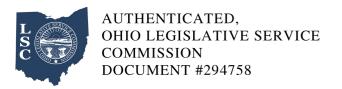


Ohio Administrative Code Rule 1501:9-3-01 Definitions.

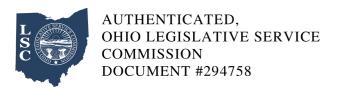
Effective: January 13, 2022

As used in Chapter 1501:9-3 of the AdministrativeCode:

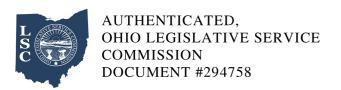
- (A) "Amendment" means a written authorization of the chief to revise an operating surface facility including any of the following:
- (1) Any substantial alteration to the design or operation of the surface facility;
- (2) Alteration to the design or operation of the surface facility that impacts the ability of the surface facility to safely operate, protect public health and safety, or minimize damage to natural resources; or
- (3) Any alteration that results in an adjustment of the containment volume.
- (B) "Applicant" means a person that submits an application for a permit to drill a class II disposal well, submits an application to convert a well to a class II disposal well, or submits an application for a permit authorizing injection into a class II disposal well.
- (C) "Annular disposal" means the method approved by the division by which brine is disposed of in any annular space of a producing well.
- (D) "Annular fluid" means a mixture of freshwater and corrosion inhibitor liquid placed in an annular space. "Annular fluid" does not include brine.
- (E) "Area of review" means an area, established in rule 1501:9-3-05 of the Administrative Code, surrounding an existing or proposed class II disposal well that is analyzed by the division in a process that consists of reviewing artificial penetrations of the injection zone, geological conditions, and potential migration pathways.



- (F) "Barrel" means a quantity of liquid equal to forty-two U.S. gallons.
- (G) "Brine" has the same meaning as in section 1509.01 of the Revised Code.
- (H) "Chief" means the chief of the division of oil and gas resources management, or the chief's designee.
- (I) "Class II disposal well" means a well permitted under section 1509.06 or 1509.22 of the Revised Code to inject brine and other waste substances as a means of disposal.
- (J) "Class II disposal well owner" means the person who owns a class II disposal well.
- (K) "Confining zone" means a geologic formation, group of formations, or part of a formation that is capable of limiting fluid movement above an injection zone.
- (L) "Construction" means any alteration of the earth, including soil, sediment, rock, sand, gravel, and organic material; or the assemblage or initiation of assemblage of any infrastructure, building, structure, fixtures, or portions thereof for the purpose of creating a class II disposal well or a class II disposal well and surface facility. "Construction" does not include the short-term storage of equipment or materials; activities to protect sensitive areas or habitats; seasonal tree and vegetative cutting; or any activity that does not exceed one acre of earth disturbance conducted for the preparation of a class II disposal well or a class II disposal well and surface facility.
- (M) "Containment" means primary containment, secondary containment, or both.
- (N) "Corrective action" means a proposed action to plug or modify an existing well that is located within the area of review of a proposed or existing class II disposal well for which an application has been submitted.
- (O) "Decommissioning plan" means a plan that contains all of the following:
- (1) A schedule to decommission a class II disposal well and surface facility;



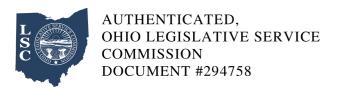
- (2) A description of the closure and remediation of the site associated class II disposal well and surface facility; and
- (3) A description of the removal and proposed final disposition of all brine and other waste substances from class II disposal well and surface facility.
- (P) "Division" means the division of oil and gas resources management, Ohio department of natural resources.
- (Q) "Filtration" means a process to filter brine and other waste substances using filter socks, cartridges, centrifuges, settling or other similar processes.
- (R) "Geological investigation" means an investigation that may include, but is not limited to:
- (1) Seismic survey(s), including a processed seismic profile with a report detailing interpretations; a map or maps illustrating line location, relevant map data, and geographical divisions; and any other applicable information or materials that illustrate the investigation of potential faulting in the immediate vicinity of the proposed injection well;
- (2) Geological descriptions of the injection zone, confining zone, and USDWs including regional depositional environment, regional structure regime, tectonic history and other applicable information;
- (3) Descriptions and interpretations of available core data of injection zone and confining zones, including a description of zone(s), geomechanics of zone(s), indication of faulting or fracturing and other applicable information;
- (4) Interpretation of available geophysical logs of the injection zone and confining zone including the general description of each log and the formation characteristics measured by each log and an analysis of the zones suitability for injection and confinement; and
- (5) Maps and diagrams with accompanying discussions including cross sections, fence diagrams, structure maps and isopach maps.



