;
- (b) The chairman of the legislative body and any elected executive of any other county within 1 mile from the location where the sewage sludge composting facility is to be installed, materially altered, or materially extended; and
 - (c) The local health official.
- B. Within 15 calendar days of receipt of the application and the public notice, the chairman of the legislative body or any elected executive of the county or municipal corporation where the sewage sludge composting facility is to be installed, materially altered, or materially extended may request in writing that the Department conduct a public hearing.
- C. If the Department receives a request for a public hearing in accordance with \$B of this regulation, or if the Department determines that a public hearing would serve the public interest, the Department shall hold a public hearing in the affected subdivision where the sewage sludge composting facility is to be installed, materially altered, or materially extended. The Department shall notify the person applying for the Sewage Sludge Utilization Permit and shall give the person the opportunity to present information at the public hearing.
- D. After the Department has established the date, place, and time for a public hearing, the Department shall publish a notice of the public hearing in a local newspaper having a substantial circulation in the county where the sewage sludge composting facility is to be installed, materially altered, or materially extended. The notice shall contain the following information:
- (1) A statement of the legal authority and jurisdiction under which the public hearing is to be held, and a reference to the particular statutes and regulations involved;
 - (2) Name of the person applying for the permit;
 - (3) A brief description of the project;
 - (4) Sources of the sewage sludge;
 - (5) Project type;
 - (6) Location of the site;
 - (7) The date, time, and place of the public hearing; and
 - (8) Provisions for examination of the application by interested parties.

.20 Composting Facility - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 10 years:
- (1) The source, type, and quantity, including documentation of sewage sludge received and composted at the composting facility;
 - (2) The types of sewage sludge composting methods;
- (3) Process monitoring and operating information demonstrating that the composted sewage sludge meets the requirements as specified in the applicable Sewage Sludge Utilization Permit;
 - (4) A summary of the results of laboratory analysis that includes:
- (a) Copies of all analyses of chemical quality of the treated sewage sludge generated at the facility and the water quality for all constituents listed in the applicable Sewage Sludge Utilization Permit; and
 - (b) In the event that a constituent exceeded the allowable level, a discussion or explanation of the exceedance;
 - (5) The time periods during which the composting facility is inoperational;
- (6) The quantity, including documentation of composted and uncomposted sewage sludge transported from the composting facility;
 - (7) The dates of transportation of composted and uncomposted sewage sludge from the composting facility;
 - (8) The destinations and final utilization of composted and uncomposted sewage sludge;
 - (9) Descriptions of problems encountered and their solutions;
- (10) Other related information regarding the composting facility as required by the applicable Sewage Sludge Utilization Permit; and
 - $(11) \ Other \ information \ that \ may \ be \ requested \ by \ the \ Department.$

B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.21 Composting Facility - Modifications, Material Alteration or Extension.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit or materially alter or extend a composting facility upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification, or material alteration or extension, and an explanation as to why it is needed;
 - (2) The permittee shall pay the Department a nonrefundable fee in accordance with the following schedule:
 - (a) For a Modification, \$40; and
 - (b) For a Material Alteration or Extension, \$130; and
- (3) The Department determines that the proposed modification, or material alteration or extension is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are modifications to a Sewage Sludge Utilization Permit for a sewage sludge composting facility:
 - (1) Modification to the composting facility's operation plan;
 - (2) Addition of new sewage sludge sources or types of sewage sludge received at the composting facility;
 - (3) Modification to the composting facility's water quality monitoring plans;
 - (4) The permittee's name change; or
 - (5) Other modifications as determined by the Department.
 - D. The following are material alterations or extensions to the sewage sludge composting facility:
 - (1) Materially altering or extending the size of the structures or buildings used for composting sewage sludge;
- (2) Change to the types of composting processes authorized by the Sewage Sludge Utilization Permit for the composting facility; or
 - (3) Other material alterations or extensions as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit or materially alters or extends a composting facility, the Department shall send notice of the modification, material alteration or extension to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.22 Transportation.

- A. The Department may issue a Sewage Sludge Utilization Permit to transport sewage sludge if the equipment to be used, the operation plan, and the destination of the sewage sludge meet the requirements established by the Department.
- B. Liquid sewage sludge may be pumped and transported by pipeline, truck, rail, or barge. Liquid sewage sludge shall be transported in closed watertight vessels or containers.
- C. Sewage sludge cake that is greater than 15 percent but less than 20 percent total solids content may be transported in watertight containers, such as dump truck bodies or trailers that are sealed to prevent leakage or in closed body vehicles, such as a concrete mixer truck, subject to the following requirements:
- (1) The vehicle trailer shall be equipped with metal splash guards securely attached horizontally at the front and rear of the trailer; and
- (2) Each splash guard shall span at least 25 percent of the trailer's open area and have no gaps through which sewage sludge cake may escape.
- D. Sewage sludge cake that is greater than 20 percent but less than 35 percent total solids content may be transported in watertight containers, such as dump truck bodies or trailers that are sealed to prevent leakage or in closed body vehicles, such as a concrete mixer truck, subject to the following requirements:
- (1) The vehicle trailer shall be equipped with metal splash guards securely attached horizontally at the front and rear of the trailer;
 - (2) Each splash guard shall be at least 4 feet in length and shall be firmly welded or attached to the body of the trailer; and
- (3) A medium or heavy duty solid rubber or plastic tarp shall cover the open area of the trailer and shall overlap the splash guard by a minimum of 1 foot. The tarp shall be firmly held down with straps that are attached to ratchets that are bolted to the trailer. The tarp shall cover the top of the trailer so that there is no vertical opening between the tarp and the splash guards, and no opening between the tarp and the sides of the trailer.
- E. Sewage sludge cake may be transported in watertight containers, such as dump truck bodies or trailers that are sealed to prevent leakage or in closed body vehicles, such as a concrete mixer truck, subject to the following freeboard requirements:

- (1) If the total solids content is greater than 15 percent but less than 25 percent, then a minimum of 2 feet of freeboard shall be maintained between the sewage sludge cake and the top of the trailer unless the top of the trailer is completely sealed; or
- (2) If the total solids content is greater than 25 percent but less than 35 percent, then a minimum of 1 foot of freeboard shall be maintained between the sewage sludge cake and the top of the trailer unless the top of the trailer is completely sealed.
 - F. The Department may require certain types of sewage sludge cake to be transported as liquid sewage sludge.
- G. Dried sewage sludge may be transported in open vehicles, such as dump trucks, that are sealed to prevent leakage. The vehicles shall be covered with tarps or the equivalent.

.23 Transportation - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where sewage sludge is to be transported. A person shall submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter. The application shall include the following completed information:
- (1) A description of the source, type, and quantity of sewage sludge to be transported, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (2) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment;
 - (3) A detailed operation plan that includes, when applicable:
- (a) Delineation of transportation routes, description of transportation vehicles, including type, size, number, type of seals on transportation vehicles and any modification made to prevent spills and leaks, and plans for maintaining clean transportation vehicles:
 - (b) A spill or leak clean-up plan describing the procedures for managing and reporting a sewage sludge spill or leak;
 - (c) Procedures for recordkeeping and reporting of the sewage sludge to be transported;
 - (d) Types of equipment to be used for collection, management, washdown, and other operations;
 - (e) Days and hours of operation;
 - (f) Methods and procedures for utilizing sewage sludge; and
 - (g) Contingency or emergency plans to manage equipment breakdown, spills, and other emergency events;
 - (4) The destination and a detailed description of the final utilization of the sewage sludge at the destination; and
 - (5) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with \$A(2) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
- C. Permit Application Fees. A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (1) For a New Permit Application, \$45; and
 - (2) For a Renewal Permit Application, \$45.

.24 Transportation - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of the application to transport sewage sludge in Maryland to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge is to be transported; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where the sewage sludge is to be transported.
- B. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the sewage sludge is to be transported receives the application regarding the proposed project.

.25 Transportation - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 10 years:
 - (1) The source, type, and quantity, including documentation of treated and untreated sewage sludge transported;
 - (2) The types of treatment the transported sewage sludge has received;
 - (3) The dates of transportation of treated and untreated sewage sludge;
 - (4) The destinations and final utilization of treated and untreated sewage sludge;
 - (5) Descriptions of problems encountered and their solutions;
- (6) Other related information regarding the transportation of sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (7) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.26 Transportation - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee shall pay the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are minor modifications to a Sewage Sludge Utilization Permit for transportation of sewage sludge:
 - (1) Modification to haul routes;
 - (2) Modification to the types of transportation vehicles;
 - (3) Modification to the types of sewage sludge to be transported;
 - (4) The permittee's name change; or
 - (5) Other modifications as determined by the Department.
 - D. The following are major modifications to a Sewage Sludge Utilization Permit for transportation of sewage sludge:
 - (1) Modification to the sources of sewage sludge to be transported; or
 - (2) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms and conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.27 Storage Facility.

- A. The Department may not issue a Sewage Sludge Utilization Permit to install, materially alter, or materially extend a sewage sludge storage facility until the storage facility meets all zoning and local land use requirements of the county where the storage facility is to be located.
- B. The Department may issue a Sewage Sludge Utilization Permit to install, materially alter, or materially extend a sewage sludge storage facility if the person applying for a Sewage Sludge Utilization Permit demonstrates that the following conditions and requirements will be met:
- (1) A 1,000-foot buffer zone shall be maintained between the storage facility property boundary lines and the nearest inhabited off-site dwelling, except that this buffer distance may be reduced if the Department determines that the storage facility has adequate odor control measures;
 - (2) A storage facility may not be located in a flood prone area;
- (3) A storage facility located within a 100-year flood plain shall be evaluated as to its hydrologic impact on adjoining landowners;
- (4) The storage facility shall be designed, constructed, and operated to safely store sewage sludge in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;

- (5) A storage facility may be located on soils of low to moderate permeability or on soils that seal through sedimentation and biological action, subject to the following:
- (a) The permeability of such soils may not exceed 1.0×10^7 cm/sec as measured by appropriate test methods that are acceptable to the Department; or
- (b) If a storage facility is proposed on other soils, the Department shall require permeability tests or use of an impermeable membrane liner or soil sealant, or any combination of these;
- (6) The minimum design capacity of a storage facility not completely enclosed shall be the maximum volume of sewage sludge to be stored, plus the estimated liquid volume from precipitation on the facility occurring during the period of storage, minus the expected liquid volume of evaporation on from the storage facility surface during the period of storage, plus the liquid volume resulting from the maximum expected 25-year, 24-hour precipitation event;
 - (7) A storage facility may be constructed of:
 - (a) Compacted soils;
 - (b) Manufactured materials, such as asphalt, steel, or reinforced concrete;
 - (c) Fiberglass; or
 - (d) Other materials approved by the Department;
 - (8) A storage facility constructed on an above ground embankment shall meet the following:
- (a) The minimum combined inner and outer slopes of the embankment shall be 5 horizontal to 1 vertical with the wet side slope not steeper than a ratio of 2:1 and the dry side slope not steeper than 3:1;
 - (b) Embankments having a height of 14 feet or less shall have a minimum top width of 8 feet;
 - (c) Embankments having a height of 15 feet to 19 feet shall have a minimum top width of 10 feet; and
- (d) The initial construction height of the embankment may be increased over the design height to insure that the approved top elevation of the embankment is maintained after settlement of the embankment has occurred, subject to the following:
- (i) The increase in height of the embankment for the initial construction shall not exceed 5 percent of the total approved height when compaction rollers are used; and
- (ii) The increase in height of the embankment for the initial construction shall not exceed 10 percent of the total approved height when bulldozers or scrapers alone are used;
- (9) The minimum height of the storage facility after settlement shall be 10 percent greater than the design storage depth for the sewage sludge, except that the Department may waive this provision or reduce the freeboard requirements if the storage facility design includes a secondary containment capability and the accumulated liquids are routinely removed from the storage facility;
 - (10) The side slopes of an excavated storage facility may not be steeper than 1:1;
- (11) A storage facility constructed by both the embankment and excavation method shall meet all of the requirements of §B(8) of this regulation if the design depth of the sewage sludge impounded against the embankment is 3 feet or more;
- (12) The storage facility shall be located in a relatively level area, usually less than 5 percent slope, and shall be located no closer than 150 feet from any drainage ditch, swale, or gully, and shall be bermed to prevent run-on of surface water, except that areas with ground slopes of greater than 5 percent may be considered suitable for a storage facility if diversion ditches, increased buffer distances, or other provisions can be made to further control storm water in the area of the storage facility;
 - (13) The cell floor elevation shall be at least 2 feet above the maximum seasonal high groundwater elevation;
 - (14) A storage facility may not be located on an unstable area:
 - (15) The storage facility shall be lined to prevent leakage of material to groundwater, with an acceptable liner being:
- (a) A compacted soil layer at least 2 feet thick with an installed permeability of 1.0×10^{-5} cm/sec or less in combination with an artificial liner at least 30 mil in thickness with a permeability of 1.0×10^{-7} cm/sec or less, as measured by appropriate test methods that are acceptable to the Department; or
- (b) Other manufactured storage structures acceptable to the Department, including asphalt or reinforced concrete structures, steel tanks, fiberglass tanks, or their equivalent;
- (16) If a clay or soil liner is specified, the liner shall be constructed with protective layers to prevent erosion, dessication, and other sources of damage;
 - (17) Public access to the storage facility shall be controlled; and
 - (18) Any other conditions required by the Department to protect the public health and the environment.

