

4725.0100 DEFINITIONS.

Subpart 1. **Scope.** Terms used in this chapter that are defined in Minnesota Statutes, section 103I.005, have the meanings given in statute. For the purposes of this chapter, the terms defined in this part have the meanings given them.

Subp. 1a. **Absorption area.** "Absorption area" has the meaning given in part 7080.1100, subpart 2, and includes the area of soil designed to absorb sewage effluent.

Subp. 1b. **Agricultural chemical.** "Agricultural chemical" has the meaning in Minnesota Statutes, section 18D.01, subdivision 3.

Subp. 1c. **Animal unit.** "Animal unit" has the meaning in part 7020.0300, subpart 5, and is a unit of measure comparing the production of animal manure. One animal unit is equal to one slaughter steer, one horse, or for animals not listed in part 7020.0300, subpart 5, the average weight of the animal in pounds divided by 1,000.

Subp. 2. [Repealed, 15 SR 78]

Subp. 3. [Repealed, 15 SR 78]

Subp. 4. [Repealed, 17 SR 2773]

Subp. 5. [Repealed, 17 SR 2773]

Subp. 6. [Repealed, 15 SR 78]

Subp. 7. [Repealed, 15 SR 78]

Subp. 8. [Repealed, 17 SR 2773]

Subp. 9. [Repealed, 17 SR 2773]

Subp. 10. [Repealed, 17 SR 2773]

Subp. 11. [Repealed, 17 SR 2773]

Subp. 12. [Repealed, 17 SR 2773]

Subp. 13. [Repealed, 17 SR 2773]

Subp. 14. [Repealed, 17 SR 2773]

Subp. 15. [Repealed, 15 SR 78]

Subp. 16. [Repealed, 15 SR 78]

Subp. 17. [Repealed, 17 SR 2773]

Subp. 18. [Repealed, 15 SR 78]

Subp. 19. **Annular space.** "Annular space" means the space between two cylindrical objects one of which surrounds the other, such as the space between a bore hole and a casing pipe, or between a casing pipe and liner pipe.

Subp. 20. [Repealed, 17 SR 2773]

Subp. 21. **Aquifer.** "Aquifer" means a stratum of saturated, permeable bedrock or unconsolidated material having a recognizable water table or potentiometric surface which is capable of producing water to supply a well.

Subp. 21a. **At-grade.** "At-grade" means the termination of a well or boring at the established ground surface.

Subp. 21b. **Bedrock.** "Bedrock" means a consolidated or coherent, hard, naturally formed aggregation of rock in the earth. Bedrock includes geologic materials deposited prior to the Cretaceous geologic period, and includes igneous and metamorphic rock such as granite, basalt, and iron formation, and sedimentary rock including sandstone, limestone, and shale. Bedrock includes sandstone formations such as the St. Peter or Jordan that may be semiconsolidated. Bedrock does not include alluvium, glacial drift, glacial outwash, glacial till, saprolite, or soil. For the purposes of this chapter, bedrock does not include mineral matter deposited during, or more recently than, the Cretaceous geologic period, or weathered portions of the formation surface where more than 50 percent of the parent bedrock is altered to an unconsolidated state.

Subp. 21c. **Bentonite.** "Bentonite" means an aluminum silicate clay that contains at least 85 percent of the mineral montmorillonite and meets API specification 13A-04.

Subp. 21d. **Bentonite grout.** "Bentonite grout" means water and a minimum of 15 percent by weight of powdered or granular bentonite, with no additives to promote temporary viscosity. An additional 15 percent by weight of either washed sand or cuttings taken from the bore hole may be mixed into the bentonite and water slurry. The bentonite must be designed by the manufacturer as a grout or well and boring sealant, and must be mixed according to the manufacturer's specifications.

Subp. 21e. **Bored geothermal heat exchanger.** "Bored geothermal heat exchanger" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 1a, and includes bored geothermal heat exchanger piping installed in a boring for thermal conductivity testing. Bored geothermal heat exchanger does not include a closed-loop piping system installed in a boring 15 feet or less below the established ground surface.

Subp. 21f. **Bored geothermal heat exchanger contractor.** "Bored geothermal heat exchanger contractor" means a person issued a limited well/boring contractor's license for constructing, repairing, and sealing bored geothermal heat exchangers.