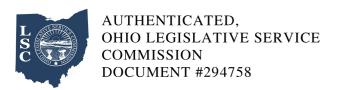
- (S) "Manifest" means a shipping document that describes the brine or other waste substances when it is transported by any means other than a pipeline and contains a description of the brine or other waste substances, the name of the person that generated the brine or other waste substances, the volume of brine or other waste substances, and the destination of the brine or other waste substances.
- (T) "Material modification" means any of the following that occurs during construction;
- (1) Any substantial alteration to the design or construction of a surface facility;
- (2) Alteration to the design or construction of the surface facility that impacts the ability of the surface facility to safely operate, protect public health and safety, or minimize damage to natural resources; or
- (3) Any alteration that results in an adjustment of the of the containment volume.
- (U) "Mechanical integrity" means a class II disposal well that satisfies both of the following:
- (1) The well has no significant leak in the casing, tubing, or packer; and
- (2) There is no significant movement of brine or other waste substances from the well into an underground source of drinking water through vertical channels adjacent to injection well bore.
- (V) "Mechanical integrity test part 1" means a test to ensure a well has no significant leak in the casing, tubing, or packer by pressurizing the annular fluid in the annular space between the tubing and the casing immediately on the outside of the tubing to an amount equal to one hundred and ten per cent of the maximum allowable injection pressure as determined in rule 1501:9-3-07 of the Administrative Code or to a pressure of three hundred pounds per square inch (psi), whichever is greater, for a duration of fifteen minutes with no more than five per cent decline in pressure unless otherwise approved by the chief.
- (W) "Mechanical integrity test part 2" means a test to ensure there is no significant movement of

brine or other waste substances from the well into an underground source of drinking water through vertical channels adjacent to injection well bore using one or more of the following methods:

(1) Cement evaluation logs;
(2) Tracer surveys;
(3) Noise logs;
(4) Temperature surveys;
(5) Casing inspection log;
(6) Caliper log; or
(7) Any other logs or tests considered effective by the chief.
(X) "Notice of application" means a notification provided by the division that an application for a permit for a class II disposal well or a class II disposal well and surface facility has been submitted to the division, which includes all of the following information as applicable:
(1) The name and address of the applicant;
(2) The township, county, and address or coordinates of the class II disposal well or class II disposal well and surface facility;
(3) The phone number, website address, and mailing address of the division;
(4) The name, title, email, and telephone number of the applicants contact;
(5) A statement that the application may be obtained by visiting the website of the division, contacting the applicant or contacting the division;

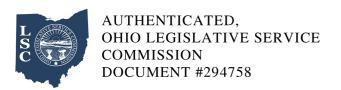


- (6) The proposed estimated depth of the class II disposal well and the proposed injection zone;
- (7) A statement to all persons required to be notified pursuant to this chapter that the division will consider all written comments received by the division within thirty calendar days of the posting of the public notice on the divisions website;
- (8) A statement to an owner of real property, who receives the notice of application pursuant to this chapter, that within five business days of receipt of the notice of application, the owner of real property is obligated to provide notice of application to each residence in an occupied dwelling that is located on the owners parcel of real property; and
- (9) A statement of the applicants responsibility to test water wells within the notification radius prior to commencement of permitted activities pursuant to this chapter.
- (Y) "Oil and gas waste facility" means all buildings, structures, portions of a building or structure, equipment, pipelines, and other fixtures at a location for the purpose of storing, recycling, treating, processing, or disposing of brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources authorized under Chapter 1509. of the Revised Code, Chapter 1571. of the Revised Code, division 1501:9 of the Administrative Code, or conditions of a permit issued under those authorities. "Oil and gas waste facility" does not include any of the following:
- (1) Operations authorized by a permit issued under section 1509.06 of the Revised Code, including associated exploration, development, well stimulation, production operations, or plugging of oil and gas resources that take place at a well site and only serve operations at that well site;
- (2) Operations authorized by a permit issued under section 1509.21 of the Revised Code;
- (3) Storing of brine or other waste substances in a vehicle, vessel, or container at locations for less than twenty-four hours for which a manifest has been generated in accordance with paragraph (B) of rule 1501:9-6-08 of the Administrative Code;
- (4) A facility used by a government authority to store brine used solely for ice and/or dust control in

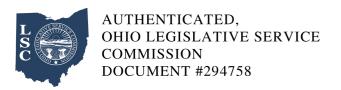


accordance with an approved brine spreading resolution subject to section 1509.226 of the Revised Code; or

