

WAC 173-218-040 UIC well classification including allowed and prohibited wells. The most common type of UIC well in Washington is a Class V well. A Class V well is usually a shallow disposal well such as a drywell, drainfield or French drain (see subsection (5) of this section).

(1) "Class I injection well" means a well used to inject dangerous and/or radioactive waste, beneath the lowermost formation containing an underground source of drinking water within one-quarter mile of the well bore. All Class I wells are prohibited in Washington and must be decommissioned.

(2) "Class II injection well" means a well used to inject fluids:

(a) Brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production. It may be mixed with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as hazardous wastes at the time of injection;

(b) For enhanced recovery of oil or natural gas; or

(c) For storage of hydrocarbons that are liquid at standard temperature and pressure.

(3) "Class III injection well" means a well used for extraction of minerals. All Class III wells are prohibited in Washington and must be decommissioned. Examples of Class III injection wells include, but are not limited to, the injection of fluids for:

(a) In situ production of uranium or other metals that have not been conventionally mined;

(b) Mining of sulfur by Frasch process; or

(c) Solution mining of salts or potash.

(4) "Class IV injection well" means a well used to inject dangerous or radioactive waste into or above an underground source of drinking water. Class IV wells are prohibited and must be decommissioned except for Class IV wells reinjecting treated groundwater into the same formation from where it was drawn as part of a removal or remedial action if such injection is approved by EPA in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act or the Resource Conservation and Recovery Act, 40 C.F.R. 144.13(c). Other examples of Class IV wells include:

(a) Dangerous or radioactive waste into or above a formation that contains an underground source of drinking water within one quarter mile of the well. This includes disposal of dangerous waste into a septic system or cesspool regardless of the size; or

(b) Dangerous or radioactive waste that cannot be classified as a Class I well type or (a) of this subsection.

(5) "Class V injection well" means all injection wells not included in Classes I, II, III, or IV. Class V wells are usually shallow injection wells that inject fluids above the uppermost groundwater aquifer. Some examples are dry wells, French drains used to manage stormwater and drain fields.

(a) The following are examples of Class V injection wells that are allowed in Washington:

(i) Drainage wells used to drain surface fluids, primarily stormwater runoff, into or below the ground surface, such as, but not limited to, a drywell or infiltration trench containing perforated pipe;

(ii) Heat pump or cooling water return flow wells used to inject water previously used for heating or cooling;

(iii) Aquifer recharge wells used to replenish the water in an aquifer;

(iv) Salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water;

(v) Septic systems serving multiple residences or nonresidential establishments that receive only sanitary waste and serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day;

(vi) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a nonoil or gas producing zone to reduce or eliminate subsidence associated with the removal of fresh water;

(vii) Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power;

(viii) Injection wells used in experimental technologies;

(ix) Injection wells used for in situ recovery of lignite, coal, tar sands, and oil shale;

(x) Injection wells used for remediation wells receiving fluids intended to clean up, treat or prevent subsurface contamination;

(xi) Injection wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;

(xii) Injection wells used to control flooding of residential basements;

(xiii) Injection wells used for testing geologic reservoir properties for potential underground storage of natural gas or oil in geologic formations; if the injected water used is of equivalent or better quality than the groundwater in the targeted geologic formation and the groundwater in the targeted geologic formation is nonpotable and/or toxic because of naturally occurring groundwater chemistry;

(xiv) Injection wells used as part of a reclaimed water project as allowed under a permit; and

(xv) Injection wells used to inject carbon dioxide for geologic sequestration.

(b) The following are examples of Class V wells that are prohibited in Washington:

(i) New and existing cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes that have an open bottom and may have perforated sides that serve twenty or more people per day or an equivalent design capacity of 3,500 gallons or larger per day. The UIC requirements do not apply to single family residential cesspools or to nonresidential cesspools which receive solely sanitary waste and have the capacity to serve fewer than twenty persons a day or an equivalent design capacity of less than 3,500 gallons per day;

(ii) Motor vehicle waste disposal wells that receive or have received fluids from vehicular repair or maintenance activities (see definition of motor vehicle waste disposal wells in WAC 173-218-030). UIC wells receiving stormwater located at vehicular repair, maintenance or dismantling facilities shall not be considered waste disposal wells if the wells are protected from receiving vehicle waste;

(iii) Wells used for solution mining of conventional mines such as stopes leaching;

(iv) Backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not;

(v) UIC wells receiving fluids containing hazardous substances (see definition for hazardous substances in WAC 173-218-030) except for wells:

(A) Allowed under (a)(x) of this subsection; or

(B) Receiving stormwater that meets the nonendangerment standard by applying the best management practices and requirements in WAC 173-218-090 or stormwater authorized under a permit; and

(vi) UIC wells receiving industrial wastewater except for industrial wastewater authorized under a permit.

[Statutory Authority: Chapter 80.80 RCW. WSR 08-14-011 (Order 07-11), § 173-218-040, filed 6/19/08, effective 7/20/08. Statutory Authority: Chapters 43.21A and 90.48 RCW. WSR 06-02-065 (Order 01-10), § 173-218-040, filed 1/3/06, effective 2/3/06. Statutory Authority: RCW 43.21A.445. WSR 84-06-023 (Order DE 84-02), § 173-218-040, filed 2/29/84.]