



Ohio Administrative Code Rule 1501:9-11-01 Definitions.

Effective: August 10, 2020

As used in Chapter 1501:9-11 of the Administrative Code:

(A) "Big lime" means all geologic formations above the Silurian Rochester Shale and below the Devonian Olentangy Shale.

(B) "Brine" has the same meaning as in section 1509.01 of the Revised Code.

(C) "Brush and stone bridge" means an obstruction made of timber and stone and placed in a well bore to form an effective base for plugging material.

(D) "Casing" means lengths of steel pipe coupled or connected together to form a continuous conduit in the well bore.

(E) "Cement" means a complex, finely-ground kiln-fired calcium silicate that when mixed with water forms a slurry that will harden in the borehole to form an effective seal between the well bore and casing or tubing, or to effectively seal formations penetrated by the well bore.

(F) "Clay" means, for purposes of paragraph (H) of rule 1501:9-11-07 of the Administrative Code, any material with a particle size of 4.0 microns or less and the sand fraction will be all particles with a grain size exceeding 62.5 microns.

(G) "Drilling Mud" means any mixture of water, bentonite, and/or clay to form a slurry as commonly used in the oil and gas industry.

(H) "Fine grout" means a mix of: Portland type I, II or III cement manufactured to meet ASTM "C150/C150M" standards or API "10 A Specification for Cements and Materials for Well Cementing;" water and sand that meets ASTM "C-33" standards and specifications.



(I) "Fresh water strata" means all unconsolidated rock material or sedimentary rock containing water with less than ten thousand milligrams per liter total of dissolved solids.

(J) "Identification tag" means a brass or steel plate with the initials ODNR and the plug permit number legibly braised, burned, or stamped in the surface that is affixed on top of the casing.

(K) "Long string" means any casing placed in the well bore for the purpose of protecting the producing zones.

(L) "Mechanical bridge plug" means a manufactured device designed to seal the well bore or inside diameter of any diameter of casing that may be used as a base for approved plugging material.

(M) "Mineable coal seam" means any underground coal seam of sufficient thickness that may be economically mined by current mining methods.

(N) "Plugging plan" means a written plan that includes all information required by section 1509.13 of the Revised Code in addition to all of the following:

- (1) The diameter of each uncased segment of the wellbore;
- (2) The length, weight, and outer diameter of each casing string in the well;
- (3) The depth to the base and top of the cemented interval of each casing string;
- (4) The base and top of any mineable coal seams;
- (5) The name, if known, and depth to the base and top of the deepest underground source of drinking water;
- (6) The depth to the base and top of each reservoir rock, thief zone, underground mine zone, karst void, or mineable coal seam that will be plugged or isolated;
- (7) The proposed depth to the top and base of each plug



- (8) The class of cement to be used to plug the well;
- (9) The yield and optimum slurry density for each cement plug; and
- (10) If the well will be plugged with an approved clay, the total weight of clay in tons that will be emplaced across each interval plugged.
- (O) "Precast concrete plug" means a tapered plug constructed of concrete and precast in various sizes expressly for creating a bridge on a casing seat or ripped casing.
- (P) "Prepared clay" has the same meaning as in section 1509.01 of the Revised Code.
- (Q) "Reservoir rock" means a rock formation that has or had any of the following:
 - (1) Production of oil or natural gas;
 - (2) Injection into it;
 - (3) A show of hydrogen sulfide; or
 - (4) A flow of brine.
- (R) "Squeeze" means the pumping of a cement slurry under pressure through perforations to seal the back side of casing.
- (S) "Sulfate resistant cement" means a cement-additive blend that resists deterioration in the presence of hydrogen sulfide.
- (T) "Thief zone" means a geologic formation encountered into which fluids can be lost.