

II. GROUNDWATER

A. Federal Groundwater Laws and Regulations

1. Safe Drinking Water Act

The objectives of the Safe Drinking Water Act⁹ (SDWA) are:

- ! The protection of public health by establishing safe limits, based upon the quality of tap water, for contaminants that may have an adverse effect on human health; and
- ! The prevention of ground and surface drinking water source contamination.

a. 1996 SDWA Amendments

The 1996 amendments¹⁰ to the SDWA give EPA authority to target contaminants for regulation which could pose the greatest threat to public health. These amendments also provide additional sources of financial assistance for public water systems.

The amendments create a voluntary source water protection program, which may include whole farm/ranch or voluntary agricultural resource management plans, to prevent contaminants from entering drinking water in the first place.

⁸ IDAHO CODE § 42-3601 *et seq.* (1996).

⁹ 42 U.S.C. § 300g-1 *et seq.* (1996).

¹⁰ Safe Drinking Water Act Amendments of 1996, P.L. 104-182.

Other provisions include:

- ! Flexibility in monitoring of contaminants;
- ! Compliance exemptions for small water systems; and
- ! Programs which enable water systems to more fully comply with the law through capacity development.

Under the 1996 amendments, EPA is required to establish a program for monitoring unregulated contaminants and must use risk assessment and cost-benefit analysis in setting new standards for contaminants. In addition, states are now required to identify areas that provide source water for drinking water systems and must conduct vulnerability assessments for high priority areas.

Finally, the amendments include right-to-know provisions which require that when an SDWA violation presents a threat to public health, the public must be notified of the contaminants present in tap water within 24 hours. The law also requires standards for high-priority microbial contaminants and disinfection by-products.

Producer Note: The extent to which former requirements will be affected by the 1996 SDWA amendments will be fully realized when regulations implementing the amendments are adopted by EPA. Until that time, producers must closely monitor and maintain all previously required activity and consult frequently with their state agency that regulates drinking water to determine whether changes in an activity may be required by any new regulations.

b. Comprehensive State Ground Water Protection Program

Under regulations which implemented the prior SDWA, states could establish a Comprehensive State Ground Water Protection Program (CSGWPP) to protect underground sources of drinking water. Under this program, states could require the use of BMPs. Generally, agricultural operations were required to meet drinking water regulations only if the operation served piped water to an average of 25 people or had more than 15 service connections for more than 59 days per year. This regulation primarily affected those with drinking water wells or operations which provided drinking water to contract labor. Farms were required to sample for microbiological and nitrate problems based on schedules established by either the state or the appropriate EPA regional office.

Producer Note: Under the CSGWPP, each state must establish goals to guide all relevant groundwater protection programs in the state; prioritize water resources; identify sources of contamination and needs to achieve protection of the resource; define all authorities, roles, responsibilities, and resources within the state; coordinate information collection and management; and improve public information and education.

c. Underground Injection Control Program

Underground injection means the subsurface emplacement of fluids by well injection. The SDWA provides an underground injection control (UIC) program which is intended to protect groundwaters that may reasonably be expected to supply any public water system from contaminants which may result in noncompliance with drinking water regulations or otherwise adversely affect public health.

The SDWA classifies all injection wells into one of the following categories:

- ! Class I) Wells used to inject hazardous wastes and industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing an underground source of drinking water;
- ! Class II) Wells which inject fluids in connection with natural gas storage, conventional oil or natural gas production, enhanced recovery of oil or natural gas, and storage of hydrocarbons which are liquid at standard temperature and pressure;
- ! Class III) Wells which inject for extraction of minerals;
- ! Class IV) Wells used by generators of hazardous or radioactive waste disposing of the waste into or above a formation which within 1/4 mile contains an underground source of drinking water, and all other disposals of hazardous waste; and
- ! Class V) All injection wells not included in Classes I, II, III, or IV.

Generally, all underground injections are prohibited without a UIC permit. In addition, the construction of any well is prohibited until a permit has been issued.

Producer Note: Agricultural drainage wells are categorized as Class V wells in the UIC program. As a result, most producers will only need to be familiar with Class V well requirements.

Producers with Class V agricultural drainage wells are required to furnish inventory information concerning the wells to appropriate state agencies. In addition, states can require individual well permits. Class V agricultural drainage wells include:

- ! Air conditioning return flow wells;
- ! Cesspools receiving wastes with open bottoms and perforated sides;
- ! Cooling water return flow wells used to inject water used for cooling;
- ! Drainage wells primarily used to drain storm runoff;
- ! Dry wells used for waste injection;
- ! Recharge wells used to replenish aquifers;
- ! Salt water intrusion barrier wells;
- ! Sand backfill, other backfill wells, and injection wells used primarily in mining areas;
- ! Septic system wells used to inject waste or effluent from multiple dwelling or business septic tanks; and
- ! Subsidence control wells.¹¹

In addition, producers are not allowed to inject contaminants into an underground source of drinking water which uses a well if the contaminant could cause a violation of any primary drinking water regulation or if the activity would adversely affect the public health.

2. *Groundwater State Management Plans*

Producer Note: EPA has published a proposed regulation¹² which will require states to develop groundwater management plans to allow the continued use of five chemicals)alachlor, atrazine, cyanazine, simazine, and metolachlor. The rule is not expected to be effective until the fall of 1997. Producers should contact the state agriculture department for effective dates.

¹¹ 40 C.F.R. § 146.5 (1996).

¹² 61 Fed. Reg. 33260 (1996).

B. State Groundwater Laws and Regulations

A number of acts in Idaho deal with the protection of groundwater. Issues which are dealt with by these acts include waste disposal and injection wells,¹³ groundwater recharge,¹⁴ groundwater management districts,¹⁵ and groundwater districts.¹⁶

1. Waste Disposal and Injection Wells

Producer Note: Generally, Idaho law declares that groundwater is a public resource which must be protected against unreasonable contamination or deterioration of quality in order to protect the groundwater for diversion to beneficial uses.

