7080.1100 DEFINITIONS.

Subpart 1. **Certain terms.** In addition to the definitions in chapters 7081, 7082, and 7083, which are incorporated in this part, and Minnesota Statutes, section 115.55, the following terms have the meanings given them. For the purposes of this chapter, if a term used in this chapter is defined in chapter 7081, 7082, or 7083 it shall apply to other SSTS if referenced in later chapters. For the purposes of these standards, certain terms or words used are interpreted as follows: the words "shall" and "must" are mandatory and the words "should" and "may" are permissive. All distances specified in this chapter are horizontal distances unless otherwise specified.

Subp. 2. **Absorption area.** "Absorption area" means the design parameter that is associated with the hydraulic acceptance of effluent. The absorption area for mound systems is the original soil below a mound system that is designed to absorb sewage tank effluent. The absorption area for trenches, seepage beds, and at-grade systems is the soil area in contact with the part of the distribution medium that is designed and loaded to allow absorption of sewage tank effluent. This includes both bottom and sidewall soil contact areas.

Subp. 3. **Agency.** "Agency" means the Pollution Control Agency.

Subp. 4. **Alarm device.** "Alarm device" means a device that alerts a system operator or system owner of a component's status using a visual or audible device. An alarm device can be either on site or remotely located.

Subp. 5. **Applicable requirements.** "Applicable requirements" means:

A. local ISTS ordinances that comply with parts 7080.2150, subpart 2, and 7081.0080, subparts 1 to 5; chapter 7082; and Minnesota Statutes, section 115.55; or

B. in areas without complying ordinances to regulate ISTS, the requirements of this chapter.

Subp. 6. **At-grade system.** "At-grade system" means a pressurized soil treatment and dispersal system where sewage tank effluent is dosed to an absorption bed that is constructed directly on original soil at the ground surface and covered by loamy soil materials.

Subp. 7. **Baffle.** "Baffle" means a device installed in a septic tank to retain solids and includes, but is not limited to, vented sanitary tees with submerged pipes and effluent screens.

Subp. 8. **Bedrock.** "Bedrock" means geologic layers, of which greater than 50 percent by volume consist of unweathered in-place consolidated rock or rock fragments. Bedrock also means weathered in-place rock which cannot be hand augered or penetrated with a knife blade in a soil pit.

Subp. 9. **Bedroom.** "Bedroom" means, for the sole purpose of estimating design flows from dwellings, an area that is:

A. a room designed or used for sleeping; or

B. a room or area of a dwelling that has a minimum floor area of 70 square feet with access gained from the living area or living area hallway. Architectural features that affect the use as a bedroom under this item may be considered in making the bedroom determination.

Subp. 10. **Biochemical oxygen demand or BOD.** "Biochemical oxygen demand" or "BOD" means the measure of the amount of oxygen required by bacteria while stabilizing, digesting, or treating biodegradable organic matter under aerobic conditions over a five-day incubation period, commonly expressed in milligrams per liter (mg/l).

Subp. 11. [Repealed, 35 SR 1353]

Subp. 11a. **Building sewer.** "Building sewer" has the meaning given in part 4715.0100, subpart 27.

Subp. 11b. **Building sewer connected to a subsurface sewage treatment system.** "Building sewer connected to a subsurface sewage treatment system" has the meaning given in Minnesota Statutes, section 115.55, subdivision 1.

Subp. 12. **Carbonaceous biochemical oxygen demand or $CBOD_5$.** "Carbonaceous biochemical oxygen demand" or "$CBOD_5$" means the measure of the amount of oxygen required by bacteria while stabilizing, digesting, or treating the organic matter under aerobic conditions over a five-day incubation period while in the presence of a chemical inhibitor to block nitrification. CBOD is commonly expressed in milligrams per liter (mg/l).

Subp. 13. **Certificate of compliance.** "Certificate of compliance" means a document, written after a compliance inspection, certifying that a system is in compliance with applicable requirements at the time of the inspection.