Subp. 21g. **Bored geothermal heat exchanger piping.** "Bored geothermal heat exchanger piping" means the pipe and fittings of a bored geothermal heat exchanger installed and buried below the ground surface and includes:

- A. the pipe loop installed in a bore hole;

- B. the buried pipe between a bore hole and a header or manifold;
- C. the buried header or manifold; and
- D. buried supply and return pipe between a buried header or manifold and the heat pump.

Subp. 21h. **Boring.** "Boring" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 2, and includes environmental bore holes, bored geothermal heat exchangers, and elevator borings, except that for the purposes of this chapter, boring does not include exploratory borings regulated under chapter 4727.

Subp. 22. **Casing.** "Casing" means a pipe or curbing placed in a well or boring to:

- A. prevent the bore hole walls from caving;
- B. seal off surface drainage; or
- C. prevent gas, water, or other fluids from entering the well or boring except through the screen, open hole, or perforated casing.

Subp. 22a. **Casing vent.** "Casing vent" means an outlet at the upper terminal of a casing, cap, or cover to allow equalization of air pressure in the casing and escape of toxic or flammable gases when present.

Subp. 22b. **Cement-sand grout.** "Cement-sand grout" means a fluid mixture of Portland cement, sand, and water in the proportion of 94 pounds of Portland cement, not more than 1.0 cubic foot of dry sand, and not more than six gallons of water. Admixtures to reduce permeability or control setting time must meet ASTM Standard C494/C494M-04.

Subp. 22c. **Certified representative.** "Certified representative" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 2a, and means an individual who acts on behalf of a licensee or registrant.

Subp. 23. **Cesspool.** "Cesspool" means an underground pit into which raw household sewage or other untreated liquid waste is discharged and from which the liquid seeps into the surrounding soil.

Subp. 23a. **Community water system.** "Community water system" has the meaning given in Code of Federal Regulations, title 40, section 141.2, and means a public water system that serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents.

Subp. 23b. **Completion of work.** "Completion of work" means the date on which the installation of the pump or pumping equipment is finished, the date on which construction of the well or boring is completed if a pump or pumping equipment is not installed by the person constructing the well or boring, the date that construction work regulated by this chapter is completed, the date the well or boring is put into service, or the date that the permit or notification expires, whichever occurs first.

Subp. 23c. **Concrete.** "Concrete" means a mixture of Portland cement, sand and gravel aggregate, and water so that one cubic yard of concrete contains a minimum of 470 pounds (five 94-pound bags) of Portland cement, a maximum of 30 gallons of water, and sand and gravel aggregate passing a one-inch sieve. Admixtures to reduce permeability or control setting time must meet ASTM Standard C494/C494M-04.

Subp. 24. [Repealed, 17 SR 2773]

Subp. 24a. **Confining layer.** "Confining layer" means a stratum of a geologic material that restricts vertical water movement. A confining layer includes:

A. a stratum at least ten feet in vertical thickness of unconsolidated materials or bedrock, that has a vertical hydraulic conductivity of 10^{-6} centimeters per second or less;

B. a stratum at least ten feet in vertical thickness of clay, sandy clay, or silty clay as defined by the United States Department of Agriculture in Handbook 18; or

C. a stratum at least ten feet in vertical thickness of the St. Lawrence or Eau Claire sedimentary bedrock formation, or a stratum at least two feet in vertical thickness of the Decorah or Glenwood sedimentary bedrock formation, as described in "Geology of Minnesota: A Centennial Volume" by Sims, P.K., and Morey, G.B., pages 459-473, "Paleozoic Lithostratigraphy of Southeastern Minnesota" by George Austin, which is incorporated by reference. The publication is available at the Minnesota Geological Survey, Minnesota Department of Health, or through the Minitex interlibrary loan program.

Subp. 24b. **Confining materials.** "Confining materials" means geologic materials that restrict vertical water movement. Confining materials include:

A. unconsolidated material or bedrock that has a vertical hydraulic conductivity of 10^{-6} centimeters per second or less;

B. clay, sandy clay, or silty clay as defined by the United States Department of Agriculture in Handbook 18 which is incorporated by reference; or

C. the Decorah, Glenwood, St. Lawrence, or Eau Claire sedimentary bedrock formations, as described in "Geology of Minnesota: A Centennial Volume" by Sims, P.K., and Morey, G.B., pages 459-473, "Paleozoic Lithostratigraphy of Southeastern Minnesota" by George Austin, which is incorporated by reference.