.28 Storage Facility - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge storage facility is to be installed, materially altered, or materially extended. A person shall submit to the Department seven completed copies of the Sewage Sludge Utilization Permit Application for a new Sewage Sludge Utilization Permit, a modification to a Sewage Sludge Utilization Permit, or a Sewage Sludge Utilization Permit renewal on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter. The application shall include the following completed information:
- (1) A written authorization signed by the legal owners of the site where the storage facility is to be installed, materially altered, or materially extended;
- (2) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed storage facility structures, the location of any wells on the site and within ½ mile of the site, any residences or buildings on site and

within $\frac{1}{2}$ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses:

- (3) Tax maps and liber and folio numbers for the parcels of land on which the storage facility will be installed, materially altered, or materially extended and the names of the legal owners of the site;
- (4) A current site-specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within ½ mile of the site;
- (5) A site specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (6) A description of the source, type, and quantity of sewage sludge to be stored, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (7) Detailed engineering plans and specifications including the design capacity calculation for the installation, material alteration, or material extension of the storage facility prepared, signed, and bearing the seal of a registered professional engineer;
 - (8) The specifications for any liners or soil sealants used;
- (9) A quality assurance/quality control plan for construction of the storage facility which includes a provision that construction quality assurance/quality control shall be performed by an independent contractor not associated with the construction contractor;
 - (10) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be stored;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the stored sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
 - (11) Information on protection of water resources, including:
 - (a) A detailed discussion of the methods to be used for the protection of ground and surface waters of the State; and
- (b) If required by the Department, a proposed ground and surface water monitoring plan that meets the following requirements:
- (i) The plan shall include a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site, including the location and type of monitoring stations, and the method of construction of monitoring wells; and
- (ii) The plan shall provide for monitoring wells to be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - (12) An assessment of the potential environmental impact of the storage facility;
 - (13) Documentation showing the maximum seasonal high groundwater elevation;
- (14) For storage facilities constructed of earthen materials, or for storage facilities constructed or installed below grade, the following information:
 - (a) Adequate test boring logs, for a minimum of three borings per 10 acres, subject to the following:
- (i) The logs shall detail the soil, sediment, and rock types encountered, depth of groundwater at time of completion and at 24 hours, 48 hours, and 72 hours after completion, and depth of auger refusal, if applicable; and
 - (ii) The location of each boring shall be accurately mapped in accordance with A(5) of this regulation;
- (b) A description of the geology at the site, including a discussion of the geologic formations directly involved and the present and future use of these formations as a groundwater source and their relationship to underlying formations, providing cross sections based on the information compiled from borehole data, with this information being incorporated into the geologic and hydrogeologic report required by §A(5) of this regulation;
- (c) A description of the hydrologic characteristics of the site, including a groundwater contour map superimposed on a topographic map, showing the location of the water table and the direction and rate of groundwater flow, a discussion of the infiltration capacity of surface soils, and the percolation capacity of subsurface soils, with this information being incorporated into the geologic and hydrogeologic report required by §A(5) of this regulation, and
 - (d) Provision for sediment and erosion control approved by the appropriate approving authority;
 - (15) For manufactured storage facilities, the following information:
 - (a) Information on the structural materials to be used;
 - (b) Design specifications, such as dimensions, structural capacity, maximum load, and restrictions on use; and
 - (c) Installation or construction techniques and procedures;
 - (16) For above ground enclosed storage facilities, a plan for controlling gaseous emissions and odors;
- (17) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;

- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment;
- (18) A proposed closure and post-closure plan to be implemented for a period of not less than five years after the cessation of storage of sewage sludge at the storage facility and the removal of all sewage sludge stored at the storage facility; and
 - (19) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §A(17) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$750; and
 - (b) For a Renewal Permit Application, \$750.
- (2) For activities, which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.29 Storage Facility - Public and Local Government Participation.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of a new, modification, or renewal Sewage Sludge Utilization Permit Application to install, materially alter, or materially extend a sewage sludge storage facility to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the storage facility is to be installed, materially altered or materially extended; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile from the location where the storage facility is to be installed, materially altered or materially extended.
- B. When the Department considers the application complete, the Department shall follow the public participation in the permitting process in accordance with the requirements of the Environment Article, Title 1, Subtitle 6, Annotated Code of Maryland.

.30 Storage Facility - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 10 years:
 - (1) The source, type, and quantity, including documentation of sewage sludge received and stored at the storage facility;
 - (2) The quantity, including documentation of sewage sludge transported from the storage facility;
 - $(3) {\it The \ dates \ of \ transportation \ of \ sewage \ sludge \ to \ and \ from \ the \ storage \ facility;}$
 - (4) The destinations and final utilization of sewage sludge transported from the storage facility;
 - (5) The water quality monitoring results required by the Department;
 - (6) Descriptions of problems encountered and their solutions;
- (7) Other related information regarding the storage facility as required by the applicable Sewage Sludge Utilization Permit; and
 - (8) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.31 Storage Facility - Modifications, Material Alterations or Extensions.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit or materially alter or extend a storage facility upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department six completed copies of the Sewage Sludge Utilization Permit application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification, material alteration or extension, and an explanation as to why it is needed;
 - (2) The permittee shall pay the Department a nonrefundable fee in accordance with the following schedule:
 - (a) For a Modification, \$40, and

- (b) For a Material Alteration or Extension, \$130; and
- (3) The Department determines that the proposed modification, material alteration, or extension is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are modifications to a Sewage Sludge Utilization Permit for a sewage sludge storage facility:
 - (1) Modification to the source or type of sewage sludge authorized for storage at the storage facility;
 - (2) Modification to the storage facility's operation plan;
 - (3) Modification to the storage facility's water quality monitoring plans;
 - (4) Modification to the closure and post-closure plan;
 - (5) Modification to the storage facility's days or hours of operation if:
 - (a) The days and hours of operation were not an issue of concern during the public hearing process; and
- (b) The permittee provides the Department with a written statement from the local government where the storage facility is located that the revised days and hours of operations meet all zoning and local land use requirements of the County where the storage facility is located;
 - (6) The permittee's name change; or
 - (7) Other modifications as determined by the Department.
- D. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
 - E. The following are material alterations or extensions to the sewage sludge storage facility:
 - (1) Materially altering or extending the size of the structures or buildings used for storage of sewage sludge;
 - (2) Change to the storage facility's days or hours of operation if:
 - (a) The days and hours of operation were an issue of concern during the public hearing process; and
- (b) The permittee provides the Department with a written statement from the local government where the storage facility is located that the revised days and hours of operations meet all zoning and local land use requirements of the County where the storage facility is located; or
 - (3) Other material alterations or extensions as determined by the Department.
- F. If the Department considers an application for material alteration or extension complete and acceptable, the Department may process the application in accordance with the requirements under Regulation .29 of this chapter.
- G. If the Department modifies a Sewage Sludge Utilization Permit or materially alters or extends a storage facility, the Department shall send notice of the modification, material alteration or extension to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- H. The Department may deny an application to modify a Sewage Sludge Utilization Permit or materially alter or extend a storage facility if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.32 Distribution Facility.

- A. The Department may issue a Sewage Sludge Utilization Permit to install, materially alter, or materially extend a sewage sludge distribution facility if the person applying for a Sewage Sludge Utilization Permit demonstrates that the following conditions and requirements will be met:
 - (1) The sewage sludge has been classified by the Department as Class A sewage sludge;
 - (2) When distributed, a label shall accompany the distributed sewage sludge, which:
- (a) Includes identification of the product as Class A sewage sludge or biosolids, sources of the sewage sludge, instructions for proper use with specific amounts and type of use (rate of application), warnings, and restrictions necessary for usage or storage;
- (b) Advises the person who is utilizing the product that the authorization to distribute the product does not relieve the person from civil or criminal liabilities or penalties for non-compliance with the Environment Article, Title 9, Annotated Code of Maryland, or any local, State, federal, or other state laws or regulations; and
- (c) Includes any specific restrictions, warnings, or cautionary statement that the Department requires to be included on the label:
- (3) The sewage sludge to be distributed from the distribution facility does not contain free liquid, with the presence of free liquid determined by:
- (a) Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (b) A comparable test approved by the Department;
- (4) A 1,000-foot buffer zone shall be maintained between the distribution facility property boundary lines and the nearest inhabited off-site dwelling, except that this buffer distance may be reduced if the Department determines that the distribution facility has adequate odor control measures;
 - (5) A distribution facility may not be located in a flood prone area;
- (6) A distribution facility located within a 100-year flood plain shall be evaluated as to its hydrologic impact on adjoining landowners:
- (7) The distribution facility is designed, constructed, and operated to safely distribute sewage sludge in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
 - (8) The cell floor elevation shall be at least 2 feet above the maximum seasonal high groundwater elevation;

- (9) A distribution facility may not be located on an unstable area;
- (10) Any other special conditions and management practices to land apply Class A sewage sludge required by the Department as the Department determines necessary; and
 - (11) Public access to the distribution facility is controlled.
- B. A written quality control monitoring plan approved by the Department shall be implemented by the facility to ensure that the Class A sewage sludge to be distributed meets the Department's standards regarding the destruction of primary pathogenic organisms, reduction of vector attraction, and limitations for heavy metals and other constituents.

.33 Distribution Facility - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge distribution facility is to be located. A person shall submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application for a new Sewage Sludge Utilization Permit, a modification to a Sewage Sludge Utilization Permit, or a Sewage Sludge Utilization Permit renewal on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter. The application shall include the following completed information:
- (1) A written authorization signed by the legal owners of the site where the distribution facility is to be installed, materially altered, or materially extended;
- (2) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed distribution facility structures, the location of any wells on the site and within $\frac{1}{2}$ mile of the site, any residences or buildings on site and within $\frac{1}{2}$ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses:
- (3) Tax maps and liber and folio numbers for the parcels of land on which the distribution facility will be installed, materially altered, or materially extended and the names of the legal owners of the site;
- (4) A current site-specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within ½ mile of the site;
- (5) A site-specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (6) A description of the source, type, and quantity of sewage sludge to be distributed, including any previous treatment the Class A sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (7) Detailed engineering plans and specifications including the design capacity calculation for the installation, material alteration, or material extension of the distribution facility prepared, signed, and bearing the seal of a registered professional engineer;
 - (8) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be distributed;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the distributed sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
 - (9) A proposed ground and surface water monitoring plan that:
 - (a) Includes a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site;
 - (b) Specifies the location and type of monitoring stations;
 - (c) Specifies the method of construction of monitoring wells; and
- (d) Provides that monitoring wells shall be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - (10) An assessment of the potential environmental impact of the distribution facility;
 - (11) Documentation showing the maximum seasonal high groundwater elevation;
- (12) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and

- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment;
 - (13) A label shall accompany the distributed sewage sludge, which:
- (a) Includes identification of the product as Class A sewage sludge or biosolids, sources of the sewage sludge, instructions for proper use with specific amounts and type of use (rate of application), warnings, and restrictions necessary for usage or storage;
- (b) Advises the person who is utilizing the product that the authorization to distribute the product does not relieve the person from civil or criminal liabilities or penalties for non-compliance with the Environment Article, Title 9, Annotated Code of Maryland, or any local, State, federal, or other state laws or regulations; and
- (c) Includes any specific restrictions, warnings, or cautionary statement that the Department requires to be included on the label;
- (14) A description of the distribution system to include an identification of the final utilization of the Class A sewage sludge;
 - (15) Quality control monitoring plans;
- (16) Documentation that the proposed distribution and final utilization of the Class A sewage sludge will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department; and
 - (17) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §A(12) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$750; and
 - (b) For a Renewal Permit Application, \$750.
- (2) For activities which involve transportation of the sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of the sewage sludge in Regulation .23C of this chapter shall be waived.