Subp. 14. **Certified statement.** "Certified statement" means a statement signed by a certified individual, apprentice, or qualified employee under chapter 7083 certifying that the licensed business or qualified employee completed work in accordance with applicable requirements.

Subp. 15. **Cesspool.** "Cesspool" means an underground pit, receptacle, or seepage tank that receives sewage directly from a building sewer and leaches sewage into the surrounding soil, bedrock, or other soil materials. Cesspools include sewage tanks that were designed to be watertight, but subsequently leak below the designed operating depth.

Subp. 16. **Clean sand.** "Clean sand" means a soil fill material required to be used in mounds. The standards for clean sand are outlined in part 7080.2220, subpart 3, item C.

Subp. 17. **Commissioner.** "Commissioner" means the commissioner of the Pollution Control Agency.

Subp. 18. **Compliance inspection.** "Compliance inspection" means an evaluation, investigation, inspection, or other such process for the purpose of issuing a certificate of compliance or notice of noncompliance.

Subp. 18a. **Contour loading rate.** "Contour loading rate" means the amount of effluent loaded to the soil per the length of the dispersal unit or units along the single hillslope along the contour. The contour loading rate is determined on the relationship between the vertical and horizontal water movement in the soil and is based on the permeability difference between the absorption area and any deeper horizons, the depth between the absorption area and the change in permeability, and the land slope.

Subp. 19. **Distinct.** "Distinct" means a soil color that is not faint as described in subpart 29.

Subp. 20. **Distribution box.** "Distribution box" means a device intended to distribute sewage tank effluent concurrently and equally by gravity to multiple segments of a soil dispersal system.

Subp. 21. **Distribution device.** "Distribution device" means a device used to receive and transfer effluent from supply pipes to distribution pipes or downslope supply pipes, or both. These devices include, but are not limited to, drop boxes, valve boxes, distribution boxes, or manifolds.

Subp. 22. **Distribution medium.** "Distribution medium" means the material used to provide void space in a dispersal component, through which effluent flows and is stored prior to infiltration. Distribution media includes, but is not limited to, drainfield rock, polystyrene beads, chambers, and gravelless pipe.

Subp. 23. **Distribution pipes.** "Distribution pipes" means perforated pipes that distribute effluent within a distribution medium.

Subp. 24. **Drop box.** "Drop box" means a distribution device used for the serial gravity application of sewage tank effluent to a soil dispersal system.

Subp. 25. **Dwelling.** "Dwelling" means any building with provision for living, sanitary, and sleeping facilities.

Subp. 26. **Effluent screen.** "Effluent screen" means a device installed on the outlet piping of a septic tank for the purpose of retaining solids of a specific size.

Subp. 27. **EPA.** "EPA" means the United States Environmental Protection Agency.

Subp. 28. **Existing systems.** "Existing systems" means systems that have been previously inspected and approved by the local unit of government during installation.

In addition, all operating systems installed before the adoption of a local permitting and inspection program are considered existing systems.

Subp. 29. **Faint.** "Faint" means a soil color:

A. with the same hue as another soil color but that varies from the other color by two or less units of value and not more than one unit of chroma;

B. that differs from another soil color by one hue and by one or less units of value and not more than one unit of chroma; or

C. that differs from another soil color by two units of hue with the same value and chroma.

Subp. 30. **Fecal coliform or FC.** "Fecal coliform" or "FC," for purposes of this chapter, means bacteria common to the digestive systems of humans that are cultured in standard tests. Counts of these organisms are typically used to indicate potential contamination from sewage or to describe a level of disinfection, generally expressed in colonies per 100 mL.

Subp. 31. **Fine sand.** "Fine sand" means a sand soil texture, as described in the Field Book for Describing and Sampling Soils, which is incorporated by reference in subpart 36, where more than 50 percent of the sand has a particle size range of 0.05 millimeters, sieve size 270, to 0.25 millimeters, sieve size 60.