Subp. 24c. **Contact hour.** "Contact hour" means a minimum of 50 minutes of lecture, demonstration, workshop, or training excluding coffee breaks, registration, meals, or social activities.

Subp. 24d. **Council.** "Council" means the Advisory Council on Wells and Borings created under Minnesota Statutes, chapter 103I.

Subp. 24e. **Cuttings.** "Cuttings" means a mixture of drilling fluid, ground up rock, and unconsolidated material removed from a well or boring.

Subp. 24f. **Dewatering well.** "Dewatering well" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 4a. Dewatering well includes a temporary well for construction dewatering greater than 25 feet deep, and permanent dewatering wells. Dewatering well does not include:

- A. a well 25 feet or less in depth for temporary construction dewatering;
- B. a well used to lower groundwater levels for control or removal of groundwater contamination regulated as a remedial well; or
- C. a drain tile, perforated pipe, sump, or pit less than ten feet deep, or less than ten feet below the floor of a basement, used to lower groundwater levels for construction or use of underground space.

Subp. 24g. **Dewatering well contractor.** "Dewatering well contractor" means a person issued a limited well/boring contractor's license to construct, repair, and seal dewatering wells.

Subp. 24h. **Directional drilling.** "Directional drilling" means a drilling method that utilizes a steerable drill bit to cut a bore hole for installing underground pipe. Directional drilling is also known as horizontal directional drilling, or HDD.

Subp. 25. [Repealed, 15 SR 78]

Subp. 26. [Repealed, 17 SR 2773]

Subp. 26a. **Drilling machine.** "Drilling machine" means a motorized machine or mechanical device mounted on a truck, trailer, crawler, or skid used to excavate, drill, or bore a well or boring. A drilling machine includes a cable tool, hollow rod, auger, or rotary tool.

Subp. 26b. **Drive-point well.** "Drive-point well" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 5.

Subp. 26c. **Drive-point well or dug well contractor.** "Drive-point well or dug well contractor" means a person issued a limited well/boring contractor's license to construct, repair, or seal drive-point wells or dug wells.

Subp. 26d. **Driven casing.** "Driven casing" means steel casing forced into the ground as the well or boring is advanced, where the outside diameter of the drill bit or drilling tools is equal to or less than the outside diameter of the casing, casing coupling, or drive shoe.

Subp. 27. **Dug well.** "Dug well" means a well that is excavated or dug with unconventional drilling equipment in which the side walls may be supported by material other than standard weight steel casing, stainless steel casing, or plastic casing as specified in this chapter. Water enters a dug well through the side walls and bottom.

Subp. 27a. **Elevator boring.** "Elevator boring" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 6, and does not include cable elevators, hydraulic cylinders used to elevate automobiles, or holeless elevators where the depth of the excavation is less than ten feet below the lowest landing of the elevator.

Subp. 27b. **Elevator boring contractor.** "Elevator boring contractor" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 7.

Subp. 27c. **Environmental bore hole.** "Environmental bore hole" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 8. An environmental bore hole must enter or go through a water bearing layer, be deeper than 25 feet or penetrate a confining layer, and be used for testing or for remediation of soil or groundwater contamination without extracting water. An environmental bore hole includes excavations used to:

- A. measure groundwater levels, including an excavation used as a piezometer;
- B. determine groundwater flow direction or velocity;
- C. measure earth properties such as hydraulic conductivity, bearing capacity, or resistance;
- D. obtain samples of geologic materials for testing or classification; or
- E. remove or remediate pollution or contamination from groundwater or soil through the use of a vent, vapor recovery system, or sparge point without extracting groundwater.

Subp. 28. **Established ground surface.** "Established ground surface" means the intended or actual finished grade (elevation) of the surface of the ground at the site of a well or boring.

Subp. 28a. **Feedlot.** "Feedlot" has the meaning given in part 7020.0300, subpart 3.

