

7041.0100 DEFINITIONS.

Subpart 1. **Scope.** For the purpose of this chapter, the following terms have the meanings given them.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency.

Subp. 3. **Agricultural land.** "Agricultural land" means land on which a food crop, feed crop, cover crop, or fiber crop is grown as well as land managed for the production of hay, pastureland for grazing of livestock, or rangeland.

Subp. 4. **Agronomic rate.** "Agronomic rate" means the sewage sludge application rate (dry weight basis) designed to:

A. provide the amount of nitrogen which can be utilized by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and

B. minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the groundwater.

Subp. 5. **Annual pollutant loading rate.** "Annual pollutant loading rate" means the maximum amount of a pollutant that can be applied to a unit area of land during a 365-day period.

Subp. 6. **Apply sewage sludge or sewage sludge applied to the land.** "Apply sewage sludge" or "sewage sludge applied to the land" means applying sewage sludge by spraying or spreading sewage sludge on the surface of the land, injecting sewage sludge below the surface of the land or incorporating sewage sludge into the soil for beneficial use.

Subp. 7. **Available nitrogen.** "Available nitrogen" means nitrogen which is present in inorganic forms and the amount of organic nitrogen that can be mineralized to plant available forms.

Subp. 8. **Beneficial use.** "Beneficial use" means any application of sewage sludge to the land to improve soil physical and chemical properties by supplying nutrients, organic matter, and other components of this material.

Subp. 9. **Bulk sewage sludge.** "Bulk sewage sludge" means sewage sludge that is not sold or given away in a bag or other container for application to the land.

Subp. 10. **Cave.** "Cave" means any naturally formed, subterranean open area or chamber, or series of chambers.

Subp. 11. **Commissioner.** "Commissioner" means the commissioner or other designated representative of the Minnesota Pollution Control Agency.

Subp. 12. **Cover crop.** "Cover crop" means a small grain or other close growing vegetation not grown for harvest such as vegetation growing on land set aside for conservation purposes.

Subp. 13. **Cropping year.** "Cropping year" means a year beginning on September 1 of the year prior to the growing season and ending August 31 the year the crop is harvested. For example, the 1994 cropping year began September 1, 1993, and ended August 31, 1994.

Subp. 14. **Cumulative pollutant loading rate.** "Cumulative pollutant loading rate" means the maximum amount of an inorganic pollutant that can be applied to an area of land.

Subp. 15. **Dewatered sewage sludge.** "Dewatered sewage sludge" means any sewage sludge with a total solids content of 20 percent or greater or which can be transported and handled as a solid material.

Subp. 16. **Domestic septage.** "Domestic septage" means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

Subp. 17. **Domestic sewage.** "Domestic sewage" means waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

Subp. 18. **Dry weight basis.** "Dry weight basis" means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass, or essentially 100 percent solids content.

Subp. 19. **EPA.** "EPA" means the United States Environmental Protection Agency.

Subp. 20. **Exceptional quality sewage sludge.** "Exceptional quality sewage sludge" means sewage sludge which has been prepared to meet one of the Class A pathogen reduction requirements in part 7041.1300, subpart 2; the pollutant concentrations in part 7041.1100, subpart 4, item C; and one of the vector attraction reduction requirements in part 7041.1400, subpart 2, items A to H.

Subp. 21. **Feed crops.** "Feed crops" means crops produced primarily for consumption by animals.

Subp. 22. **Food crops.** "Food crops" means crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

Subp. 23. **Forest.** "Forest" means a tract of land thick with trees and underbrush.

Subp. 24. **Groundwater.** "Groundwater" means water below the land surface in the saturated zone.

Subp. 25. **Highly permeable soils.** "Highly permeable soils" means soils whose soil leaching potentials are rated as severe, poor filter for soil pesticide loss, by the Natural Resources Conservation Service using the procedure found in part 620, Soil

Interpretation Rating Guides of the United States Department of Agriculture-Natural Resources Conservation Service National Soil Survey Handbook.

Subp. 26. **Industrial wastewater.** "Industrial wastewater" means wastewater generated in a commercial or industrial process.

Subp. 27. **Land application site.** "Land application site" means an area of land which receives application of sewage sludge for beneficial use.

Subp. 28. **Long-term storage.** "Long-term storage" means the storage of dewatered bulk sewage sludge for a period greater than 30 days but not exceeding seven months at a land application site.

Subp. 29. **Material derived from sewage sludge.** "Material derived from sewage sludge" means sewage sludge received from a treatment works whose quality is changed either through treatment or mixing with a nonhazardous material prior to being applied to the land.

Subp. 30. **Mine.** "Mine" means an excavation for minerals.

Subp. 31. **NPDES permit.** "NPDES permit" means a national pollutant discharge elimination system permit issued by the agency that authorizes under certain conditions the discharge of pollutants to surface waters of the state. Combined NPDES/SDS permits issued by the agency will be considered NPDES permits under this chapter.

Subp. 32. **Natural Resources Conservation Service.** "Natural Resources Conservation Service" means the Natural Resources Conservation Service of the United States Department of Agriculture, formerly known as the Soil Conservation Service.

Subp. 33. **Other container.** "Other container" means either an open or closed receptacle. This includes, but is not limited to, a bucket, box, carton, or vehicle or trailer with a load capacity of one metric ton (2205 pounds) or less.