- (5) A facility that disposes of other waste substances pursuant to a permit issued under Chapter 3734. of the Revised Code and rules adopted under it.
- (Z) "Other waste substances" means any nonpotable liquid resulting, obtained, or produced from the exploration, drilling, stimulation, testing, workover, plugging of an oil and gas well or production of oil or gas. "Other waste substances" includes water that is mixed with brine as a result of an unplanned release and precipitation captured in a containment regulated under Chapter 1509. of the Revised Code and any rules adopted under it or Chapter 1571. of the Revised Code. "Other waste substances" does not include wastes associated with gas processing facilities or pipelines not regulated under Chapter 1509. of the Revised Code and any rules adopted under it or Chapter 1571. of the Revised Code.
- (AA) "Permittee" means a person who has been issued a class II disposal well permit under this rule.
- (BB) "Person" has the same meaning as in section 1509.01 of the Revised Code.
- (CC) "Pipeline" means pipe, associated appurtenances, and conveyances that are installed or used for the transportation of brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas wells. "Pipeline" also means pipe, appurtenances, and conveyances used to transport brine to a class II disposal well. "Pipeline" does not include process piping.
- (DD) "Positive displacement test" means a test to demonstrate mechanical integrity of an annular disposal well by applying gas pressure to the annular space utilized for disposal at a pressure determined by the following formula: surface casing depth X 0.433 psi/ft + 50 psi.
- (EE) "Preliminary site review" means a site visit conducted by the chief that may include the applicant or the applicants designee to review the location of a proposed class II disposal well or class II disposal well and surface facility.



- (FF) "Pressure fall-off test" means a test to collect fluid-flow data in a particular zone or zones by injecting brine in a class II disposal well for a period of time and then measuring pressure changes over a period of time that the class II disposal well is shut-in.
- (GG) "Primary containment" means a structure or equipment that is or will be in direct contact with brine or with other waste substances to prevent a release of the brine or other waste substance, including but not limited to a tank, vessel, dike, pipe, liner, vault, or other equipment.
- (HH) "Process piping" or "piping" means pipe, associated appurtenances, and conveyances associated with storing brine and other waste substances at a surface facility for which a permit has been issued pursuant to rule 1501:9-3 of the Administrative Code.
- (II) "Production operation" has the same meaning as in section 1509.01 of the Revised Code.
- (JJ) "Professional surveyor" has the same meanings as in section 4733.01 of the Revised Code.
- (KK) "Qualified person" means a person that has specific expertise and experience that meets common industry standards for performing specific testing and inspections to verify component and system integrity.
- (LL) "Record" means information developed and maintained during the operation of a class II disposal well or surface facility. "Record" includes, but is not limited to logs, verification of integrity results, manifests, analytical testing results related to the manifests, standard operating procedures, and log of inspections.
- (MM) "Secondary containment" means a structure, including but not limited to, vessel, berm, dike, pipe, liner, vault, curbing, drip pan, sump, or other equipment constructed or placed in a manner to temporarily contain a release of brine or other waste substance from primary containment and to prevent the brine or other waste substance from coming into contact with the ground water or the land, or to be discharged or likely to be discharged into surface water.
- (NN) "Spinner survey" means a logging method that uses a small propeller turned by fluid movement to determine fluid flow associated with a formation.



- (OO) "Standard annular pressure test" means a test to demonstrate the mechanical integrity of a class II disposal well by applying pressure to the annulus between the tubing and casing equal to or greater than the maximum allowable injection pressure.
- (PP) "Storing" or "store" means to accumulate or collect brine or other waste substances.
- (QQ) "Subject tract" means a tract(s) upon which a person proposes to and has the legal right to drill, reopen, deepen, plug back, or convert a well for the injection of brine for the class II disposal well.
- (RR) "Surface facility" means all buildings, structures, portions of a building or structure, equipment, primary containment, secondary containment, process piping, and other fixtures at a location that is solely connected to a class II disposal well for the purposes of filtering, storing, or filtering and storing brine prior to injection and the facility has a total nominal storage volume of twelve thousand barrels or less.
- (SS) "Tracer Survey" means a survey by which a radioactive tracer is injected into a wellbore and the point of placement and movement of the tracer is recorded by a gamma ray instrument.
- (TT) "Verification of integrity" means the testing or inspection in accordance with industry standards of all primary containment, secondary containment, equipment, piping systems, and other appurtenances at the class II disposal well or surface facility, that are performed by a qualified person and are of the appropriate type for the component and system being tested or inspected.
- (UU) "Well" has the same meaning as in section 1509.01 of the Revised Code.