Subp. 29. [Repealed, 17 SR 2773]

Subp. 29a. **Groundwater.** "Groundwater" has the meaning given in Minnesota Statutes, section 115.01, subdivision 6, and does not include water in an artificially created basin, such as a tank excavation, that is not hydrologically connected to the earth outside the basin.

Subp. 29b. **Groundwater thermal exchange device.** "Groundwater thermal exchange device" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 11, and includes a water-supply well used to withdraw or inject groundwater for a heat pump.

Subp. 30. **Grout.** "Grout" means a low permeability material used to fill the annular space around a casing, or to seal a well or boring. Grout is either neat-cement grout, cement-sand grout, or bentonite grout.

Subp. 30a. [Repealed, 33 SR 211]

Subp. 30b. [Repealed, 17 SR 2773]

Subp. 30c. **Hazardous substance.** "Hazardous substance" has the meaning given in Minnesota Statutes, section 115B.02, subdivision 8.

Subp. 30d. **Hoist.** "Hoist" means a motorized machine or mechanical device that is not a drilling machine, mounted on a truck, trailer, crawler, or skid, which is used to:

- A. remove or install a pump or pumping equipment, casing, screen, pitless adapter, or pitless unit;

- B. remove an obstruction from a well or boring;
- C. install a tremie pipe when sealing a well or boring; or
- D. conduct an activity which requires a license or registration issued under this chapter.

Hoist does not include hand-operated equipment such as a pipe wrench, chain, pulley, or tripod.

Subp. 30e. **Holding tank.** "Holding tank" has the meaning given in part 7080.1100, subpart 40, and means a watertight tank for storage of sewage until it can be transported to a point of approved treatment and dispersal.

Subp. 30f. **Hydrofracturing.** "Hydrofracturing" means the process of placing one or more packers into a bedrock formation and injecting potable water under pressures high enough to open existing fractures or create new fractures in the bedrock for the purpose of increasing the water yield.

Subp. 30g. **Individual well contractor.** "Individual well contractor" means an individual licensed according to Minnesota Statutes, section 103I.525.

Subp. 30h. **Interceptor.** "Interceptor" has the meaning given in Uniform Plumbing Code (UPC) section 211.0 as incorporated by part 4714.0050.

Subp. 30i. **Licensee.** "Licensee" means a person who is licensed as a well contractor, limited well/boring contractor, or elevator boring contractor under this chapter and Minnesota Statutes, chapter 103I.

Subp. 30j. **Limited well/boring contractor.** "Limited well/boring contractor" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 12, and includes a person with a license to: construct, repair, or seal drive-point wells or dug wells; install or repair screens or pitless units or adapters and casing from the pitless unit or adapter to the upper termination of the casing; install a well pump or pumping equipment; seal wells or borings; construct, repair, or seal a dewatering well; or construct, repair, or seal a bored geothermal heat exchanger.

Subp. 30k. **Manure storage area.** "Manure storage area" has the meaning given in part 7020.0300, subpart 14, and does not include a manure storage basin.

Subp. 30l. **Manure storage basin.** "Manure storage basin" means a lagoon, pit, impoundment, or excavation in the ground used to store liquid and solid manure.

Subp. 30m. **Monitoring well.** "Monitoring well" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 14.

Subp. 30n. **Neat-cement grout.** "Neat-cement grout" means a fluid mixture in the proportion of 94 pounds of Portland cement and not more than six gallons of water. Bentonite up to five percent by weight of cement (4.7 pounds of bentonite per 94 pounds of Portland cement) may be used to reduce shrinkage. Not more than 0.6 additional gallons of water may be added for each one percent of bentonite. Admixtures to reduce permeability or control setting time must meet ASTM Standard C494/C494M-04. The minimum density of neat-cement grout using regular (Type I or Type II)

Portland cement without bentonite or entrained air is 15.0 pounds per gallon. The minimum density of regular neat-cement grout with bentonite and without entrained air is:

- A. 14.7 pounds per gallon for neat-cement grout and two percent bentonite;
- B. 14.4 pounds per gallon for neat-cement grout and three percent bentonite;
- C. 14.1 pounds per gallon for neat-cement grout and four percent bentonite; and
- D. 13.8 pounds per gallon for neat-cement grout and five percent bentonite.

