4727.0920 TEMPORARY AND PERMANENT SEALING REPORT.

Subpart 1. **General.**

A. A licensee must submit an exploratory boring sealing report to the commissioner that contains the information in subparts 2 and 3 within 30 days of temporary or permanent sealing. The report must be submitted on a form provided by the commissioner.

B. A permanent sealing report must be filed when a temporarily sealed exploratory boring is permanently sealed. A new temporary sealing report must be filed when a temporarily sealed exploratory boring is drilled deeper or otherwise reconstructed and the explorer again wants to temporarily seal the boring.

C. The average scintillometer reading of waste drill cuttings must be reported only for exploratory borings that are drilled to explore or prospect for uranium or other radioactive metallic minerals.

Subp. 2. **Temporary sealing report.** If an exploratory boring is not permanently sealed within 30 days of the completion of drilling, the licensee must submit a temporary sealing report to the commissioner. The sealing report must contain the following information:

A. the name and address of the property owner;

B. the name and license number of the explorer doing the work, the name of the drilling contractor performing the work, and the signature of the responsible individual;

C. the date work was completed;

D. the county, township, range, section, and three quartiles where the exploratory boring is located;

E. a description of the geological materials penetrated by the boring according to subpart 4;

F. the original and current exploratory boring depth;

G. the date of construction;

H. the drilling method;

I. the drilling fluids used;

J. the bore hole diameter and depth;

K. the casing type, diameter, and depth, if present;

L. the method of covering and protecting the casing;

M. the open hole, screen, or perforation depth interval, if present;

N. the static water level;

O. the scintillometer reading, if required by subpart 1; and

P. the materials and methods used to grout the annular space around the casing, if present.

Subp. 3. **Permanent sealing report.** In addition to the information in subpart 2, a permanent sealing report must contain the following information:

A. the grout or sealing materials, quantities, and intervals where the grout was placed; and

B. a description of any obstructions removed or remaining in the exploratory boring.

Subp. 4. **Geological materials.** A licensee must report the geological materials penetrated in drilling an exploratory boring. The report must include the rock or sediment types, color, and relative hardness. The grain size must be reported for unconsolidated sediments and may be based on field observation without technical size measurement. Descriptions must use terms contained in items A and B, the Dictionary of Geological Terms, or ASTM Standard D2487-85.

A. Unconsolidated materials:

	Diameter	
Material	Millimeters	Inches
(1) Clay	Up to 0.005	Up to 0.0002
(2) Silt	0.005 to 0.062	0.0002 to 0.0025
(3) Fine sand	0.062 to 0.250	0.0025 to 0.0100
(4) Medium sand	0.250 to 0.500	0.0100 to 0.0200
(5) Coarse sand	0.500 to 1.000	0.0200 to 0.0400
(6) Very coarse sand	1.000 to 2.000	0.0400 to 0.0800
(7) Fine gravel	2.000 to 4.000	0.0800 to 0.1600
(8) Coarse gravel	4.000 to 62.500	0.1600 to 2.5000
(9) Cobbles	62.500 to 250.000	2.5000 to 10.000

B. Rock:

(1) basalt, which is a very fine-grained, dark igneous rock, commonly black, dark gray, or dark red-brown, in which the mineral grains cannot be distinguished with the unaided eye;

(2) carbonate rock, which is a sedimentary rock consisting of limestone, dolomite, or dolostone;

(3) dolomite or dolostone, which is a sedimentary rock composed primarily of the mineral dolomite (calcium-magnesium carbonate), which effervesces weakly in dilute hydrochloric acid;

(4) gabbro, which is a dark-colored, basic intrusive igneous rock comprised principally of basic plagioclase (commonly labradorite or bytownite) and clinopyroxene (augite);

(5) gneiss, which is a foliated rock formed by regional metamorphism, in which bands or lenticles of granular minerals alternate with bands or lenticles in which minerals having flaky or elongate prismatic habits predominate;

(6) granite, which is a coarse-grained, light-colored igneous rock in which quartz constitutes 10 to 50 percent of the felsic components and in which the alkali feldspar/total feldspar ratio is generally restricted to the range of 65 to 90 percent;

(7) iron formation, which is a chemical sedimentary rock, typically thin-bedded or finely laminated, containing at least 15 percent iron of sedimentary origin, and commonly but not necessarily containing layers of chert;

(8) limestone, which is a sedimentary rock composed primarily of the mineral calcite (calcium carbonate), which effervesces freely in dilute hydrochloric acid;

(9) metasedimentary rock, which is a sedimentary rock that shows evidence of having been subjected to metamorphism;

(10) metavolcanic rock, which is a volcanic rock that shows evidence of having been subjected to metamorphism;

(11) quartzite, which is a very hard sandstone, consisting chiefly of quartz grains that have been so completely and solidly cemented with secondary silica that the rock breaks across or through the grains rather than around them or a granoblastic metamorphic rock consisting mainly of quartz, which is formed by recrystallization of sandstone or chert by metamorphism;

(12) sandstone, which is a sedimentary rock consisting of cemented or otherwise compacted sediment and composed predominantly of sand-sized particles generally of quartz;

(13) schist, which is a strongly foliated crystalline rock, formed by dynamic metamorphism, that can be readily split into thin flakes or slabs due to the well-developed parallelism of more than 50 percent of the minerals;

(14) shale, which is a sedimentary rock consisting of compacted or cemented silt and clay;

(15) slate, which is a fine-grained, hard, dark-colored metamorphic rock derived from shale and which typically is gray and splits readily into flat pieces; and

(16) volcanic rock, which is generally a finely crystalline or glassy igneous rock resulting from volcanic action at or near the earth's surface.

Statutory Authority: *MS s 103I.101*

History: *28 SR 147*

Published Electronically: *September 15, 2003*