.34 Distribution Facility - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of a new, modification, or renewal Sewage Sludge Utilization Permit Application to install, materially alter, or materially extend a Class A sewage sludge distribution facility to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the distribution facility is to be installed, materially altered or materially extended; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile from the location where the distribution facility is to be installed, materially altered or materially extended.
- B. When the Department considers the application complete, the Department shall publish a notice of application received and a public hearing. The Department shall conduct the public hearing in accordance with the requirements of the Environment Article, Title 1, Subtitle 6, Annotated Code of Maryland.

.35 Distribution Facility - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 10 years:
- (1) The source, type, and quantity, including documentation of sewage sludge received at and distributed from the distribution facility;
 - (2) The dates of transportation and distribution of Class A sewage sludge to and from the distribution facility;
 - (3) The destinations and final utilization of the Class A sewage sludge;
 - (4) The water quality monitoring results required by the Department;
 - (5) Descriptions of problems encountered and their solutions;
- (6) Other related information regarding the distribution of Class A sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (7) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.36 Distribution Facility - Modifications, Material Alterations or Extensions.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit or materially alter or extend a distribution facility upon request by the permittee if the following conditions are met:

- (1) The permittee submits to the Department six completed copies of the Sewage Sludge Utilization Permit application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification, material alteration or extension, and an explanation as to why it is needed;
 - (2) The permittee shall pay the Department a nonrefundable fee in accordance with the following schedule:
 - (a) For a Modification, \$40, and
 - (b) For a Material Alteration or Extension, \$130; and
- (3) The Department determines that the proposed modification, material alteration, or extension is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are modifications to a Sewage Sludge Utilization Permit for a Class A sewage sludge distribution facility:
 - (1) Modification to the source or type of Class A sewage sludge authorized for distribution from the distribution facility;
 - (2) Modification to the distribution facility's operation plan;
 - (3) Modification to the distribution facility's water quality monitoring plans;
 - (4) Modification to the closure and post-closure plan;
- (5) Modification to the distribution facility's days and hours of operation provided the days and hours of operation were not an issue of concern during the public hearing process;
 - (6) The permittee's name change;
 - (7) Modifications to the approved label; or
 - (8) Other modifications as determined by the Department.
- D. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
 - E. The following are material alterations or extensions to a Class A sewage sludge distribution facility:
 - (1) Materially altering or extending the size of the structures or buildings used to distribute Class A sewage sludge;
- (2) Change to the distribution facility's days or hours of operation if the days and hours of operation were an issue of concern during the public hearing process; or
 - (3) Other material alterations or extensions as determined by the Department.
- F. If the Department considers an application for material alteration or extension complete and acceptable, the Department may process the application in accordance with the requirements under Regulation .34 of this chapter.
- G. If the Department modifies a Sewage Sludge Utilization Permit or materially alters or extends a distribution facility, the Department shall send notice of the modification, material alteration or extension to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- H. The Department may deny an application to modify a Sewage Sludge Utilization Permit or materially alter or extend a distribution facility if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.37 Agricultural Land.

- A. The Department may issue a Sewage Sludge Utilization Permit to apply sewage sludge on agricultural land if the following requirements are met:
- (1) The sewage sludge has been classified by the Department as Class B sewage sludge and meets the applicable vector attraction reduction requirements in 40 CFR § 503.33;
- (2) The concentration of each constituent in the sewage sludge is less than or equal to the ceiling concentration for the constituent listed in Table 1 of Regulation .05B(1) of this chapter;
 - (3) The sewage sludge meets one of the following criteria:
- (a) No constituent in the sewage sludge exceeds the cumulative constituent loading rate for the constituent listed in Table 2 of Regulation .05B(2) of this chapter; or
- (b) No constituent in the sewage sludge exceeds the constituent concentration for the constituent listed in Table 3 of Regulation .05B(3) of this chapter;
- (4) A nutrient management plan is prepared for the site by a certified and licensed nutrient management consultant or a certified operator in accordance with the requirements of COMAR 15.20.04, and is in compliance with COMAR 15.20.07 and 15.20.08; and
- (5) Expected crop yields submitted to the Department as part of the Sewage Sludge Utilization Permit Application are determined to be in accordance with the requirements in COMAR 15.20.08.
- B. The Department may restrict or apply special provisions for the land application of sewage sludge on fields that are adjacent to or bordering homes, schools, places of worship, hospitals, legal boundaries of incorporated municipalities, or other locations of concern as determined by the Department.
 - C. Sewage sludge may not be applied on agricultural land unless:
 - (1) The sewage sludge has been classified by the Department as Class A sewage sludge; or
- (2) The sewage sludge has been classified by the Department as Class B sewage sludge and the requirements of §D of this regulation are met.
 - D. Class B sewage sludge may be applied on agricultural land only if the following requirements are met:
 - (1) The requirements of $\S A(1)$ -(5) of this regulation;
 - (2) Requirements concerning minimum buffer distances, as follows:

(a) Class B sewage sludge may not be applied closer than the minimum buffer distance to a feature of concern identified in Table 1 of SD(2)(b) of this regulation, unless the Department establishes an alternate minimum buffer distance in accordance with SD(2)(b) of this regulation.

(b) Table 1 – Minimum Buffer Distances

| Feature of Concern | Minimum Buffer Distance | | |
|----------------------------|--------------------------------------|---------------------------------------|--|
| | Surface Application of Sewage Sludge | Injection of Sewage Sludge or Surface | |
| | with no Incorporation | Application of Sewage Sludge with | |
| | - | Incorporation | |
| Bedrock | 20 inches | 20 inches | |
| Bedrock outcrops | 50 feet | 25 feet | |
| Field ditches | 10 feet | 10 feet | |
| Incorporated municipality | 1,000 feet | 400 feet | |
| boundary lines | - | | |
| Occupied off-site dwelling | 200 feet | 100 feet | |
| Occupied on-site dwelling | 200 feet | 100 feet | |
| Property lines | 50 feet | 25 feet | |
| Public roads | 25 feet | 15 feet | |
| Surface waters unless | 100 feet | 35 feet | |
| Equivalent Best Management | | | |
| Practices are installed | | | |
| Water table | 20 inches | 20 inches | |
| Wells, non-potable | 25 feet | 25 feet | |
| Wells, potable | 100 feet | 100 feet | |

Agency Note: Data on depth to the water table and depth to bedrock may be accessed from the USDA-NRCS Soil Data Mart or through the Web Soil Survey. Web Soil Survey provides soil data and information produced by the National Cooperative Soil Survey, which is operated by USDA-NRCS. In cases where a soil survey publication exists, but data has not been posted to the Soil Data Mart, the published soil survey is considered the official data.

- (c) Sewage sludge may be land applied even though soil survey results indicate that the depth to bedrock or the depth to the water table is less than 20 inches if it can be demonstrated that field conditions are in compliance with the 20-inch buffer distance requirements for these features of concern by:
 - (i) Using a soil test pit or an auger boring for each applicable soil mapping unit; and
 - (ii) Demonstrating compliance within 7 days before land application;
- (d) For agricultural land located within a critical area as identified by the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays, sewage sludge:
- (i) May not be land applied within 100 feet of the Mean High Water Line of tidal waters or the landward edge of tidal wetlands; and
- (ii) May only be subsurface injected or incorporated between 101 and 1,000 feet of the Mean High Water Line of tidal waters or the landward edge of tidal wetlands;
- (e) Except as otherwise prohibited by law, the Department may modify the minimum buffer distances established in \$D(2)(b) of this regulation as follows:
- (i) The Department may increase or decrease the minimum buffer distance associated with any feature of concern identified in Table 1 of SD(2)(b) of this regulation;
- (ii) The Department may establish minimum buffer distances for features of concern not identified in Table 1 of \$D(2)(b) of this regulation, such as particular categories of land use; and
- (iii) In modifying the minimum buffer distances, the Department may consider the sewage sludge application method, the application rate, adjacent land use, land slopes, vegetated filter strip, the type and condition of any surrounding bodies of water, and any other factor considered relevant by the Department;
 - (3) Bulk sewage sludge may not be applied to a public contact site;
 - (4) Requirements concerning slope, as follows:
- (a) Unless modified by the Department in accordance with SD(4)(b) of this regulation, the following requirements concerning slope shall be met:
 - $(i) \ The \ sewage \ sludge \ may \ not \ be \ applied \ on \ a \ slope \ that \ is \ greater \ than \ 15 \ percent;$
- (ii) Liquid sewage sludge which is surface applied may only be applied on a slope that is greater than 6 percent in accordance with COMAR 15.20.08; and
 - (iii) Liquid sewage sludge may be subsurface injected on a slope that is up to 15 percent; and
- (b) The limits of \$D(4)(a) of this regulation may be modified by the Department, but only if the Department determines that sediment and erosion controls or other features at a site, or both, are sufficient to protect the public health and the environment:
 - (5) Sewage sludge may not be applied when:
 - (a) The soil is saturated;
 - $(b) {\it The ground is flooded, ponded, frozen or covered with snow; or }$

- (c) Weather conditions prevent compliance with the requirement to incorporate the sewage sludge into the soil;
- (6) The timing of sewage sludge land application shall be in accordance with the requirements of COMAR 15.20.08;
- (7) Areas where sewage sludge is to be applied shall be clearly marked with stakes or other markers before the application of the sewage sludge;
 - (8) Sites shall be contour plowed, if required by the Department;
- (9) At the time of land application of sewage sludge on a permitted privately owned site, if required by the Department, the permittee posts signs that meet the following requirements:
 - (a) The location, size, content, and number of the signs are as specified by the Department;
- (b) The signs are legible, placed in conspicuous areas on the boundaries of the permitted fields, and visible from contiguous public roads and properties with occupied dwellings;
- (c) The locations of the signs and time period during which the signs are required to be posted are not in violation of any local or State laws or regulations;
- (d) The signs are composed of weather resistant materials and sturdily mounted so as to be capable of remaining in place for 30 days after completion of the land application of sewage sludge on the permitted site; and
- (e) The signs are maintained, promptly repaired, or replaced if they are removed or damaged so as to render any of the information illegible;
- (10) For a permitted publically owned site, the permittee is in compliance with sign requirements that will be determined by the Department based on site-specific information;
- (11) The sewage sludge shall be applied in a manner approved by the Department using conventional agricultural equipment, such as manure spreaders, spray equipment, or other applicators, or by commercial equipment specifically designed for sewage sludge application on agricultural land, with all conventional agricultural and commercial equipment used for agricultural land application required to be calibrated in accordance with the manufacturer's recommendations before land application of the sewage sludge begins;
- (12) The sewage sludge applied shall be incorporated into the soil by the end of each working day unless incorporation is excepted by Section 1D of the Maryland Nutrient Management Manual incorporated by reference into COMAR 15.20.07.02;
- (13) When sewage sludge is applied to forage grasses, the grass shall be cropped or closely grazed immediately before sewage sludge land application;
- (14) Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge;
- (15) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge;
- (16) Animals whose products are consumed by humans shall not be allowed to graze on the land for 30 days after application of sewage sludge, and the growth of crops for direct human consumption is prohibited for 3 years after land application of sewage sludge;
 - (17) Food crops harvested off sewage sludge land application sites shall meet the following requirements:
- (a) Food crops with harvested parts that touch the sewage sludge soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;
- (b) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer before incorporation in the soil;
- (c) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months before incorporation into the soil;
 - (d) Feed crops or fiber crops shall not be harvested for 30 days after application of sewage sludge; and
- (e) Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of sewage sludge when the harvested turf is placed on either a lawn or land with a high potential for public exposure, unless otherwise specified by the Department; and
- (18) Trucks, tires and vehicle undercarriages shall be cleaned on the site to prevent drag-out of soil or sewage sludge onto public roads.

