**Section 730.105 Classification of Injection Wells**

Injection wells are classified as follows:

a) Class I Injection Wells. A Class I injection well is any of the following:

1) A Class I hazardous waste injection well that is used by a generator of hazardous waste or an owner or operator of a hazardous waste management facility to inject hazardous waste beneath the lowermost formation containing an underground source of drinking water within 402 meters (one-quarter mile) of the well bore.

2) An industrial or municipal disposal well that injects fluids beneath the lowermost formation containing an underground source of drinking water within 402 meters (one-quarter mile) of the well bore.

3) A radioactive waste disposal well that injects fluids below the lowermost formation containing an underground source of drinking water within 402 meters (one-quarter mile) of the well bore.

b) Class II Injection Wells. A Class II injection well is one that injects any of the following types of fluids:

1) Fluids that are brought to the surface in connection with conventional oil or natural gas production and which may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;

2) Fluids that are used for enhanced recovery of oil or natural gas; and

3) Fluids that are used for storage of hydrocarbons that are liquid at standard temperature and pressure.

c) Class III Injection Wells. A Class III injection well is one that injects fluid for extraction of minerals, including one used in any of the following activities:

1) Mining of sulfur by the Frasch process;

2) In situ production of uranium or other metals. This category includes only in situ production from ore bodies that have not been conventionally mined. Solution mining of conventional mines, such as stopes leaching, is included in Class V; or

3) Solution mining of salts or potash.

BOARD NOTE: Class III injection well would include a well that is used for the recovery of geothermal energy to produce electric power, but would not include a well that is used in heating or aquaculture that falls under Class V.

d) Class IV Injection Wells. A Class IV injection well is any of the following:

1) A well used by a generator of hazardous waste or of radioactive waste, by an owner or operator of a hazardous waste management facility, or by an owner or operator of a radioactive waste disposal site to dispose of hazardous waste or radioactive waste into a formation that contains an underground source of drinking water within 402 meters (one-quarter mile) of the well.

2) A well used by a generator of hazardous waste or of radioactive waste, by an owner or operator of a hazardous waste management facility, or by an owner or operator of a radioactive waste disposal site to dispose of hazardous waste or radioactive waste above a formation that contains an underground source of drinking water within 402 meters (one-quarter mile) of the well.

3) A well used by a generator of hazardous waste or an owner or operator of a hazardous waste management facility to dispose of hazardous waste that cannot be classified pursuant to subsection (a)(1), (d)(1), or (d)(2) (e.g., wells used to dispose of hazardous wastes into or above a formation that contains an aquifer that has been exempted pursuant to Section 730.104).

e) Class V Injection Wells. A Class V injection well is any not included in Class I, Class II, Class III, Class IV, or Class VI. Specific types of Class V injection wells include the following:

1) Air conditioning return flow wells used to return the water used in a heat pump for heating or cooling to the supply aquifer;

2) Cesspools, including multiple dwelling, community, or regional cesspools, or other devices that receive wastes that have an open bottom and sometimes have perforated sides. The UIC requirements do not apply to single family residential cesspools or to non-residential cesspools that receive solely sanitary wastes and have the capacity to serve fewer than 20 persons a day;

3) Cooling water return flow wells used to inject water previously used for cooling;

4) Drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation;

5) Dry wells used for the injection of wastes into a subsurface formation;

6) Recharge wells used to replenish the water in an aquifer;

7) 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;

8) Sand backfill and other 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;

9) Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community, or regional business establishment septic tank. The UIC requirements do not apply to single family residential septic system wells, or to nonresidential septic system wells that are used solely for the disposal of sanitary waste and which have the capacity to serve fewer than 20 persons a day;

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

11) Radioactive waste disposal wells other than Class IV injection wells;

12) Injection wells associated with the recovery of geothermal energy for heating, aquaculture, or production of electric power;

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

14) Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts; and

15) Injection wells used in experimental technologies.

f) Class VI Injection Wells. A Class VI injection well is any of the following:

1) An injection well that is not experimental in nature and which is used for geologic sequestration of carbon dioxide beneath the lowermost formation containing a USDW;

2) An injection well that is used for geologic sequestration of carbon dioxide and which has been granted a permit that includes alternative injection well depth requirements pursuant to Section 730.195; or

3) An injection well that is used for geologic sequestration of carbon dioxide and which has received an expansion to the areal extent of an existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemption pursuant to Section 730.104 and 35 Ill. Adm. Code 704.123(d).

BOARD NOTE: Derived from 40 CFR 146.5 (2017).

(Source: Amended at 42 Ill. Reg. 24145, effective November 19, 2018)