Subp. 32. **Flood fringe.** "Flood fringe" means that portion of the floodplain outside the floodway. Flood fringe is synonymous with the term "floodway fringe" used in flood insurance studies.

Subp. 33. **Floodplain.** "Floodplain" means the area covered by a 100-year flood event along lakes, rivers, and streams as published in technical studies by local, state, and federal agencies, or in the absence of these studies, estimates of the 100-year flood boundaries and elevations as developed according to a local unit of government's floodplain or related land use regulations.

Subp. 34. **Floodway.** "Floodway" means the bed of a wetland or lake, the channel of a watercourse, and those portions of the adjoining floodplain that are reasonably required to carry the regional flood discharge.

Subp. 35. **Flow measurement.** "Flow measurement" means any method to accurately measure water or sewage flow, including, but not limited to, water meters, event counters, running time clocks, or electronically controlled dosing.

Subp. 36. **Geomorphic description.** "Geomorphic description" means the identification of the landscape, landform, and surface morphometry of the proposed area of the soil treatment and dispersal system as described in the Field Book for Describing and Sampling Soils: Version 2.0 (2002), developed by the National Soil Survey Center and

Natural Resources Conservation Service of the United States Department of Agriculture. The field book is incorporated by reference, is not subject to frequent change, and is available through the Minitex interlibrary loan system.

Subp. 37. **Gray water.** "Gray water" means sewage that does not contain toilet wastes.

Subp. 38. **Gray water system.** "Gray water system" means a system that receives, treats, and disperses only gray water or other similar system as designated by the commissioner.

Subp. 39. **Hazardous waste.** "Hazardous waste" means any substance that, when discarded, meets the definition of hazardous waste in Minnesota Statutes, section 116.06, subdivision 11.

Subp. 40. **Holding tank.** "Holding tank" means a tank for storage of sewage until it can be transported to a point of treatment and dispersal. Holding tanks are considered a septic system tank under Minnesota Statutes, section 115.55.

Subp. 41. **Individual subsurface sewage treatment system or ISTS.** "Individual subsurface sewage treatment system" or "ISTS" means a subsurface sewage treatment system or part thereof, as set forth in Minnesota Statutes, sections 115.03 and 115.55, that employs sewage tanks or other treatment devices with final discharge into the soil below the natural soil elevation or elevated final grade that are designed to receive a sewage design flow of 5,000 gallons per day or less.

ISTS also includes all holding tanks that are designed to receive a design flow of 10,000 gallons per day or less; sewage collection systems and associated tanks that discharge into ISTS treatment and dispersal components; and privies. ISTS does not include those components defined as plumbing under the Minnesota Plumbing Code, chapter 4715, except for a building sewer connected to a subsurface sewage treatment system.

Subp. 42. **Inner wellhead management zone.** "Inner wellhead management zone" means the drinking water supply management area for a public water supply well that does not have a delineated wellhead protection area approved by the Department of Health under part 4720.5330.

Subp. 43. **Invert.** "Invert" means the lowest point of a channel inside a pipe.

Subp. 44. **Liquid capacity.** "Liquid capacity" means the liquid volume of a sewage tank below the invert of the outlet pipe or, for holding tanks and pump tanks, the liquid volume below the invert of the inlet.

Subp. 45. **Lot.** "Lot" means a parcel of land in a plat recorded in the office of the county recorder or registrar of titles or a parcel of land created and conveyed, using a specific legal description, for a building site to be served by an ISTS.

Subp. 46. **Management plan.** "Management plan" means a plan that requires the periodic examination, adjustment, testing, and other operational requirements to meet system performance expectations, including a planned course of action in the event a system does not meet performance expectations.

Subp. 47. **Matrix.** "Matrix" means the majority of the color in a soil horizon, as described in the Field Book for Describing and Sampling Soils, which is incorporated by reference in subpart 36.

Subp. 48. [Repealed, 35 SR 1353]

Subp. 49. **Mottles.** "Mottles" means the minority of the variegated colors in a soil horizon, as described in the Field Book for Describing and Sampling Soils, which is incorporated by reference in subpart 36.

