

## **II. GROUNDWATER**

### **A. Federal Groundwater Laws and Regulations**

#### ***1. Safe Drinking Water Act***

The objectives of the Safe Drinking Water Act<sup>10</sup> (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***

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<sup>8</sup> UTAH CODE ANN. § 19-5-101 *et seq.* (1995).

<sup>9</sup> UTAH ADMIN. R. R317-8-3.5(5)(a).

<sup>10</sup> 42 U.S.C. § 300g-1 *et seq.* (1996).

The 1996 amendments<sup>11</sup> 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.

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.

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<sup>11</sup> Safe Drinking Water Act Amendments of 1996, P.L. 104-182.

**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.<sup>12</sup>

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 regulation<sup>13</sup> 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.

### B. **State Groundwater Laws and Regulations**

#### 1. *Utah Safe Drinking Water Act*

Under the Utah Safe Drinking Water Act,<sup>14</sup> the Utah Drinking Water Board (Water Board) has the authority to administer provisions of the Safe Drinking Water Act. The regulations apply to public water systems which provide water for domestic and other uses to an average of 25 individuals daily for at least 60 days per year or which have at least 15 service connections.

**Producer Note:** Utah's drinking water regulations must be at least as stringent as the national drinking water standards. The Water Board requires operators of any public water system to obtain a certificate which authorizes operation of the public water system. However, the Water Board may not regulate water which is used solely for agricultural purposes.

#### 2. *Utah Water Wells*

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<sup>12</sup> 40 C.F.R. § 146.5 (1996).

<sup>13</sup> 61 Fed. Reg. 33260 (1996).

<sup>14</sup> UTAH CODE ANN. § 19-4-101 *et seq.* (1995).

Utah requires that any person drilling a well must first obtain a license from the state engineer.<sup>15</sup> The state engineer is in charge of the Division of Water Rights which, in turn, is a division within the Department of Natural Resources. After the well is drilled, the person drilling the well must furnish data to the state engineer regarding the well project within 30 days after completing or abandoning the project. The report is made on forms supplied by the state engineer. Every person constructing a well must obtain a license from the state engineer. A license will only be issued after a \$5,000 bond is posted with the state engineer's office.

**Producer Note:** Because of the arid nature of much of the state, Utah has very strict rules regulating water usage. Producers who want to drill wells on their property or expand their use of surface water should work closely with the Division of Water Rights within the Department of Natural Resources.

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<sup>15</sup> UTAH CODE ANN. § 73-3-22 *et seq.* (1989).

<sup>16</sup> 42 U.S.C. § 7401 *et seq.* (1994).