Subp. 30o. **Noncommunity water system.** "Noncommunity water system" means a public water system that serves an average of at least 25 persons daily at least 60 days a year, at a place other than their home, and that is not a community public water system. Any water system meeting the criteria identified in this subpart that serves churches, schools, resorts, parks, camps, rest areas, or businesses is deemed to be a noncommunity water system.

Subp. 30p. **Ordinary high water level.** "Ordinary high water level" has the meaning given in Minnesota Statutes, section 103G.005, subdivision 14.

Subp. 30q. **Pasture.** "Pasture" has the meaning given in part 7020.0300, subpart 18.

Subp. 30r. **Person.** "Person" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 16.

Subp. 30s. **Petroleum.** "Petroleum" has the meaning given in Minnesota Statutes, section 115C.02, subdivision 10.

Subp. 31. [Repealed, 15 SR 78]

Subp. 31a. **Petroleum bulk storage site.** "Petroleum bulk storage site" means a property on which petroleum products are stored for sale and excludes pipeline terminals and refineries.

Subp. 31b. [Repealed, 17 SR 2773]

Subp. 32. **Pitless adapter.** "Pitless adapter" means a watertight device allowing discharge through one or more openings of a casing.

Subp. 33. **Pitless unit.** "Pitless unit" means a watertight assembly with a cap that attaches to a casing below ground, allows subsurface discharge through one or more openings, and extends the upper termination of the casing above the established ground surface.

Subp. 34. **Pollution or contamination.** "Pollution" or "contamination" means the presence or addition of any substance to groundwater which is or may become injurious to the health, safety, or welfare of the general public or private individuals using a well, boring, or groundwater; or which is or may become injurious to domestic, commercial, industrial, agricultural, or other uses which are being made of such water.

Subp. 34a. **Portland cement.** "Portland cement" means:

A. construction material that conforms to ASTM Standard C150-04a, "Standard Specification for Portland Cement"; or

B. Type IL blended Portland-limestone cement that conforms to ASTM Standard C595, "Standard Specification for Blended Hydraulic Cements."

Subp. 35. **Potable water.** "Potable water" means water which is safe for human consumption in that it is free from impurities in amounts sufficient to cause disease or harmful physiological effects.

Subp. 35a. **Potable water-supply well.** "Potable water-supply well" means a water-supply well used to provide water to humans for such purposes as drinking; cooking; bathing; manufacturing or processing of food, drink, or pharmaceuticals; or to supply water to plumbing fixtures accessible to humans.

Subp. 36. **Pressure tank or hydropneumatic tank.** "Pressure tank" or "hydropneumatic tank" means a closed water storage container constructed to operate under a designed pressure rating to modulate the water system pressure within a selected pressure range.

Subp. 37. **Priming.** "Priming" means the first filling of a pump with water and the action of starting the flow in a pump.

Subp. 37a. **Public water-supply well.** "Public water-supply well" means a well supplying water to a public water system.

Subp. 37b. **Public water system.** "Public water system" means a community or noncommunity water system regulated under chapter 4720.

Subp. 38. [Repealed, 17 SR 2773]

Subp. 39. [Repealed, 17 SR 2773]

Subp. 40. **Pumping water level.** "Pumping water level" means the distance measured from the established ground surface to the water surface in a well being pumped at a specified rate for a specified period of time.

Subp. 40a. **Rapid setting cement.** "Rapid setting cement" means:

A. Type III Portland cement as designated in ASTM Standard C150-04a;

B. Type IL-HE Portland-limestone cement as designated in ASTM Standard C595, "Standard Specification for Blended Hydraulic Cements";

C. API Class C cement; or

D. any Portland cement containing calcium chloride or sodium chloride in an amount between two and four percent by weight of Portland cement, or gypsum in an amount between 20 and 100 percent by weight of Portland cement.

Subp. 40b. **Regional flood.** "Regional flood" has the meaning given in Minnesota Statutes, section 103F.111, subdivision 10.

Subp. 41. [Repealed, 15 SR 78]

Subp. 41a. **Registrant.** "Registrant" means a person who is registered as a monitoring well contractor under this chapter and Minnesota Statutes, chapter 103I.

Subp. 41b. **Remedial well.** "Remedial well" means a water-supply well used to lower a groundwater level to control or remove contamination in groundwater and excludes horizontal trenches, and sumps or pits less than ten feet deep.