Construction of injection wells which will be used for the injection of hazardous wastes or radioactive wastes into or above a drinking water source is prohibited. In addition, an injection through an existing injection well into or above a drinking water source is prohibited. Hazardous waste is defined as any fluid or combination of fluids which because of quantity, concentration, or characteristics, including physical, chemical, or biological, may:

- ! Cause or significantly contribute to an increase in deaths or an increase in serious, irreversible, or incapacitating reversible illness;
or
- ! Pose a substantial threat to human health or to the environment if improperly treated, stored, disposed of, or managed.

Producer Note: Hazardous wastes include, but are not limited to, materials which are toxic, corrosive, ignitable, or reactive, or materials which may have mutagenic, teratogenic, or carcinogenic properties, but do not include solid or dissolved material in domestic sewage or solid or dissolved material in irrigation return flows.

A permit obtained from DEQ is required for the construction or modification of waste disposal and injection wells. If a permit application is denied, or if the permit holder does not like the conditions imposed by the permit, a hearing may be requested, so long as the request is made

¹³ IDAHO CODE § 42-3901 *et seq.* (1996).

¹⁴ IDAHO CODE § 42-4201 *et seq.* (1996).

¹⁵ IDAHO CODE § 42-5101 *et seq.* (1996).

¹⁶ IDAHO CODE § 42-5201 *et seq.* (1996).

within 30 days of notice of the denial or permit conditions. Judicial review can be obtained of any decision made by the agency.

Construction and operation of an injection well without a permit is a misdemeanor and may subject the violator to the following penalties:

- ! Preliminary or permanent injunctions, including temporary restraining orders;
- ! Civil penalties not exceeding \$2,500 for each day the violation occurs;
- ! Cease and desist orders; and
- ! Criminal penalties for willful violations and violations of cease and desist orders, with each day constituting a separate offense, including:
 - ◆ Six months in jail; and/or
 - ◆ Fines of \$5,000 for each offense.

2. *Groundwater Recharge*

The Idaho provisions dealing with groundwater recharge are for the purpose of conservation, development, augmentation, and optimum use of the water resources of the state. As a result, water projects and water use that will augment groundwater basin recharge are encouraged by the state, especially those projects which recharge water basins through storage of unappropriated waters in underground aquifers. Prior water rights will be protected, and DEQ can issue licenses and order reductions in the amount of water that may be diverted for recharge purposes.

Producer Note: Jerome, Lincoln, Gooding, and Twin Falls counties are involved in a pilot project for groundwater recharge. Producers in these counties should contact DEQ to determine if water appropriation for their operation is affected.

3. *Groundwater Management Districts*

Idaho allows for the creation of special groundwater management districts for the purpose of financing the repair or abandonment of wells in aquifers which have experienced or are experiencing declines in water level or water pressures because of flow, leakage, and waste from improper construction, maintenance, and operation of wells drilled into the aquifer.

4. *Groundwater Districts*

Groundwater districts may be established in Idaho when 50 or a majority, whichever is less, of the groundwater users in a particular geographic area desire to organize a groundwater district and they propose the organization of the district and the election of an initial board of directors (Board).

Groundwater users which are included in the district, and therefore subject to assessments, include the following:

- ! All ground irrigators within the boundaries of the district;
- ! All nonirrigators within the boundaries of the district who voted according to notice of the election of the board;
- ! A nonirrigator who provides written notice to the board within 60 days after the date the district was formed; and
- ! Any person other than municipal, commercial, industrial, federal, and tribal users, whose permit was acquired after the formation of the district.

Once elected, the Board may perform any number of duties, including, but not limited to the following:

- ! Acquire, and/or construct, operate, control or use by appropriation, grant, purchase, bequest, devise, contract or lease works or facilities, water rights, water permits and licenses, well drilling permits, wells, pipelines, ditches and any other real and personal property to fully exercise its powers;
- ! Sell any real or personal property within its boundaries;
- ! Levy assessments;
- ! Appropriate, develop, store, and transport water within the state;
- ! Finance the repair or abandonment of wells which have experienced declines in water level or water pressures;
- ! Have and exercise the power of eminent domain;
- ! Sue and be sued; and

- ! Manage and conduct the affairs of the district and have and exercise all rights and powers necessary or incidental to or implied from the specific powers granted by the act.

5. *Idaho Groundwater Quality Plan*

In addition to other methods of protecting groundwater, Idaho has implemented the Groundwater Quality Plan¹⁷ to maintain the existing high quality of groundwater and to satisfy existing and projected beneficial uses, including drinking water, agricultural, industrial, and aquacultural water supplies. All groundwater must be protected as a valuable public resource against unreasonable contamination or deterioration. If possible, the quality of degraded groundwater will be restored to support identified beneficial uses.

The law is intended to prevent contamination of groundwater from point and nonpoint sources of contamination to the maximum extent practical. Goals of the law include:

- ! To prevent contamination of groundwater from any source to the maximum extent practical;
- ! To require appropriate actions to prevent further contamination upon the discovery of any contamination that poses a threat to existing or projected beneficial uses, including investigation and evaluation or enforcement actions if necessary to stop further contamination or clean up existing contamination;
- ! To require all persons to conduct their activities so as to prevent the nonregulated release of contaminants into groundwater; and
- ! To educate the citizens of the state for the preservation and restoration of groundwater quality.

Producer Note: Agricultural producers may be required to provide an Agricultural Ground Water Quality Protection Plan to assist in preventing the contamination of groundwaters.

¹⁷ IDAHO CODE § 39-102