Subp. 50. **Mound system.** "Mound system" means a soil treatment and dispersal system designed and installed such that all of the infiltrative surface is installed above grade, using clean sand between the bottom of the infiltrative surface and the original ground elevation, utilizing pressure distribution and capped with suitable soil material to stabilize the surface and encourage vegetative growth.

Subp. 51. **New construction.** "New construction" means installing or constructing a new ISTS or altering, extending, or adding capacity to a system that has been issued an initial certificate of compliance.

Subp. 52. **Notice of noncompliance.** "Notice of noncompliance" means a document written and signed by a certified inspector after a compliance inspection that gives notice that an ISTS is not in compliance as specified under part 7080.1500.

Subp. 53. **Ordinary high water level.** "Ordinary high water level" of surface water has the meaning given in Minnesota Statutes, section 103G.005, subdivision 14.

Subp. 54. **Original soil.** "Original soil" means naturally occurring soil that has not been cut, filled, moved, smeared, compacted, altered, or manipulated to the degree that the loading rate must be reduced from that associated with natural soil conditions.

Subp. 55. **Other pit.** "Other pit" means any pit or other device designed to leach sewage effluent that is greater than 30 inches in height or has a bottom area loading rate of sewage greater than two gallons per square feet per day.

Subp. 56. **Owner.** "Owner" means any person having possession of, control over, or title to property with an ISTS.

Subp. 57. **Parent material.** "Parent material" means the unconsolidated and chemically weathered geologic mineral or organic matter from which soils are developed by soil forming processes.

Subp. 58. **Percolation rate.** "Percolation rate" means the rate of a drop of water infiltrating into a test hole as specified in part 7080.1720, subpart 6, item B.

Subp. 59. **Periodically saturated soil.** "Periodically saturated soil" means the highest elevation in the soil that is in a reduced chemical state due to soil pores filled or nearly filled with water causing anaerobic conditions. Periodically saturated soil is determined by the presence of redoximorphic features in conjunction with other established indicators as specified in part 7080.1720, subpart 5, items E and F, or determined by other scientifically established technical methods or empirical field measurements acceptable to the permitting authority in consultation with the commissioner.

Subp. 60. **Plastic limit.** "Plastic limit" means a soil moisture content above which manipulation will cause compaction or smearing. The plastic limit can be measured by American Society for Testing and Materials, Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils, ASTM D4318 (2005). The standard is incorporated by reference, is available through the Minitex interlibrary loan system, and is not subject to frequent change.

Subp. 60a. **Plumbing program administrative authority.** "Plumbing program administrative authority" means the commissioner of labor and industry or the governing body of the adopting unit of government, its agents, and its employees according to the Minnesota Plumbing Code, part 4715.0100, subpart 2.

Subp. 61. **Pressure distribution.** "Pressure distribution" means a network of distribution pipes in which effluent is forced through orifices under pressure.

Subp. 62. **Privy.** "Privy" means an aboveground structure with an underground cavity meeting the requirements of part 7080.2280 that is used for the storage or treatment and dispersal of toilet wastes, excluding water for flushing and gray water. A privy also means a nondwelling structure containing a toilet waste treatment device.

Subp. 63. **Public waters.** "Public waters" means any public waters or wetlands defined in Minnesota Statutes, section 103G.005, subdivision 15, or identified as public waters or wetlands by the inventory prepared according to Minnesota Statutes, section 103G.201.

Subp. 64. **Pump tank.** "Pump tank" means a sewage tank or separate compartment within a sewage tank, which receives sewage tank effluent, that serves as a reservoir for a pump. A separate tank used as a pump tank is considered a septic system tank under Minnesota Statutes, section 115.55, subdivision 1, paragraph (p).