Subp. 41c. [Repealed, 33 SR 211]

Subp. 41d. **Rock.** "Rock" means a naturally formed aggregation of mineral matter including the rocks described in part 4725.1851, subpart 4, item B.

Subp. 41e. **Sand.** "Sand" means unconsolidated mineral material composed principally of quartz ranging in size from 0.0025 to 0.040 inches in diameter.

Subp. 41f. **Scrap yard.** "Scrap yard" means an establishment, place of business, or place of storage or deposit that is maintained, operated, or used for storing, keeping, buying, or selling scrap, junk, or waste metal obtained from automobiles, trucks, tractors, farm equipment, industrial equipment, containers, appliances, or similar items where the total scrap metal stored is greater than nine tons or consists of more than five motor vehicles.

Subp. 41g. **Screen.** "Screen" means a wire-wrapped, gauze, shutter, slotted, or engineered perforated pipe at the bottom of a casing designed to allow water to enter a well or boring and to prevent sediment from entering the well or boring.

Subp. 41h. **Screen leader or riser.** "Screen leader" or "riser" means a pipe smaller in diameter than the casing that is attached to the top of a screen and telescoped into a casing.

Subp. 41i. **Screen sump.** "Screen sump" means a pipe attached to the bottom of a screen.

Subp. 41j. **Sealing.** "Sealing" means the process of preparing a well or boring to be filled with grout and the process of filling a well or boring with grout.

Subp. 42. [Repealed, 33 SR 211]

Subp. 43. **Seepage pit, leaching pit, or dry well.** "Seepage pit," "leaching pit," or "dry well" means an underground pit, tank, or receptacle into which a septic tank discharges effluent or other liquid waste and from which the liquid seeps into the surrounding soil through the bottom or openings in the side of the pit, tank, or receptacle.

Subp. 43a. **Sensitive water-supply well.** "Sensitive water-supply well" means a water-supply well with less than 50 feet of watertight casing where the casing does not penetrate a confining layer or multiple layers of confining materials with an aggregate thickness of ten feet or more.

Subp. 44. **Septic tank.** "Septic tank" means a watertight tank of durable materials through which sewage flows very slowly and in which solids separate from the liquid to be decomposed or broken down by bacterial action.

Subp. 44a. **Sewage.** "Sewage" has the meaning given in Minnesota Statutes, section 115.01, subdivision 17, and includes gray water discharge from bathing and laundry.

Subp. 44b. **Sewage sump.** "Sewage sump" means a sump, dosing chamber, lift station, tank, pit, or receptacle which contains a pump to discharge sewage.

Subp. 45. **Sewer.** "Sewer" means a pipe or conduit carrying sewage or into which sewage may back up, including floor drains and traps.

Subp. 45a. **Soil dispersal system.** "Soil dispersal system" has the meaning given in part 7080.1100, subpart 79, and means the piping and media such as gravel, where sewage effluent is treated and dispersed into the soil by percolation and filtration and includes trenches, seepage beds, drainfields, at-grade systems, and mound systems.

Subp. 46. [Repealed, 33 SR 211]

Subp. 47. **Static water level.** "Static water level" means the distance measured from the established ground surface to the water surface in a well or boring neither being pumped, nor under the influence of pumping nor flowing under artesian pressure.

Subp. 47a. **Stormwater drain pipe.** "Stormwater drain pipe" means a pipe or conduit carrying stormwater or surface water from a building roof, parking lot, street, or paved area. Stormwater drain pipe does not include a pipe or conduit carrying:

- A. domestic waste water, sewage, or industrial wastes;
- B. clear water drainage from building perimeter drain tile; or
- C. water from a floor drain, not connected to a sewer, to a point of surface discharge.

Subp. 47b. **Submerged closed loop heat exchanger.** "Submerged closed loop heat exchanger" or "SCLHE" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 17a, and includes a SCLHE unit and SCLHE in-well piping.

Subp. 47c. **Submerged closed loop heat exchanger unit.** "Submerged closed loop heat exchanger unit" or "SCLHE unit" means that portion of a SCLHE designed to transfer heat between the heat transfer fluid and groundwater.