Subp. 34. **Pathogens.** "Pathogens" means organisms that are capable of producing an infection or disease in a susceptible host.

Subp. 35. **Perched water condition.** "Perched water condition" means the soil is saturated with water in one or more layers within 200 centimeters (78.7 inches) of the mineral soil surface and has one or more unsaturated layers, with an upper boundary above 200 centimeters (78.7 inches) in depth, below the saturated layer. The zone of saturation, i.e., the water table, is perched on top of a relatively impermeable layer. The Natural Resources Conservation Service also classifies this as "epi-saturation."

Subp. 36. **Permitting authority.** "Permitting authority" means either the EPA or a state with an EPA-approved sewage sludge management program.

Subp. 37. **Person.** "Person" has the meaning given it in Minnesota Statutes, section 116.06, subdivision 17.

Subp. 38. **Person who prepares sewage sludge.** "Person who prepares sewage sludge" means the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

Subp. 39. **pH.** "pH" means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25 degrees Celsius or measured at another temperature and then converted to an equivalent value at 25 degrees Celsius.

Subp. 40. **Pollutant.** "Pollutant" means an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions including malfunction in reproduction, or physical deformations in either organisms or offspring of the organisms.

Subp. 41. **Pollutant limit.** "Pollutant limit" means a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge, such as milligrams per kilogram of total solids, or the amount of a pollutant that can be applied to a unit area of land, such as pounds per acre.

Subp. 42. **Public contact site.** "Public contact site" means land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, and golf courses.

Subp. 43. **Quarry.** "Quarry" means a surficial mine used to obtain building stone, limestone, gravel, or sand.

Subp. 44. **Realistic yield goal.** "Realistic yield goal" means the most recent five-year average of crop yields, excluding the worst year, or the most recent three- to five-year average yield increased by ten percent or if the crop has never been grown, the realistic yield goal based on soil productivity and level of management as determined by the county Natural Resources Conservation Service, county extension agent, or a crop consultant.

Subp. 45. **Reclamation site.** "Reclamation site" means drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

Subp. 46. **Residential development.** "Residential development" means ten or more places of habitation concentrated within ten acres of land. The term also includes schools, churches, hospitals, nursing homes, businesses, offices, and apartment buildings or complexes having ten or more living units.

Subp. 47. **SDS permit.** "SDS permit" means a state disposal system permit issued by the agency that authorizes under certain conditions the subsurface disposal or on-land disposal of pollutants and the operation of a disposal system.

Subp. 48. **Seasonal high water table.** "Seasonal high water table" means the highest level the water table reaches during a given year. Methods of determining the seasonal high water table are given in part 7041.3400, subpart 3.

Subp. 49. **Sewage sludge.** "Sewage sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. Sewage sludge that is acceptable and beneficial for recycling on land as a soil conditioner and nutrient source is also known as biosolids.

Subp. 50. **Short-term storage.** "Short-term storage" means the storage of dewatered bulk sewage sludge for a period of less than 30 days at a land application site.

Subp. 51. **Sinkhole.** "Sinkhole" means a closed depression in an area of Karst topography that is formed either by solution of surficial limestone or by collapse of underlying caves.

Subp. 52. **Soil horizon.** "Soil horizon" means a layer of soil that is approximately parallel to the soil surface and has some set of properties that have been produced by soil-forming processes, and has some properties that are not like those of the layers above and beneath it. These properties include color, structure, texture, consistency, and bulk density.

Subp. 53. **Soil texture.** "Soil texture" means the relative portion of the soil separates sand, silt, and clay. It can be measured using methods described in part 7041.3400, subpart 1. Coarse texture is United States Department of Agriculture textural classifications sand, loamy sand, and sandy loam. Medium texture is United States Department of Agriculture classifications loam, silt, silt loam, and sandy clay loam. Fine texture is United States Department of Agriculture classifications clay loam, silty clay loam, sandy clay, silty clay, and clay.

Subp. 54. **Specific oxygen uptake rate (SOUR).** "Specific oxygen uptake rate (SOUR)" means the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge.

Subp. 55. **Surface waters.** "Surface waters" means waters of the state including streams, lakes, ponds, marshes, watercourses, waterways, springs, reservoirs, and all other

bodies or accumulations of water, natural or artificial, public or private, which are contained within, flow through, or border upon the state.

Subp. 56. **Total solids.** "Total solids" means the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

Subp. 57. **Treatment works.** "Treatment works" means either a federally owned, publicly owned, or privately owned device or system used to treat, recycle, or reclaim either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature. This includes a septage treatment or septage storage facility which receives domestic septage from multiple sources. For the purpose of this chapter, a treatment works does not include septic tanks unless they are part of a wastewater treatment facility operated by a municipality or sanitary district which is required by the agency to have a NPDES or SDS permit.

Subp. 58. **Type IV certified operator or inspector.** "Type IV certified operator or inspector" means a person certified according to chapter 7048 for the land application of sewage sludge or the inspection of sewage sludge land application sites.

Subp. 59. **Unstabilized solids.** "Unstabilized solids" means organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Subp. 60. **Vector attraction.** "Vector attraction" means the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Subp. 61. **Volatile solids.** "Volatile solids" means the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

Subp. 62. **Wetland.** "Wetland" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must:

- A. have a predominance of hydric soils;
- B. be inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and
- C. under normal circumstances, support a prevalence of such vegetation.

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