

7081.0210 GROUNDWATER INVESTIGATION.

Subpart 1. **Necessity of investigation.** A preliminary groundwater evaluation must be conducted for all proposed MSTs according to this part.

Subp. 2. **Preliminary investigation.** The following information must be ascertained from the best available information:

A. the size of the soil dispersal system, proposed loading rate, and system geometry;

B. the township, range, section number, and other unique property identifiers, as required by the local unit of government, of the parcel where the proposed soil dispersal area is to be located;

C. any anticipated discharges from nondomestic sources to the proposed MSTs;

D. the location of the MSTs on a United States Geological Survey quadrangle topographic map, including the area within a one-mile radius of the proposed soil treatment system;

E. a determination of the general geology, periodic soil saturation, regional groundwater setting, and aquifers used for water supply and a description of the general site hydrology characteristics, including, but not limited to, identification and estimated depth measurements to geologic units and aquifers, and identification of groundwater confining strata;

F. a determination whether the proposed system is in a drinking water supply management area, inner wellhead management zone, source water protection area, or groundwater sensitive area;

G. an assessment of all water supply wells within a 300-foot radius of the proposed soil treatment area with a minimum assessment of well locations and casing depths from well construction log records. If no records exist, the well locations and casing depths must be estimated;

H. a determination or estimation of groundwater flow direction; and

I. an assessment of nitrogen impacts from the system.

Subp. 3. **Field or further investigation.** The designer must consult with the local unit of government to determine whether the local unit of government will require a field or further groundwater investigation and, if so, the extent of the investigation. The field or further investigation must be conducted if information gained in subpart 2 indicates that a proposed system is a potential contaminant threat to a regional water table, an aquifer, or water supply well(s). The threats of concern include, but are not limited to, fecal organism contamination, nitrate contamination, or phosphorus impacts to surface waters.

Subp. 4. **Monitoring.** The designer must consult with the local unit of government to determine if the local unit of government will require effluent or groundwater monitoring and, if so, the extent of the monitoring. Monitoring must be conducted if information gained in subpart 2 or 3 indicates that a proposed system is a potential contaminant threat to a regional water table, an aquifer, or a water supply well or impacts surface waters. The potential groundwater mound height must be monitored under all MSTs during operation.

Subp. 5. **Hydrological interpretations.** The information gathered in this part must be used to estimate or measure if the system adequately protects the groundwater and surface water as prescribed in part 7081.0080, subpart 4. The interpretation must include an evaluation of whether contaminant plumes will intersect water supply well capture zones.

Subp. 6. **Groundwater report.** All information required in this part must be submitted for review and approval of the local unit of government prior to final design, including all applicable information delineated on a map.

Statutory Authority: *MS s 115.03; 115.55*

History: *32 SR 1400*

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