Subp. 47d. **Submerged closed loop heat exchanger in-well piping.** "Submerged closed loop heat exchanger in-well piping" or "SCLHE in-well piping" means the piping and fittings of a SCLHE used to convey heat transfer fluid in the well and fittings connecting the piping in the well to the pitless unit.

Subp. 47e. **Submerged closed loop heat exchanger lateral piping.** "Submerged closed loop heat exchanger lateral piping" or "SCLHE lateral piping" means the piping and fittings of a SCLHE system used to convey heat transfer fluid between a building and the well.

Subp. 47f. **Submerged closed loop heat exchanger system.** "Submerged closed loop heat exchanger system" or "SCLHE system" means one or more SCLHE connected by SCLHE lateral piping to a building or a network of buildings exchanging thermal energy.

Subp. 47g. **Submerged closed loop heat exchanger system owner.** "Submerged closed loop heat exchanger system owner" or "system owner" means a person who owns and is responsible for overseeing the operation of the SCLHE system.

Subp. 48. **Subterranean gas.** "Subterranean gas" means a gas occurring below the land surface. It may be flammable such as methane or highly toxic as hydrogen sulfide and may be associated with ground water.

Subp. 48a. **Suction line.** "Suction line" means a pipe or line connected to the inlet side of a pump or pumping equipment or any connection to a casing that may conduct nonsystem water into the well or boring because of negative pressures.

Subp. 48b. **Thermally enhanced bentonite grout.** "Thermally enhanced bentonite grout" means a bentonite-based grout that is mixed with sand or graphite to improve the thermal efficiency of a bored geothermal heat exchanger system.

Subp. 49. [Renumbered subp. 48a]

Subp. 49a. [Repealed, 17 SR 2773]

Subp. 49b. **Total coliform bacteria.** "Total coliform bacteria" means all of the aerobic and facultative anaerobic, gram-negative, non-spore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 degrees centigrade.

Subp. 49c. **Tremie pipe.** "Tremie pipe" means a pipe or hose used to insert grout into an annular space, well, or boring.

Subp. 49d. **Unconsolidated materials.** "Unconsolidated materials" means geological materials that are not bedrock and includes alluvium, glacial drift, glacial outwash, glacial till, lacustrine deposits, loess, saprolite, soil, and those materials specified in part 4725.1851, subpart 4, item A.

Subp. 49e. [Repealed, 45 SR 986]

Subp. 49f. [Repealed, 45 SR 986]

Subp. 49g. [Repealed, 45 SR 986]

Subp. 49h. **Wastewater treatment unit.** "Wastewater treatment unit" has the meaning given in part 7045.0020, subpart 103.

Subp. 50. [Repealed, 17 SR 2773]

Subp. 50a. **Water-supply well.** "Water-supply well" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 20a.

Subp. 50b. **Water table.** "Water table" has the meaning given in part 7060.0300, subpart 8.

Subp. 51. **Well.** "Well" has the meaning given in Minnesota Statutes, section 103I.005, subdivision 21.

Subp. 51a. **Well pump or pumping equipment.** "Well pump or pumping equipment" means a device, machine, or material used to withdraw or otherwise obtain water from a well, and all necessary seals, fittings, and pump controls. Well pump or pumping equipment does not include:

- A. water tanks except for buried pressure tanks;
- B. sampling devices placed in a monitoring well to obtain a water sample and are then removed after the sample is collected; or
- C. devices used in the construction or rehabilitation of a well.

Subp. 52. [Repealed, 17 SR 2773]

Subp. 53. [Repealed, 17 SR 2773]

Subp. 54. [Repealed, 17 SR 2773]

Statutory Authority: *MS s 103I.101; 103I.111; 103I.205; 103I.208; 103I.221; 103I.301; 103I.401; 103I.451; 103I.501; 103I.525; 103I.531; 103I.535; 103I.541; 103I.621; 144.05; 144.12; 144.383; 156A.01 to 156A.08; 157.04; 157.08; 157.09; 157.13*

History: *8 SR 1625; 15 SR 78; 17 SR 2773; 25 SR 1207; 33 SR 211; L 2013 c 108 art 12 s 108; L 2014 c 275 art 1 s 136; 45 SR 986; 48 SR 447; 49 SR 1261*

Published Electronically: *May 28, 2025*