.38 Agricultural Land - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where sewage sludge is to be applied on agricultural land, subject to the following:.
 - (1) Adjacent properties owned and operated by separate persons shall be considered as separate sites; and
- (2) Non-adjacent parcels of land that are owned or operated by the same person, as evidenced by a farm plan or other documentation acceptable to the Department, may be considered a single site if the distance between the parcels is 3 miles or less.
- B. A person shall submit to the Department seven completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- C. The Sewage Sludge Utilization Permit Application to apply sewage sludge on agricultural land shall include seven completed copies of the following forms provided by the Department and signed and dated not more than 6 months before the receipt of the Sewage Sludge Utilization Permit Application by the Department:
 - (1) An owner's consent form completed and signed by the legal owners of the site where sewage sludge is to be applied;

- (2) A site information form completed and signed by the person applying for a permit and the farmer or operator of the site where sewage sludge is to be applied; and
- (3) A completed manganese advisory form signed by the person applying for the permit, the farmer or operator and the legal owners of the site where sewage sludge is to be applied if the site is located on the Coastal Plain and the sewage sludge to be applied is limed sewage sludge.
- D. The Sewage Sludge Utilization Permit Application to apply sewage sludge on agricultural land shall include seven completed copies of the following information:
- (1) The sources and types of sewage sludge to be applied, including any treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (2) A current site specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, the property boundary lines, field boundaries, and the proximity of the site to major roads in the area and any roads on the site;
 - (3) A current site plan that includes:
 - (a) The location of property boundary lines and field boundaries;
 - (b) The exact acreage where sewage sludge is to be applied;
 - (c) The location of all buffer distances;
 - (d) The location of any residences or buildings on site or within ½ mile of the site;
- (e) An inventory of any domestic, commercial, or municipal wells on site and within ½ mile of the property boundary lines, including water level for the wells if available;
 - (f) The location of any on site stream, spring, seep, pond, drainage ditch or other body of water;
 - (g) The location of any on site area with a slope of 15 percent or greater;
 - (h) The location of any on site bedrock outcropping;
 - (i) The location of any on site depression area;
 - (j) The surrounding land uses;
 - (k) Other features as determined by the Department; and
 - (l) A legend identifying the key features on the site plan;
- (4) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge not more than 6 months before the receipt of the Sewage Sludge Utilization Permit Application by the Department, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen;
 - (ii) The dry weight concentration of iron if the project involves the application of sewage sludge on pasture land;
- (iii) The dry weight concentration of Calcium Carbonate (CaCO3) or equivalent if the sewage sludge to be applied is a lime stabilized or lime amended sewage sludge; and
- (iv) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health, safety, and the environment;
- (5) If required by the Department, the results of a laboratory analysis of a representative soil sample, which was obtained from each field not more than 6 months before the receipt of the Sewage Sludge Utilization Permit Application by the Department subject to the following:
- (a) All soil samples shall be collected from within the field that would receive sewage sludge in accordance with the requirements in COMAR 15.20.08;
- (b) Soil samples shall not be collected from buffer distances, restricted areas, or other areas that are not subject to the land application of sewage sludge;
- (c) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (d) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (e) The analytical results include, at a minimum:
 - (i) pH, cation exchange capacity, and soil texture;
- (ii) If metal analysis has not been previously performed on the field, total cadmium, total copper, total lead, total nickel, total zinc, and total phosphorus; and
- (iii) Any other constituents in the soil that the Department determines necessary to adequately assess the potential impact of the project on public health, safety, and the environment;

- (6) A soil map and soil map units from the USDA-NRCS identifying the site's criteria for restricted and potentially restricted soils, the locations of the soil test pits and auger borings required in SD(7) of this regulation, and the location of cation exchange capacity tests and pH testing of the soil:
- (7) The results of one soil test pit or auger boring to a depth of at least 36 inches for each soil mapping unit present on the USDA-NRCS county soils map but not less than one soil test pit or auger boring every 5 acres to identify the texture of the soils encountered and the depth to groundwater;
- (8) Calculations of the lime required to raise the soil pH level to 6.0 and to maintain it at a minimum level of 6.0 over the life of the Sewage Sludge Utilization Permit;
 - (9) A tax map showing the property line, owner, acreage, and liber and folio numbers;
- (10) A USDA-NRCS county soil survey map or a portion thereof clearly identifying the sites of the proposed sewage sludge land application including a description of each soil map unit found on the site;
 - (11) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, recordkeeping, and reporting of the sewage sludge to be utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the treated sewage sludge;
 - (f) Contingency or emergency plans to manage equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
- (12) A list of type of crops or cover species to be grown, which indicate the crop yields as required in Regulation .37A(5) of this chapter;
 - (13) A nutrient management plan that:
- (a) Has been prepared by a certified and licensed nutrient management consultant or a certified operator in accordance with the requirements of COMAR 15.20.04; and
 - (b) Is in compliance with COMAR 15.20.07 and 15.20.08; and
 - (14) Other information that may be requested by the Department.
- E. The Department may reject an analysis of sewage sludge or a soil sample submitted in accordance with §\$D(4) and (5) of this regulation and require retesting and resubmittal if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - F. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$175; and
 - (b) For a Renewal Permit Application, \$175.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.39 Agricultural Land - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of the application to apply sewage sludge on agricultural land to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge is to be applied;
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where sewage sludge is to be applied; and
 - (3) The local health official.
- B. Within 10 calendar days of receipt of the application, the chairman of the legislative body or the elected executive of the county or municipal corporation where the sewage sludge is to be applied on agricultural land may request that the Department conduct a public information meeting.
- C. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the sewage sludge is to be applied on agricultural land receives the application regarding the proposed project.
- D. If the Department receives a request for a public information meeting in accordance with §B of this regulation, the Department shall conduct a public information meeting in the affected subdivision. The person applying for the Sewage Sludge Utilization Permit shall be notified and be given the opportunity to present information at the public information meeting.
- E. The Department may consolidate public information meetings within a county for more than one Sewage Sludge Utilization Permit Application.
- F. After the Department has established the date, location, and time for a public information meeting, the Department shall publish a notice of the receipt of the permit application and of the public information meeting, at least 14 calendar days before the public information meeting, in a newspaper of general circulation in the area that the Department determines may be directly

affected by the project. The public notice shall briefly describe the proposed project and state the date, time, and location established by the Department for the public information meeting.

- G. At least 7 calendar days before the date of the public information meeting, the person applying for the Sewage Sludge Utilization Permit shall provide copies, by certified mail or other means of delivery acceptable to the Department, of the Department's notice for the public information meeting to owners of all real property within 1,000 feet of the boundaries of the site where the sewage sludge is to be applied on agricultural land.
- H. The person applying for the Sewage Sludge Utilization Permit shall submit to the Department copies of the documentation of the public information meeting notices as proof of notification to all owners of real properties within 1,000 feet of the boundaries of the site where the sewage sludge is to be applied.

.40 Agricultural Land - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
- (1) The source, type, and quantity, including documentation of sewage sludge received and applied on the agricultural land:
 - (2) The dates of land application of sewage sludge;
 - (3) The number and size of the fields where sewage sludge was applied on agricultural land;
 - (4) Cumulative and annual constituent loading rates including plant-available nitrogen, P_2O_5 and K_2O_7 :
 - (5) Descriptions of problems encountered and their solutions;
- (6) Other related information regarding the land application of sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (7) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.
- C. Prior to land application of sewage sludge on the permitted site, the permittee shall provide the farmer and operator of the site where the sewage sludge is to be land applied with a copy of the nutrient management plan for the site for the year of application as required in Regulation .38D(13) of this chapter.
- D. Within 30 days of land application of sewage sludge, the permittee shall provide the farmer or operator and the legal owner of the site where sewage sludge was applied with a copy of the report required by §B of this regulation and a site-specific map with a minimum scale of 1 inch = 200 feet showing the areal extent of the site and the exact acreage where sewage sludge was applied.

.41 Agricultural Land - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
- $C.\ The\ following\ are\ minor\ modifications\ to\ a\ Sewage\ Sludge\ Utilization\ Permit\ for\ agricultural\ land\ application\ of\ sewage\ sludge:$
- (1) Addition of sewage sludge from the same approved source that has received a different treatment than the approved sewage sludge;
 - (2) Modification to the site's operation plan;
 - (3) Addition of a crop or cover crop;
 - (4) Adjustment of approved maximum nitrogen per acre requirements for a different crop or cover crop;
 - (5) The permittee's name change; or
 - (6) Other modification as determined by the Department.
- D. The following are major modifications to a Sewage Sludge Utilization Permit for agricultural land application of sewage sludge:
 - (1) Addition of a new sewage sludge source or type to be applied;
 - (2) Increase in the size of the permitted acreage; or
 - (3) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.

- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.42 Marginal land.

- A. The Department may issue a Sewage Sludge Utilization Permit to apply sewage sludge on a marginal land at rates up to 50 dry tons per acre if the following requirements are met:
- (1) The sewage sludge has been classified by the Department as Class B sewage sludge and meets the applicable vector attraction reduction requirements in 40 CFR § 503.33;
- (2) The concentration of each constituent in the sewage sludge is less than or equal to the ceiling concentration for the constituent listed in Table 1 of Regulation .05B(1) of this chapter;
 - (3) The sewage sludge meets one of the following criteria:
- (a) No constituent in the sewage sludge exceeds the cumulative constituent loading rate for the constituent listed in Table 2 of Regulation .05B(2) of this chapter; or
- (b) No constituent in the sewage sludge exceeds the constituent concentration for the constituent listed in Table 3 of Regulation .05B(3) of this chapter;
 - B. Sewage sludge may not be applied on a marginal land unless:
 - (1) The sewage sludge has been classified by the Department as Class A sewage sludge; or
- (2) The sewage sludge has been classified by the Department as Class B sewage sludge and the requirements of §C of this regulation are met.
 - C. Class B sewage sludge may be applied on a marginal land only if the following requirements are met:
 - (1) The requirements of A(1)-(3) of this regulation;
 - (2) Bulk sewage sludge may not be applied to a public contact site;
- (3) The sewage sludge may not be applied within a vertical distance of 2 feet of the maximum expected high groundwater level;
 - (4) Minimum buffer distances are maintained in accordance with the requirements in Regulation .37D(2) of this chapter;
- (5) Areas where sewage sludge is to be applied shall be clearly marked with stakes or other markers before the application of the sewage sludge;
- (6) The sewage sludge shall be spread evenly over the site using conventional earth moving equipment, agricultural equipment, or commercial equipment specifically designed for application of sewage sludge;
 - (7) The sewage sludge applied shall be incorporated into the soil by the end of each working day;
- (8) A crop that is not grown for direct human consumption shall be planted after sewage sludge application during the next available planting season in accordance with a plan approved by the Department;
- (9) Application of sewage sludge shall cease when weather or site conditions or odors prevent compliance with an operation plan approved by the Department;
- (10) At the time of application of sewage sludge on a permitted privately owned site, if required to do so by the Department, the permittee posts signs that meet the following requirements:
 - (a) The location, size, content, and number of the signs are as specified by the Department;
- (b) The signs are legible, placed in conspicuous areas on the boundaries of the permitted fields, and visible from contiguous public roads and properties with occupied dwellings;
- (c) The locations of the signs and time period during which the signs are required to be posted are not in violation of any local or State laws or regulations;
- (d) The signs are composed of weather resistant materials and sturdily mounted so as to be capable of remaining in place for 30 days after completion of the land application of sewage sludge on the permitted site; and
- (e) The signs are maintained, promptly repaired, or replaced if they are removed or damaged so as to render any of the information illegible;
- (11) For a permitted publically owned site, the permittee is in compliance with sign requirements that will be determined by the Department based on site-specific information;
- (12) Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge;
- (13) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge;
- (14) Animals whose products are consumed by humans shall not be allowed to graze on the land for 30 days after application of sewage sludge, and the growth of crops for direct human consumption is prohibited for 3 years after the application of sewage sludge;
- (15) Trucks, tires and vehicle undercarriages shall be cleaned on the site to prevent drag-out of sewage sludge or soil onto public roads; and
- (16) The Department may impose other restrictions on the application project necessary to minimize the risk to the environment or public health, safety, or welfare as may be determined by the Department;
- D. The Department may issue a Sewage Sludge Utilization Permit to apply sewage sludge on a marginal land at rates greater than 50 dry tons per acre if the following conditions are met:

- (1) The requirements of §§A—C of this regulation are met;
- (2) The applicant demonstrates to the Department that the high application rate is reasonable due to site-specific conditions or sewage sludge characteristics;
 - (3) The applicant submits a report detailing the potential environmental impacts of the project, subject to the following:
- (a) The report shall consider, at a minimum, the potential impacts of the project on soils, groundwater, surfacewater, adjacent properties, and future land use; and
- (b) The report shall contain the results of all on-site tests and laboratory reports necessary to assess the environmental impacts on the project; and
- (4) The Department determines that the requested application rate is reasonable based on the site specific conditions, the characteristics of the sewage sludge, and that the project will not cause an undue risk to the environment or public health, safety, or welfare.