Subp. 65. **Redoximorphic features.** "Redoximorphic features" means:

A. a color pattern in soil, formed by oxidation and reduction of iron or manganese in saturated soil coupled with their removal, translocation, or accrual, which results in the

loss (depletion) or gain (concentration) of mineral compounds compared to the matrix color; or

B. a soil matrix color controlled by the presence of ferrous iron.

Redoximorphic features are described in part 7080.1720, subpart 5, item E.

Subp. 66. **Replacement.** "Replacement" means the removal or discontinued use of any major portion of an ISTS and reinstallation of that portion of the system, such as reinstallation of a new sewage tank, holding tank, dosing chamber, privy, or soil dispersal system.

Subp. 66a. **Rock fragments.** "Rock fragments" means pieces of rock greater than two millimeters in diameter that are strongly cemented and resistant to rupture. Rock fragments are commonly known as gravel, stones, cobbles, and boulders.

Subp. 66b. **Sand.** "Sand" means a sand soil texture, as described in the Soil Survey Manual (1993) developed by the Natural Resource Conservation Service, United States Department of Agriculture. The manual is incorporated by reference, is not subject to frequent change, and is available through the Minitex interlibrary loan system.

Subp. 67. **Seepage bed.** "Seepage bed" means a soil treatment and dispersal system, the absorption width of which is greater than three feet but no greater than 25 feet.

Subp. 68. **Seepage pit.** "Seepage pit" means an underground pit that receives sewage tank effluent and from which the liquid seeps into the surrounding soil and that meets the design requirements in part 7080.2550.

Subp. 69. **Septage.** "Septage" means solids and liquids removed from an SSTS and includes solids and liquids from cesspools, seepage pits, other pits, or similar systems or devices that receive sewage. Septage also includes solids and liquids that are removed from portable, incinerating, composting, holding, or other toilets. Waste from Type III marine sanitation devices, as defined in Code of Federal Regulations, title 33, section 159.3, and material that has come into contact with untreated sewage within the past 12 months is also considered septage.

Subp. 70. **Septic tank.** "Septic tank" means any watertight, covered receptacle that is designed and constructed to receive the discharge of sewage from a building sewer or preceding tank, stores liquids for a detention period that provides separation of solids from liquid and digestion of organic matter, and allows the effluent to discharge to a succeeding tank, treatment device, or soil dispersal system.

Subp. 71. **Serial distribution.** "Serial distribution" means distribution of sewage tank effluent by gravity flow that progressively loads one section of a soil treatment and dispersal system to a predetermined level before overflowing to the succeeding section and does not

place a dynamic head on the lower section of the soil treatment and dispersal system. The distribution medium is allowed to serve as a conveyance medium to the next section.

Subp. 72. **Setback.** "Setback" means a separation distance measured horizontally.

Subp. 73. **Sewage.** "Sewage" means waste produced by toilets, bathing, laundry, or culinary operations or the floor drains associated with these sources, and includes household cleaners, medications, and other constituents in sewage restricted to amounts normally used for domestic purposes.

Subp. 74. **Sewage tank.** "Sewage tank" means a receptacle used in the containment or treatment of sewage and includes, but is not limited to, septic tanks, aerobic tanks, pump tanks, and holding tanks. Requirements for sewage tanks are described in parts 7080.1900 to 7080.2030. Sewage tanks are considered a septic system tank in Minnesota Statutes, section 115.55, subdivision 1, paragraph (p).

Subp. 75. **Sewage tank effluent.** "Sewage tank effluent" means the liquid that flows from a septic tank or other treatment device.

Subp. 76. **Site.** "Site" means the area required for the proper location of the ISTS.

Subp. 77. **Slope.** "Slope" means the vertical rise or fall divided by the horizontal distance, expressed as a percentage.

Subp. 78. **Soil dispersal area.** "Soil dispersal area" means the area required for the soil dispersal system, including spacing between individual units or zones.

Subp. 79. **Soil dispersal system.** "Soil dispersal system" means a system where sewage effluent is dispersed into the soil for treatment by absorption and filtration and includes, but is not limited to, trenches, seepage beds, at-grade systems, mound systems, and drip dispersal systems.