.43 Marginal land - Permit Application Requirements.

- A. A person shall submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where sewage sludge is to be applied on a marginal land, subject to the following:.
 - (1) Adjacent properties owned and operated by separate persons shall be considered as separate sites; and
- (2) Non-adjacent parcels of land that are owned or operated by the same person, as evidenced by a farm plan or other documentation acceptable to the Department, may be considered a single site if the distance between the parcels is 3 miles or less.
- B. A person shall submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department. A person shall also submit a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- C. The Sewage Sludge Utilization Permit Application to apply sewage sludge on a marginal land shall include six completed copies of the owner's consent form provided by the Department completed and signed by the legal owners of the site where sewage sludge is to be applied and dated not more than 6 months before the receipt of the Sewage Sludge Utilization Permit Application by the Department.
- D. The Sewage Sludge Utilization Permit Application to apply sewage sludge on a marginal land shall include six completed copies of the following information:
- (1) The sources and types of sewage sludge to be applied, including any treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (2) A current site specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, the property boundary lines, fields boundaries, and the proximity of the site to major roads in the area and any roads on the site;
 - (3) A current site plan that includes:
 - (a) The location of property boundary lines and field boundaries;
 - (b) The exact acreage where sewage sludge is to be applied;
 - (c) The location of all buffer distances;
 - (d) The location of any residences or buildings on site or within ½ mile of the site;
- (e) An inventory of any domestic, commercial, or municipal wells on site and within $\frac{1}{2}$ mile of the property boundary lines, including water level for the wells if available;
 - (f) The location of any on site stream, spring, seep, pond, drainage ditch or other body of water;
 - (g) The location of any on site area with a slope of 15 percent or greater;
 - $(h) {\it The location of any on site bedrock outcropping;}$
 - (i) The location of any on site depression area;
 - (j) The surrounding land uses;
 - (k) The location of cation exchange capacity tests and pH testing of the soil;
 - (l) The location of all soil tests, and the location of all soil borings or test pits on the site;
 - (m) Other features as determined by the Department; and
 - (n) A legend identifying the key features on the site plan;
 - (4) Representative analysis of the pH of the soils;
- (5) A description of representative test borings or test pits on the site including a description of the texture of the soils encountered and the depth to the groundwater;
- (6) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:

- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment;
 - (7) A loading calculation per acre for the sewage sludge proposal;
 - (8) Sediment and erosion control provisions approved by the appropriate approving authority;
- (9) The type of crop to be grown with a calculation of the amount of seed mixture to be used per acre, the proposed optimal soil pH for the type of crop to be grown, and the desired yield of the crop;
 - (10) A tax map showing the property line, owner, acreage, and liber and folio numbers;
 - (11) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, recordkeeping, and reporting of the sewage sludge to be utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the treated sewage sludge;
 - (f) Contingency or emergency plans to manage equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
 - (12) Future use of the site; and
 - (13) Other information that may be requested by the Department.
- E. The Department may reject an analysis of a sewage sludge sample submitted in accordance with \$D(6) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - F. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a Permit Application, \$350; and
 - (b) For a Renewal Permit Application, \$350.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.44 Marginal land - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall:
- (1) Publish a notice of the receipt of the Sewage Sludge Utilization Permit Application in a local newspaper having a substantial circulation in the county where the sewage sludge is to be applied that contains the following information:
 - (a) Name of the person applying for the permit;
 - (b) A brief description of the project;
 - (c) Sources of the sewage sludge;
 - (d) Project type;
 - (e) Location of the site;
 - (f) A list of the persons within the local jurisdiction who have been sent copies of the application;
- (g) A statement of the right of the county or municipal corporation, if applicable, to request a public hearing within 15 calendar days after receipt of the application; and
 - (h) Provisions for examination of the application by interested parties; and
 - (2) Mail a copy of the application and the public notice published in accordance with §A(1) of this regulation to:
- (a) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge is to be applied;
- (b) The chairman of the legislative body and any elected executive of any other county within 1 mile where the sewage sludge is to be applied; and
 - (c) The local health official.
- B. Within 15 calendar days of receipt of the application and the public notice, the chairman of the legislative body or any elected executive of the county or municipal corporation where the sewage sludge is to be applied may request in writing that the Department conduct a public hearing.
- C. If the Department receives a request for a public hearing in accordance with §B of this regulation, or if the Department determines that a public hearing would serve the public interest, the Department shall hold a public hearing in the affected subdivision where the sewage sludge is to be applied. The Department shall notify the person applying for the Sewage Sludge Utilization Permit and shall give the person the opportunity to present information at the public hearing.
- D. After the Department has established the date, place, and time for a public hearing, the Department shall publish a notice of the public hearing in a local newspaper having a substantial circulation in the county where the sewage sludge is to be applied. The notice shall contain the following information:

- (1) A statement of the legal authority and jurisdiction under which the public hearing is to be held, and a reference to the particular statutes and regulations involved;
 - (2) Name of the person applying for the permit;
 - (3) A brief description of the project;
 - (4) Sources of the sewage sludge;
 - (5) Project type;
 - (6) Location of the site;
 - (7) The date, time, and place of the public hearing; and
 - (8) Provisions for examination of the application by interested parties.

.45 Marginal land - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
 - (1) The source, type, and quantity, including documentation of sewage sludge received and applied on the marginal land;
 - (2) The dates of land application of sewage sludge;
 - (3) The number and size of the areas where sewage sludge was applied on marginal land;
 - (4) Cumulative and annual constituent loading rates;
 - (5) Descriptions of problems encountered and their solutions;
- (6) Other related information regarding the land application of sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (7) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.
- C. The permittee shall provide the farmers or operators and the legal owners of the site where sewage sludge was applied with a copy of the report required by §B of this regulation and a site specific map with a minimum scale of linch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site and the exact acreage where sewage sludge was applied.

.46 Marginal land - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed:
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health safety, or welfare.
 - C. The following are minor modifications to a Sewage Sludge Utilization Permit for a marginal land:
- (1) Addition of sewage sludge from the same approved source that has received a different treatment than the approved sewage sludge;
 - (2) Modification to the site's operation plan;
 - (3) Modification to the type of crop to be grown;
 - (4) The permittee's name change; or
 - (5) Other modifications as determined by the Department.
 - D. The following are major modifications to a Sewage Sludge Utilization Permit for a marginal land:
 - (1) Addition of new sewage sludge source or type to be applied;
 - (2) An increase in the size of the permitted acreage; or
 - (3) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit, or for other good cause as determined by the Department.

.47 Energy Generation or Incineration.

- A. The Department may issue a Sewage Sludge Utilization Permit to incinerate sewage sludge at a permitted waste-to-energy facility or an incinerator if:
- (1) The Refuse Disposal Permit holder for the waste-to-energy facility or incinerator submits to the Department a Sewage Sludge Utilization Permit Application for the energy generation or incineration at the permitted waste-to-energy facility or incinerator; and
 - (2) The person applying for a permit demonstrates that the following conditions and requirements will be met:
- (a) The waste-to-energy facility or incinerator shall be designed, constructed, and operated to safely utilize sewage sludge in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (b) The incineration of sewage sludge is to be conducted in accordance with the waste-to-energy facility's or incinerator's approved operating plan and specifications and will not violate any condition of the waste-to-energy facility's or incinerator's Refuse Disposal Permit;
- (c) The waste-to-energy facility or incinerator possesses adequate equipment on-site able to incinerate the sewage sludge;
- (d) The waste-to-energy facility or incinerator is in compliance with all applicable State laws, regulations and guidelines regarding air quality control in the State; and
- (e) The ash residue produced by the process will be disposed in an environmentally safe manner as approved by the Department.
- B. The Department may deny a Sewage Sludge Utilization Permit Application for incineration of sewage sludge at a permitted waste-to-energy facility or an incinerator if the person applying for the permit is currently in, or has a history of, violation of a Refuse Disposal Permit or applicable State laws or regulations.

.48 Energy Generation or Incineration - Permit Application Requirements.

- A. A Refuse Disposal Permit holder seeking a Sewage Sludge Utilization Permit to incinerate sewage sludge shall:
- (1) Submit to the Department a separate Sewage Sludge Utilization Permit Application for each waste-to-energy facility or incinerator where sewage sludge is to be utilized;
- (2) Submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department;
 - (3) Include, as part of the permit application, the information required in §B of this regulation; and
- (4) Submit to the Department a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- B. A person seeking a Sewage Sludge Utilization Permit under §A of this regulation shall include in the permit application the following completed information:
- (1) A description of the source, type, and quantity of sewage sludge to be utilized at the waste-to-energy facility or incinerator, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (2) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
- (3) A detailed description of the methods, processes, and monitoring procedures to be utilized at the waste-to-energy facility or incinerator;
- (4) Methods and procedures for storage and on-site management of processed and unprocessed sewage sludge received at the waste-to-energy facility or the incinerator and utilization of the ash generated by the waste-to-energy facility or the incinerator;
 - (5) An air quality permit issued by the Department in accordance with the requirements in COMAR 26.11.02;
- (6) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and

- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (7) Other information that may be requested by the Department.
- C. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §B(6) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$750; and
 - (b) For a Renewal Permit Application, \$750.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.49 Energy Generation or Incineration - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit to incinerate sewage sludge at a waste-to-energy facility or an incinerator, the Department shall mail a copy of the application to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the waste-to-energy facility or incinerator is located; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where the waste-to-energy facility or incinerator is located.
- B. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the waste-to-energy facility or incinerator is located receives the application regarding the proposed project.

.50 Energy Generation or Incineration - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
- (1) The source, type, and quantity, including documentation of sewage sludge received and utilized at the waste-to-energy facility or incinerator;
 - (2) The time periods during which the waste-to-energy facility or incinerator is inoperational;
- (3) The quantity, including documentation of unincinerated sewage sludge that has been transported from the waste-to-energy facility or incinerator;
 - (4) The dates of transportation of unutilized sewage sludge from the waste-to-energy facility or incinerator;
 - (5) The destinations and final utilization of unutilized sewage sludge;
 - (6) The destinations and final utilization of the ash generated by the waste-to-energy facility or incinerator;
 - (7) Descriptions of problems encountered and their solutions;
- (8) Other related information regarding the utilization of sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (9) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.51 Energy Generation or Incineration - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department. The application shall include a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee shall pay the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40; and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
- C. The following are minor modifications to a Sewage Sludge Utilization Permit to incinerate sewage sludge at a waste-to-energy facility or an incinerator:

- (1) Modification to the waste-to-energy facility's or incinerator's operation plan;
- (2) The permittee's name change; or
- (3) Other modifications as determined by the Department.
- D. The following are major modifications to a Sewage Sludge Utilization Permit to incinerate sewage sludge at a waste-to-energy facility or an incinerator:
 - (1) Modification to the source or type of the sewage sludge received at the waste-to-energy facility or the incinerator; or
 - (2) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms or conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.52 Marketing.

- A. The Department may issue a Sewage Sludge Utilization Permit to market in Maryland sewage sludge generated out-of-State if:
 - (1) The sewage sludge has been classified by the Department as Class A sewage sludge;
- (2) The sewage sludge to be marketed will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
 - (3) The sewage sludge does not contain free liquid, with the presence of free liquid determined by:
- (a) Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (b) A comparable test approved by the Department;
 - (4) The person seeking to market the sewage sludge:
- (a) Submits to the Department a written quality control monitoring plan that will ensure that the Class A sewage sludge to be marketed meets the Department's standards regarding the destruction of primary pathogenic organisms, reduction of vector attraction, and limitations for heavy metals and other constituents; and
 - (b) Receives the Department's approval for the quality control monitoring plan; and
- (5) The permit requires the permittee to implement the quality control monitoring plan as approved under A(4)(b) of this regulation.
- B. The Department may require additional conditions and management practices to market the Class A sewage sludge as it determines necessary.

.53 Marketing - Permit Application Requirements.

- A. A person seeking to market, in Maryland, sewage sludge generated out-of-State shall:
- (1) Submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department;
- (2) Include, as part of the permit application required by §A(1) of this regulation, the information specified in §B of this regulation; and
- (3) Submit to the Department a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- B. A Sewage Sludge Utilization Permit Application submitted under §A of this regulation shall include the following completed information:
- (1) A description of the source, type, and quantity of sewage sludge to be marketed, including any previous treatment the Class A sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
- (2) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge not more than 6 months before the receipt of the Sewage Sludge Utilization Permit Application by the Department, subject to the following requirements:
 - $(a) \ The \ sample \ was \ obtained \ in \ accordance \ with \ the \ requirements \ of \ Regulation \ .06 \ of \ this \ chapter;$
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and

- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment;
 - (3) A detailed operation plan that includes, when applicable:
 - (a) A label that shall accompany the marketed sewage sludge, which:
- (i) Includes identification of the product as Class A sewage sludge or biosolids, sources of the sewage sludge, instructions for proper use with specific amounts and type of use (rate of application), field stockpiling (staging) and storage requirements, odor control measures, warnings, and restrictions necessary for utilization;
- (ii) Advises the person who is utilizing the product that the authorization to market the product does not relieve the person from civil or criminal liabilities or penalties for non-compliance with the Environment Article, Title 9, Annotated Code of Maryland, or any local, State, federal, or other state laws or regulations; and
- (iii) Includes any specific restrictions, warnings, or cautionary statements that the Department requires to be included on the label:
 - (b) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be marketed;
- (c) Methods and procedures to prevent or control odors and other potential nuisance conditions from the sewage sludge to be marketed; and
- (d) A marketing plan and strategy for the sewage sludge with a description of the marketing system to include an identification of the final utilization of the Class A sewage sludge;
 - (4) Quality control monitoring plans;
- (5) Documentation that the marketing and final utilization of the Class A sewage sludge will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department, and it will not cause or likely cause a discharge of constituents to the waters of the State;
- (6) Information on steps that will be taken to comply with any additional conditions and management practices to market the Class A sewage sludge required by the Department under Regulation .52B of this chapter; and
 - (7) Other information that may be requested by the Department.
- B. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §A(2) of this regulation and require retesting and resubmittal if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - C. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$750; and
 - (b) For a Renewal Permit Application, \$750.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.54 Marketing - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and shall maintain all documents used to generate the report for a period of 5 years:
 - (1) The source, type, and quantity, including documentation of Class A sewage sludge received and marketed;
 - (2) The type of treatment the marketed Class A sewage sludge has received;
 - (3) The dates of marketing of Class A sewage sludge;
 - (4) The destination and final utilization of the Class A sewage sludge;
 - (5) Descriptions of problems encountered and their solutions;
- (6) Other related information regarding the marketing of Class A sewage sludge as required by the applicable Sewage Sludge Utilization Permit; and
 - (7) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.55 Marketing - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed:
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:

- (a) For a Minor Modification, \$40; and
- (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
- C. The following are minor modifications to a Sewage Sludge Utilization Permit for marketing of Class A sewage sludge:
 - (1) Modification to the approved label;
 - (2) The permittee's name change; or
 - (3) Other modifications as determined by the Department.
 - D. The following are major modifications to a Sewage Sludge Utilization Permit for marketing of Class A sewage sludge:
 - (1) Modification to the source or type of Class A sewage sludge to be marketed; or
 - (2) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms and conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.56 Research Project.

- A. The Department may issue a Sewage Sludge Utilization permit to utilize sewage sludge as part of a research project.
- B. A research project may be designed to improve current sewage sludge utilization methods, develop new methods, determine the environmental or health effects of sewage sludge utilization, or any other sewage sludge related research project approved by the Department.
 - C. A research project may include:
- (1) The application of sewage sludge at rates which exceed crop nitrogen or phosphorus requirements and the constituent concentration limitations specified in Regulation .37 of this chapter, on land specifically dedicated for research purposes;
- (2) The application of sewage sludge at rates which exceed crop nitrogen or phosphorus requirements and the constituent concentration limitations specified in Regulation .37 of this chapter, on agricultural land specifically dedicated for research purposes with prior approval from the Maryland Department of Agriculture;
- (3) The application of sewage sludge on a marginal land at rates greater than 50 dry tons specified in Regulation .42 of this chapter;
- (4) The utilization of unstabilized sewage sludge if appropriate precautions are taken to assure that viable pathogens do not enter groundwater, surfacewater, or in any way cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department; or
- (5) The growing of crops, such as vegetables and tobacco, if the purpose of the research is to determine the effect of sewage sludge on these crops, and the crops are not allowed to enter the human food chain, or in the case of tobacco, be used in any product.

.57 Research Project - Permit Application Requirements.

- A. A person who intends to utilize sewage sludge as part of a research project as provided in Regulation .56 of this chapter shall:
- (1) Submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge research project is to be located;
- (2) Submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department;
- $(3) \ Include, \ as \ part \ of \ the \ Sewage \ Sludge \ Utilization \ Permit \ Application, \ the \ information \ required \ in \ \S B \ of \ this \ regulation; \ and$
- (4) Submit to the Department a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- B. A Sewage Sludge Utilization Permit Application submitted under §A of this regulation shall include the following completed information:
 - (1) A description of the proposed project;
 - (2) A written authorization signed by the legal owners of the site where the project is to be located;
- (3) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed project structures, the location of any wells on the site and within $\frac{1}{2}$ mile of the site, any residences or buildings on site and within $\frac{1}{2}$ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses;
- (4) Tax maps and liber and folio numbers for the parcels of land on which the project will be located and the names of the legal owners of the site;
- (5) A current site-specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within ½ mile of the site;

- (6) A site-specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (7) A description of the source, type, and quantity of sewage sludge to be utilized, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (8) A detailed description of the utilization methods, processes, and monitoring procedures;
- (9) Detailed engineering plans and specifications for the project prepared, signed, and bearing the seal of a registered professional engineer;
 - (10) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
 - (11) Quality control monitoring plans;
 - (12) Information on protection of water resources, including:
 - (a) A detailed discussion of the methods to be used for the protection of ground and surface waters of the State; and
- (b) If required by the Department, a proposed ground and surface water monitoring plan that meets the following requirements:
- (i) The plan shall include a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site, including the location and type of monitoring stations, and the method of construction of monitoring wells; and
- (ii) The plan shall provide for monitoring wells to be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - (13) An assessment of the potential environmental impact of the project;
- (14) A nutrient management plan prepared by a certified nutrient management consultant or a certified operator in accordance with the requirements of COMAR 15.20.04, and in compliance with COMAR 15.20.07 and 15.20.08;
- (15) Documentation that the proposed utilization of the sewage sludge will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (16) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - $(a) \ The \ sample \ was \ obtained \ in \ accordance \ with \ the \ requirements \ of \ Regulation \ .06 \ of \ this \ chapter;$
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen, and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (17) Other information that may be requested by the Department.
- C. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §B(16) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - D. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$25; and
 - (b) For a Renewal Permit Application, \$25.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.58 Research Project - Public and Local Government Participation Requirements for a Permit Application.

A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of the application for a research project to utilize sewage sludge to:

- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the research project is to be located;
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where the research project is to be located; and
 - (3) The local health official if the research project includes the application of sewage sludge.
- B. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the research project to utilize sewage sludge is to be located receives the application regarding the proposed project.

.59 Research Project - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
 - (1) The source, type, and quantity, including documentation of sewage sludge received and utilized;
 - (2) The results of the project;
- (3) The quantity, including documentation and final utilization of unutilized sewage sludge transported from the facility or site;
 - (4) The dates of transportation of unutilized sewage sludge;
 - (5) Descriptions of problems encountered and their solutions;
 - (6) The time periods during which the project is inoperational;
 - (7) Other related information regarding the project as required by the applicable Sewage Sludge Utilization Permit; and
 - (8) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.60 Research Project - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
 - C. The following are minor modifications to a Sewage Sludge Utilization Permit for a research project:
 - (1) Modification to the project's operation plan;
 - (2) Modification to the project's water quality monitoring plans;
 - (3) Modification to the project's odor control procedures;
 - (4) Modification to the days or hours of operation;
 - $(5) {\it The permittee's name change; or }$
 - (6) Other modifications as determined by the Department.
 - D. The following are major modifications to a Sewage Sludge Utilization Permit for a research project:
 - (1) Modification to the source or type of the sewage sludge utilized;
 - (2) Modification to the utilization method;
 - (3) Modification to the engineering plans and specifications, if applicable; or
 - (4) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms and conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.61 Innovative Project.

The Department may issue a Sewage Sludge Utilization Permit for an innovative project to utilize sewage sludge in deep rows, brickmaking, resource recovery projects, as fuel, and in other projects, if the sewage sludge is utilized in a manner that will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department.

.62 Innovative Project - Permit Application Requirements.

- A. A person who intends to use sewage sludge in an innovative project as described in Regulation .61 of this chapter shall:
- (1) Submit to the Department a separate Sewage Sludge Utilization Permit Application for each site where a sewage sludge innovative project is to be located;
- (2) Submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department;
- (3) Include, as part of the Sewage Sludge Utilization Permit Application required by A(1) of this regulation, the information required by B of this regulation; and
- (4) Submit to the Department a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- B. The Sludge Utilization Permit Application submitted under §A of this regulation shall include the following completed information:
 - (1) A description of the proposed project;
 - (2) A written authorization signed by the legal owners of the site where the project is to be located;
- (3) A current site plan designating the property boundary lines, the exact acreage of the site, existing and proposed project structures, the location of any wells on the site and within $\frac{1}{2}$ mile of the site, any residences or buildings on site and within $\frac{1}{2}$ mile of the site, the proximity of the site to major roads in the area and any roads on the site, and surrounding land uses;
- (4) Tax maps and liber and folio numbers for the parcels of land on which the project will be located and the names of the legal owners of the site;
- (5) A current site-specific topographic map with a minimum scale of 1 inch = 200 feet and a contour interval of not more than 5 feet showing the areal extent of the site, and the location of any stream, spring, or seep within ½ mile of the site;
- (6) A site-specific geologic and hydrogeologic report as required by the Department, including a hydrologic map showing the location of the 100-year flood plain, if applicable, and the location of all soil tests, soil borings and test pits on the site;
- (7) A description of the source, type, and quantity of sewage sludge to be utilized, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (8) A detailed description of the utilization methods, processes, and monitoring procedures;
- (9) Detailed engineering plans and specifications for the project prepared, signed, and bearing the seal of a registered professional engineer;
 - (10) A detailed operation plan that includes, when applicable:
 - (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing the sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events; and
 - (g) Methods and procedures for restricting public access to the site;
 - (11) Quality control monitoring plans;
 - (12) Information on protection of water resources, including:
 - (a) A detailed discussion of the methods to be used for the protection of ground and surface waters of the State; and
- (b) If required by the Department, a proposed ground and surface water monitoring plan that meets the following requirements:
- (i) The plan shall include a system for routinely monitoring the quality of waters of the State at, surrounding, and beneath the site, including the location and type of monitoring stations, and the method of construction of monitoring wells; and
- (ii) The plan shall provide for monitoring wells to be installed by a State licensed well driller in accordance with COMAR 26.04.04;
 - (13) An assessment of the potential environmental impact of the project;
- (14) A nutrient management plan prepared by a certified nutrient management consultant or a certified operator in accordance with the requirements of COMAR 15.20.04, and in compliance with COMAR 15.20.07 and 15.20.08;
- (15) Documentation that the proposed utilization of the sewage sludge will not cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
- (16) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and

- (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (17) Other information that may be requested by the Department.
- C. The Department may reject an analysis of a sewage sludge sample submitted in accordance with §B(16) of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - D. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$750; and
 - (b) For a Renewal Permit Application, \$750.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.63 Innovative Project - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of the application for an innovative project to utilize sewage sludge to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the innovative project is to be located:
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where the innovative project is to be located; and
 - (3) The local health official if the innovative project includes the application of sewage sludge.
- B. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the innovative project to utilize sewage sludge is to be located receives the application regarding the proposed project.