Subp. 80. **Soil texture.** "Soil texture" means the soil particle size classification and particle size distribution as specified in the Field Book for Describing and Sampling Soils, incorporated by reference in subpart 36.

Subp. 80a. **Structure.** "Structure" means a constructed lot improvement that is intended or used for human occupancy or that is determined by the local unit of government to:

A. interfere with the construction, operation, or maintenance of an SSTS; or

B. be interfered with by the construction, operation, or maintenance of an SSTS.

Subp. 81. **Subsoil.** "Subsoil" means a soil layer that has a moist color value of 3.5 or greater and has undergone weathering and soil formation processes.

Subp. 82. **Subsurface sewage treatment system or SSTS.** "Subsurface sewage treatment system" or "SSTS" is either an individual subsurface sewage treatment system

as defined in subpart 41 or a midsized subsurface sewage treatment system as defined in part 7081.0020, subpart 4, as applicable.

Subp. 83. **Supply pipe.** "Supply pipe" means a nonperforated pipe, the purpose of which is to transport sewage tank effluent.

Subp. 84. **Systems in shoreland areas or wellhead protection areas or systems serving food, beverage, or lodging establishments or SWF.** "Systems in shoreland areas or wellhead protection areas or systems serving food, beverage, or lodging establishments" or "SWF" means the following three categories of systems:

A. SSTS constructed in shoreland areas where land adjacent to public waters has been designated and delineated as shoreland by local ordinance as approved by the Department of Natural Resources;

B. SSTS constructed in wellhead protection areas regulated under Minnesota Statutes, chapter 103I; and

C. SSTS serving food, beverage, and lodging establishments that are required to obtain a license under Minnesota Statutes, section 157.16, subdivision 1, including manufactured home parks and recreational camping areas licensed according to Minnesota Statutes, chapter 327.

Subp. 85. **Toilet waste.** "Toilet waste" means waste commonly disposed of in toilets, including fecal matter, urine, toilet paper, and water used for flushing.

Subp. 86. **Toilet waste treatment devices.** "Toilet waste treatment devices" means other toilet waste apparatuses including incinerating, composting, biological, chemical, recirculating, or holding toilets or portable restrooms.

Subp. 87. **Topsoil.** "Topsoil" means the natural, in-place organically enriched soil layer with a color value of less than 3.5.

Subp. 88. **Topsoil borrow.** "Topsoil borrow" means a loamy soil material having:

A. less than five percent material larger than two millimeters, No. 10 sieve;

B. no material larger than 2.5 centimeters;

C. a moist color value of less than 3.5; and

D. adequate nutrients and pH to sustain healthy plant growth.

Subp. 89. **Trench.** "Trench" means a soil treatment and dispersal system, the absorption width of which is 36 inches or less.

Subp. 89a. **Uniform distribution.** "Uniform distribution" means a method that distributes effluent evenly over the entire absorption area of a component over both time and space.

Subp. 90. **Valve box.** "Valve box" means a watertight structure designed for alternate distribution of sewage tank effluent to segments of a soil treatment system.

Subp. 91. **Vertical separation.** "Vertical separation" means the vertical measurement of unsaturated soil or sand between the bottom of the distribution medium and the periodically saturated soil level or bedrock.

Subp. 92. **Watertight.** "Watertight" means constructed so that no liquid can get into or out of a device except through designed inlets and outlets.

Subp. 93. **Wellhead protection area.** "Wellhead protection area" means the surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field as regulated under chapter 4720. For the purposes of this chapter, wellhead protection area is that area bounded by the drinking water supply management area as regulated under chapter 4720.

Statutory Authority: *MS s 14.389; 115.03; 115.55; 115.56; L 2015 1sp4 art 4 s 132; art 4 s 145*

History: *32 SR 1347; 35 SR 1353; 40 SR 689*

Published Electronically: *December 22, 2015*