.64 Innovative Project - Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
 - (1) The source, type, and quantity, including documentation of sewage sludge received and utilized;
 - (2) The results of the project;
- (3) The quantity, including documentation and final utilization of unutilized sewage sludge transported from the facility or site:
 - (4) The dates of transportation of unutilized sewage sludge;
 - (5) Descriptions of problems encountered and their solutions;
 - (6) The time periods during which the project is inoperational;
 - (7) Other related information regarding the project as required by the applicable Sewage Sludge Utilization Permit; and
 - (8) Other information that may be requested by the Department.
- B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.65 Innovative Project - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department. The application shall include a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.

- C. The following are minor modifications to a Sewage Sludge Utilization Permit for an innovative project:
 - (1) Modification to the project's operation plan;
 - (2) Modification to the project's water quality monitoring plans;
 - (3) Modification to the project's odor control procedures;
 - (4) Modification to the days or hours of operation;
 - (5) The permittee's name change; or
 - (6) Other modifications as determined by the Department.
- D. The following are major modifications to a Sewage Sludge Utilization Permit for an innovative project:
 - (1) Modification to the source or type of the sewage sludge utilized;
 - (2) Modification to the utilization method;
 - (3) Modification to the engineering plans and specifications, if applicable; or
 - (4) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms and conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.66 Disposal or Alternative Utilization at a Municipal Landfill.

- A. The Department may issue a Sewage Sludge Utilization Permit for the disposal or alternative utilization of sewage sludge at a municipal landfill if:
- (1) The Refuse Disposal Permit holder for the municipal landfill submits to the Department a Sewage Sludge Utilization Permit Application for the disposal or alternative utilization of sewage sludge at the permitted municipal landfill;
- (2) The proposed sewage sludge disposal or alternative utilization is to be conducted in accordance with the municipal landfill's approved operating plan and specifications and does not violate any condition of the municipal landfill's Refuse Disposal Permit;
 - (3) The municipal landfill possesses adequate equipment on-site able to dispose or alternatively utilize the sewage sludge;
 - (4) The sewage sludge meets the following requirements with respect to free liquid:
- (a) Except as provided in \$A(4)(b) of this regulation, sewage sludge accepted for disposal or alternative utilization may not contain free liquids;
- (b) If sewage sludge accepted for disposal or alternative utilization contains free liquid, the sewage sludge may be mixed with soil, sawdust, or both, and the resulting mixture may be disposed or alternatively utilized at the municipal landfill as specified in the Sewage Sludge Utilization Permit if the mixture is tested and does not contain free liquid; and
 - (c) For the purposes of A(4)(a) and (b) of this regulation, the presence of free liquid is determined by:
- (i) Application of Method 9095B (Paint Filter Liquids Test) as outlined in the most recent edition of the USEPA Publication SW-846 "Test Methods for Evaluating Solid Waste", which is incorporated by reference in COMAR 26.13.01.05A(4); or
 - (ii) A comparable test approved by the Department; and
- (5) When alternatively utilized, the sewage sludge shall meet the requirements for alternative cover material established by the Department.
- B. The Department may deny a Sewage Sludge Utilization Permit Application for disposal or alternative utilization of sewage sludge at a permitted municipal landfill if the person applying for the permit is currently in, or has a history of, violation of its Refuse Disposal Permit or other applicable State laws or regulations.

.67 Disposal or Alternative Utilization at a Municipal Landfill - Permit Application Requirements.

- A. A Refuse Disposal Permit holder who intends to dispose or alternatively utilize sewage sludge shall:
- (1) Submit to the Department a separate Sewage Sludge Utilization Permit Application for each municipal landfill where sewage sludge is to be disposed or alternatively utilized;
- (2) Submit to the Department six completed copies of the Sewage Sludge Utilization Permit Application on a form provided by the Department;
- (3) Include, as part of the Sewage Sludge Utilization Permit Application, the information required by §B of this regulation; and
- (4) Submit to the Department a performance bond, liability insurance, or other form of security required under the provisions of Regulation .10 of this chapter.
- B. A Sewage Sludge Utilization Permit Application submitted under §A of this regulation shall include the following completed information:
- (1) A description of the source, type, and quantity of sewage sludge to be disposed or alternatively utilized at the municipal landfill, including any previous treatment the sewage sludge has received, such as anaerobic digestion, aerobic digestion, lime stabilization, composting, or dewatering;
 - (2) A detailed operation plan that includes, when applicable:

- (a) Procedures for sampling, on-site recordkeeping, and reporting of the sewage sludge to be disposed or alternatively utilized;
 - (b) Types of equipment to be used for collection, management, washdown, and other operations;
 - (c) Days and hours of operation;
 - (d) Methods and procedures to prevent or control odors and other potential nuisance conditions at the site;
 - (e) Methods and procedures for utilizing sewage sludge;
 - (f) Contingency or emergency plans to manage fires, equipment breakdown, spills, and other emergency events;
 - (g) Methods and procedures for restricting public access to the site;
 - (h) Disposal or utilization options, such as daily cover, intermediate cover, or as a final cover material; and
 - (i) All locations at the municipal landfill where the sewage sludge will be disposed or alternatively utilized;
- (3) Unless the analytical results have been submitted to the Department in accordance with the requirements of Regulation .06 of this chapter, the most recent results of a laboratory analysis of a representative composite sample of the sewage sludge that was obtained from the wastewater treatment plant that generated the sewage sludge, subject to the following requirements:
 - (a) The sample was obtained in accordance with the requirements of Regulation .06 of this chapter;
- (b) The analysis of the sample was performed by an independent laboratory or other laboratory acceptable to the Department, using standards, procedures, and methods that are acceptable to the Department;
- (c) If requested by the Department, the results shall be accompanied by a description of the method or methods of analysis; and
 - (d) The analytical results include, at a minimum:
- (i) Percent of total solids, pH, ammonium nitrogen, nitrate nitrogen, total phosphorous, total potassium, total arsenic, total cadmium, total copper, total lead, total mercury, total molybdenum, total nickel, total selenium, total zinc, polychlorinated biphenyls (PCBs), and the dry weight concentration of total Kjeldahl nitrogen; and
- (ii) Any other sewage sludge constituent that the Department determines necessary to adequately assess the potential impact of the project on public health and the environment; and
 - (4) Other information that may be requested by the Department.
- C. The Department may reject an analysis of a sewage sludge sample submitted in accordance with $\S B(3)$ of this regulation and require retesting and resubmittal of results if the Department determines that the method of analysis is inaccurate, or for any other good cause.
 - D. Permit Application Fees:
- (1) A person shall pay the Department a nonrefundable Sewage Sludge Utilization Permit Application fee in accordance with the following schedule:
 - (a) For a New Permit Application, \$350; and
 - (b) For a Renewal Permit Application, \$350.
- (2) For activities which involve transportation of sewage sludge in combination with any other activities listed in the Sewage Sludge Utilization Permit Application, the Department will issue a single Sewage Sludge Utilization Permit to include all activities. For combined activities, only the application fee listed for transportation of sewage sludge in Regulation .23C of this chapter shall be waived.

.68 Disposal or Alternative Utilization at Municipal Landfill - Public and Local Government Participation Requirements for a Permit Application.

- A. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of the application for disposal or alternative utilization of sewage sludge at a municipal landfill to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the sewage sludge is to be disposed or alternatively utilized at a municipal landfill; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile of the site where the sewage sludge is to be disposed or alternatively utilized at a municipal landfill.
- B. The Department will consider all written comments and suggestions received within 15 calendar days after the chairman of the legislative body or the elected executive of the county or municipal corporation where the sewage sludge is to be disposed or alternatively utilized at a municipal landfill receives the application regarding the proposed project.

.69 Disposal or Alternative Utilization at a Municipal Landfill-Recordkeeping and Reporting Requirements for a Sewage Sludge Utilization Permit.

- A. The permittee shall generate a report containing the following information and maintain all documents used to generate the report for a period of 5 years:
- (1) The source, type, and quantity, including documentation of sewage sludge that has been received and disposed of or utilized at the municipal landfill;
 - (2) The type of treatment the disposed or alternatively utilized sewage sludge has received;
 - (3) The dates of transportation of sewage sludge to the municipal landfill;
 - (4) Descriptions of problems encountered and their solutions;
- (5) Other related information regarding the disposal or alternative utilization as required by the applicable Sewage Sludge Utilization Permit; and
 - (6) Other information that may be requested by the Department.

B. The permittee shall submit to the Department three completed copies of the report required by §A of this regulation for each year the Sewage Sludge Utilization Permit is in effect. The permittee shall submit to the Department the report on a form provided by the Department and in accordance with a schedule established by the Department.

.70 Disposal or Alternative Utilization at Municipal Landfill - Modifications of a Sewage Sludge Utilization Permit.

- A. The Department may modify a Sewage Sludge Utilization Permit to include a new condition as may be required by a new law or regulation, to clarify permit conditions, or for other good cause.
- B. The Department may modify a Sewage Sludge Utilization Permit upon request by the permittee if the following conditions are met:
- (1) The permittee submits to the Department four completed copies of the Sewage Sludge Utilization Permit modification application on a form provided by the Department, and all other required information and forms as determined by the Department, with the application including a description of the proposed modification and an explanation as to why the modification is needed;
- (2) The permittee pays the Department a nonrefundable Sewage Sludge Utilization Permit modification fee in accordance with the following schedule:
 - (a) For a Minor Modification, \$40, and
 - (b) For a Major Modification, \$130; and
- (3) The Department determines that the proposed modification is in compliance with the applicable requirements of this chapter and will not cause an undue risk to the environment or public health, safety, or welfare.
- C. The following are minor modifications to a Sewage Sludge Utilization Permit for disposal or utilization at a municipal landfill:
 - ${\it (1) Modification \ to \ the \ municipal \ land fill's \ operation \ plan;}$
 - (2) The permittee's name change; or
 - (3) Other modifications as determined by the Department.
- D. The following are major modifications to a Sewage Sludge Utilization Permit for a disposal or utilization of sewage sludge at a municipal landfill:
 - (1) Modification to the source or type of sewage sludge to be disposed or alternatively utilized at the municipal landfill;
 - (2) Modification to the alternative utilization method; or
 - (3) Other modifications as determined by the Department.
- E. If the Department considers a modification application complete and acceptable, the Department may modify the Sewage Sludge Utilization Permit.
- F. If the Department modifies a Sewage Sludge Utilization Permit, the Department shall send notice of the modification to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.
- G. The Department may deny a modification application if the permittee is not in compliance with the applicable requirements of this chapter or any of the terms and conditions of the Sewage Sludge Utilization Permit or for other good cause as determined by the Department.

.71 Sewage Sludge Utilization Permit Term and Renewal.

- A. As a requirement for maintaining a Sewage Sludge Utilization Permit, the permittee shall:
- (1) Comply with the applicable State laws and regulations and with the terms and conditions of the Sewage Sludge Utilization Permit;
- (2) Maintain a performance bond, liability insurance, or other form of security as required in Regulation .10 of this chapter;
- (3) Allow authorized State and local health officials to conduct inspections as required in Regulation .04 of this chapter; and
 - (4) Provide any other information that may be requested by the Department.
- B. Except for a Sewage Sludge Utilization Permit to apply sewage sludge on an agricultural or marginal land or to conduct a research project, the Department may issue a Sewage Sludge Utilization Permit for a term not to exceed 10 years. For a Sewage Sludge Utilization Permit to apply sewage sludge on an agricultural or marginal land or to conduct a research project, the Department may issue a Sewage Sludge Utilization Permit for a term not to exceed 5 years.
- C. Except for Sewage Sludge Utilization Permits for a sewage sludge storage or distribution facility, the Department may renew a Sewage Sludge Utilization Permit if:
- (1) The permittee is in compliance with the applicable State laws and regulations and all of the terms and conditions of the Sewage Sludge Utilization Permit;
- (2) The permittee submits to the Department two calendar weeks before the expiration date of the current Sewage Sludge Utilization Permit or in accordance with the time specified in the current Sewage Sludge Utilization Permit four completed copies of the Sewage Sludge Utilization Permit renewal application on a form provided by the Department, and all other required information and forms as determined by the Department;
 - (3) The permittee pays the Department the required renewal application fee; and
 - (4) The sewage sludge generator has paid the fee required in Regulation .08 of this chapter.
- D. For Sewage Sludge Utilization Permits for a sewage sludge storage or distribution facility, the Department may renew a Sewage Sludge Utilization Permit if:

- (1) The permittee is in compliance with the applicable State laws and regulations and all of the terms and conditions of the Sewage Sludge Utilization Permit:
- (2) The permittee submits to the Department two calendar weeks before the expiration date of the current Sewage Sludge Utilization Permit or in accordance with the time specified in the current Sewage Sludge Utilization Permit six completed copies of the Sewage Sludge Utilization Permit renewal application on a form provided by the Department, and all other required information and forms as determined by the Department;
 - (3) The permittee pays the Department the required renewal application fee; and
 - (4) The sewage sludge generator has paid the fee required in Regulation .08 of this chapter.
- E. To provide a county or a municipal corporation, if appropriate, with an opportunity to consult with the Department about the decision to issue, deny, or place restrictions on a Sewage Sludge Utilization Permit, the Department shall mail a copy of a renewal Sewage Sludge Utilization Permit Application to install, materially alter, or materially extend a sewage sludge storage or distribution facility to:
- (1) The chairman of the legislative body and any elected executive of the county and municipal corporation where the storage or distribution facility is to be installed, materially altered or materially extended; and
- (2) The chairman of the legislative body and any elected executive of any other county within 1 mile from the location where the storage or distribution facility is to be installed, materially altered or materially extended.
- F. When the Department considers the renewal Sewage Sludge Utilization Permit Application to install, materially alter, or materially extend a sewage sludge storage or distribution facility complete, the Department shall publish a notice of application received and a public hearing. The Department shall conduct the public hearing in accordance with the requirements of the Environment Article, Title 1, Subtitle 6, Annotated Code of Maryland.
- G. If the Department considers a renewal application complete and acceptable, the Department may renew the Sewage Sludge Utilization Permit.
- H. The Department may deny a renewal application if the permittee is not in compliance with the applicable State laws and regulations or any of the terms or conditions of the Sewage Sludge Utilization Permit that is subject to renewal.

.72 Transfer of a Sewage Sludge Utilization Permit or Ownership.

- A. Thirty days before any change in control or ownership of the permitted property, site, or facility, the permittee shall:
 - (1) Provide the succeeding legal owners of the permitted property, site, or facility by certified mail, with a copy of:
 - (a) The "Owner's Consent Form" signed by the current owners of the permitted property, site, or facility; and
 - (b) A copy of the Sewage Sludge Utilization Permit for the permitted property, site, or facility; and
- (2) Notify the succeeding legal owners of any outstanding permit noncompliance, and, at the same time, submit to the Department a copy of this notification.
- B. Sewage Sludge Utilization Permits for sewage sludge treatment, composting, storage, or distribution facilities, application on agricultural or marginal land, energy generation or incineration, or innovative or research project are not transferable and are only valid for the permittee named in the Sewage Sludge Utilization Permit. In order for a different person to become the permittee for a Sewage Sludge Utilization Permit for these sewage sludge utilization activities, the new person shall first obtain a new Sewage Sludge Utilization Permit from the Department.
- C. The Department may transfer to a new person a Sewage Sludge Utilization Permit for sewage sludge transportation, marketing, or disposal or alternative utilization project at a municipal landfill if:
 - (1) The permittee submits to the Department a written request for the transfer that:
 - (a) Indicates the reason for the requested transfer; and
 - (b) Is signed by the permittee and the new person seeking to obtain the Sewage Sludge Utilization Permit;
- (2) The permittee submits to the Department a written agreement between the permittee and new person indicating the specific date of the proposed transfer of the Sewage Sludge Utilization Permit, and acknowledging responsibilities of the permittee and the new person for compliance with the terms and conditions of the Sewage Sludge Utilization Permit;
- (3) The new person submits to the Department the required performance bond, liability insurance, or other form of security required by provisions of Regulation .10 of this chapter;
 - (4) The new person pays the Department a nonrefundable Sewage Sludge Utilization Permit transfer fee of \$500; and
 - (5) The permittee or the new person submits to the Department other information that may be requested by the Department.
- D. If the Department considers the request for transfer complete and acceptable, the Department may transfer the Sewage Sludge Utilization Permit.
 - E. The Department may deny a request to transfer a Sewage Sludge Utilization Permit if:
- (1) The permittee is not in compliance with applicable State laws and regulations and all of the terms and conditions of the Sewage Sludge Utilization Permit that is subject to transfer;
 - (2) The new person has violated:
 - (a) Any law of the State or any other state concerning the utilization of sewage sludge; or
- (b) Any provision of the Environment Article, Annotated Code of Maryland or any regulation adopted under the Environment Article, Annotated Code of Maryland; or
 - (3) For any other good cause as determined by the Department.

.73 Variance.

A. A person who utilizes or proposes to utilize sewage sludge may apply to the Department for a variance from one or more of the provisions of this chapter. Variances may be sought for the Sewage Sludge Utilization Permit Application requirements, or

the design, construction, operation, monitoring, recordkeeping, or reporting requirements of these regulations. The Department may grant a variance if the person demonstrates to the satisfaction of the Department that the proposal conserves and protects public health, natural resources, and the environment of the State, and controls air, water, and land pollution to at least the same extent as would be obtained by compliance with the applicable requirements of this chapter.

- B. A written request for variance submitted under §A of this regulation shall include the following information:
 - (1) A written description of the variance requested;
- (2) The reasons for which the variance is requested, including the economic, technological, and environmental justification;
 - (3) A nonrefundable \$500 variance fee payable to the Department; and
 - (4) Other information that the Department may require.

.74 Suspension, Revocation or Modification by the Department.

- A. After written notification and an opportunity to request a hearing by the Department, the Department may suspend, revoke, or modify a Sewage Sludge Utilization Permit if the Department finds that:
 - (1) False or inaccurate information was contained in:
 - (a) The Sewage Sludge Utilization Permit Application;
 - (b) The information and forms required as part of the Sewage Sludge Utilization Permit Application; or
 - (c) Information required as part of the Sewage Sludge Utilization Permit;
 - (2) As part of a regulated activity by a permittee, there is or has been a violation of:
 - (a) The Environment Article, Annotated Code of Maryland;
 - (b) Applicable requirements of this chapter; or
 - (c) Any conditions in the Sewage Sludge Utilization Permit;
- (3) Substantial deviation from approved plans, specifications, or requirements has occurred as determined by the Department:
- (4) The Department, an authorized representative of the Department, or the local health official has been refused entry to the premises for the purpose of inspecting or sampling to ensure compliance with the terms and conditions of the Sewage Sludge Utilization Permit;
- (5) Conditions exist which are causing or may cause an undue risk to the environment or public health, safety, or welfare as may be determined by the Department;
 - (6) The permittee has been negligent or incompetent in the utilization of sewage sludge;
 - (7) The sewage sludge generator fee as required in Regulation .08 of this chapter has not been paid; or
 - (8) Any other good cause exists for suspending, revoking, or modifying the Sewage Sludge Utilization Permit.
 - B. Immediate Suspension or Revocation.
- (1) Notwithstanding other provisions of this chapter or the terms and conditions of the Sewage Sludge Utilization Permit, the Department may immediately suspend or revoke a Sewage Sludge Utilization Permit if the Department determines there is an immediate and substantial threat to the environment, public health, safety, or welfare.
- (2) The Department shall deliver written notice of an immediate suspension or revocation of a Sewage Sludge Utilization Permit to the permittee which does the following:
 - (a) Informs the permittee of the emergency suspension or revocation;
- (b) Cites the regulation or regulations with which the permittee has failed to comply that is the basis for the emergency suspension or revocation;
- (c) Specifies the corrective action to be taken by the permittee and the time period within which the action shall be taken; and
 - (d) Notifies the permittee of the right to request a hearing.
 - (3) The filing of a hearing request does not stay the revocation or suspension.
- C. An opportunity shall be provided for a hearing if the permittee files a written request with the Department within 10 calendar days of receipt of the notice of suspension, revocation, or modification of a Sewage Sludge Utilization Permit.
- D. A hearing provided for in this regulation shall be conducted by the Department at a designated time and place in accordance with the provisions of State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.
- E. Actions taken in accordance with this regulation do not preclude the Department from taking other administrative, civil, or criminal action for violations of State law, regulations, or terms or conditions of a Sewage Sludge Utilization Permit.
- F. If the Department suspend or revokes a Sewage Sludge Utilization Permit, the Department shall send notice of the suspension or revocation to the local health official and the local soil conservation district in the County in which the Sewage Sludge Utilization Permit is issued by the Department.

.75 Delegation of Inspection, Monitoring, or Enforcement.

- A. A local health official or the local health official's designee may seek delegation authority from the Department to inspect, monitor, or enforce the provisions of Sewage Sludge Utilization Permits issued for sewage sludge utilization activities in that local jurisdiction.
- B. The Department may delegate the inspection, monitoring, or enforcement authority to a local health official if the Department determines that the local health department is capable of conducting the inspection, monitoring, or enforcement of the provisions of Sewage Sludge Utilization Permits issued for sewage sludge utilization activities in that local jurisdiction.

- C. The local health official seeking new, modified, or renewed delegation authority from the Department for the inspection, monitoring, or enforcement of the provisions of Sewage Sludge Utilization Permits issued for sewage sludge utilization activities in that local jurisdiction, shall submit to the Department a written request for the delegation authority on or before January 1 immediately preceding the State fiscal year for which new or renewal delegation is sought.
- D. The written request shall include a statement from the elected executive of the County or municipal corporation that is seeking delegation approving the request for the delegation authority.
- E. The Department shall, in writing, grant or deny the delegation authority on or before May 1of the State fiscal year that immediately precedes the State fiscal year for which new or renewal delegation authority is sought.
- F. The Department may not deny a requested delegation authority unless opportunity has been afforded to the appropriate local health official of the affected local jurisdiction to present arguments before the Department as to why delegation is appropriate.
- G. If the Department determines that a local health official's written request for delegation authority to inspect, monitor, or enforce the provisions of Sewage Sludge Utilization Permits issued for sewage sludge utilization activities in that local jurisdiction meets the applicable requirements of this regulation, the Department shall enter into a written delegation agreement with the local health official.
- H. The Department shall establish the terms and conditions of the delegation agreement to comply with the requirements of this regulation.
- I. The delegation agreement shall include terms and conditions to ensure oversight by the Department including evaluations and financial audits.
 - J. The Department may issue a delegation agreement for a term not to exceed 5 years.
- K. Delegation shall be effective July 1 of the initial State fiscal year for which new or renewal delegation authority is sought, and shall end on June 30 of the year the delegation agreement expires.
- L. The Department may provide the local health department with grants for the reasonable reimbursement of costs the local health department has incurred as provided in the delegation agreement in accordance with the Environment Article, §9-244, Annotated Code of Maryland.
- M. If the Department determines that a delegated local health department is not capable of conducting the inspection, monitoring, or enforcement of the provisions of the terms and conditions of the delegation agreement between the Department and the local health official, the Department may suspend or revoke the delegation authority after opportunity is afforded for the appropriate local health official of the affected local jurisdiction to present arguments before the Department.