EXHIBIT
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Safe Drinking Water Act

Underground Injection Control (UIC) Program

Protecting Public Health and Drinking Water Resources

EPA
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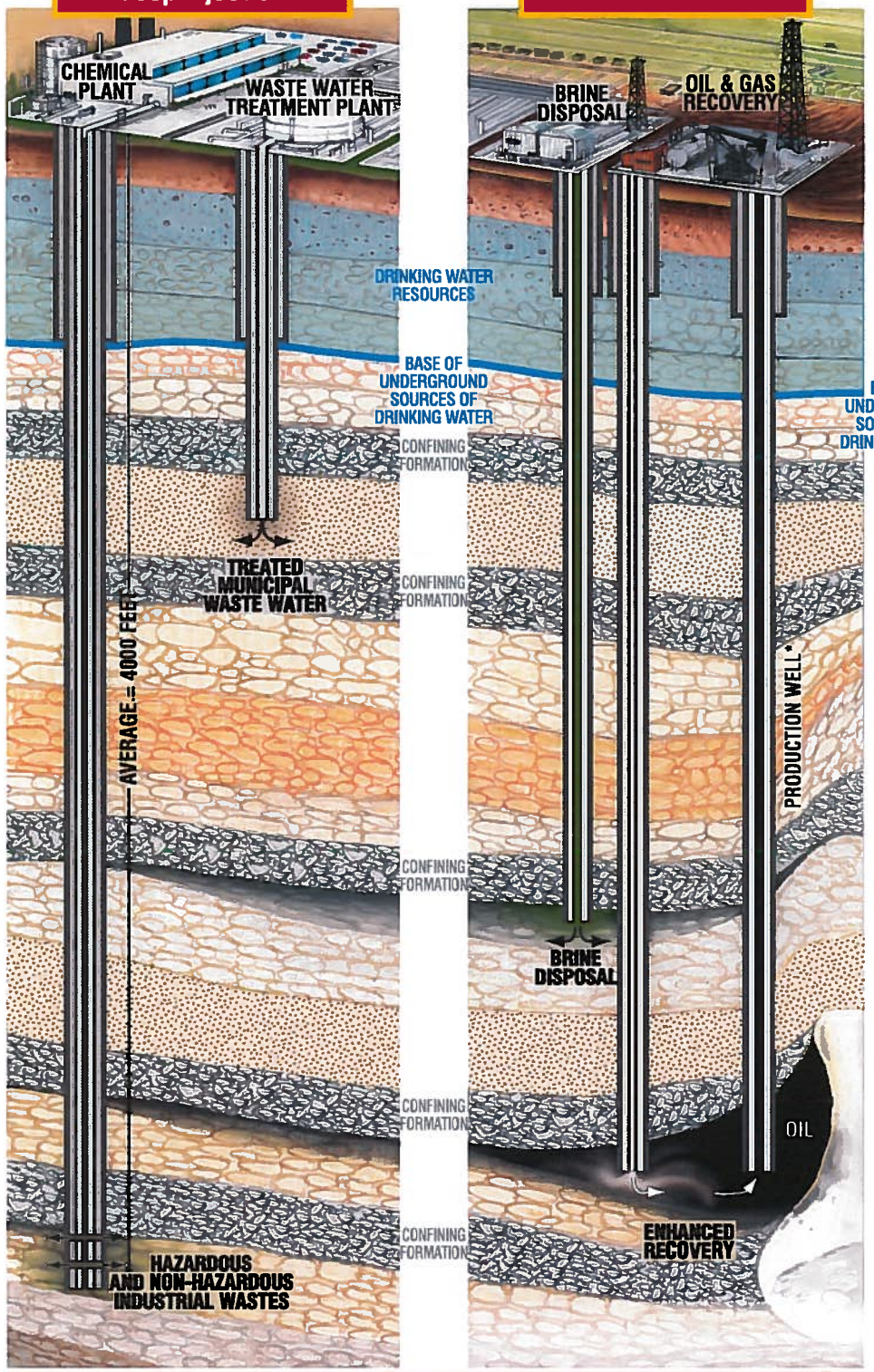
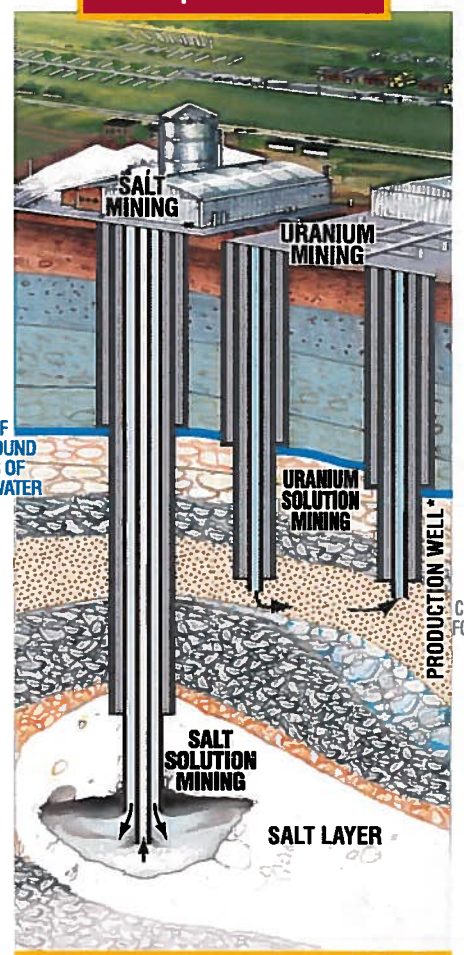
Class I wells- Isolate hazardous, industrial and municipal wastes through deep injection



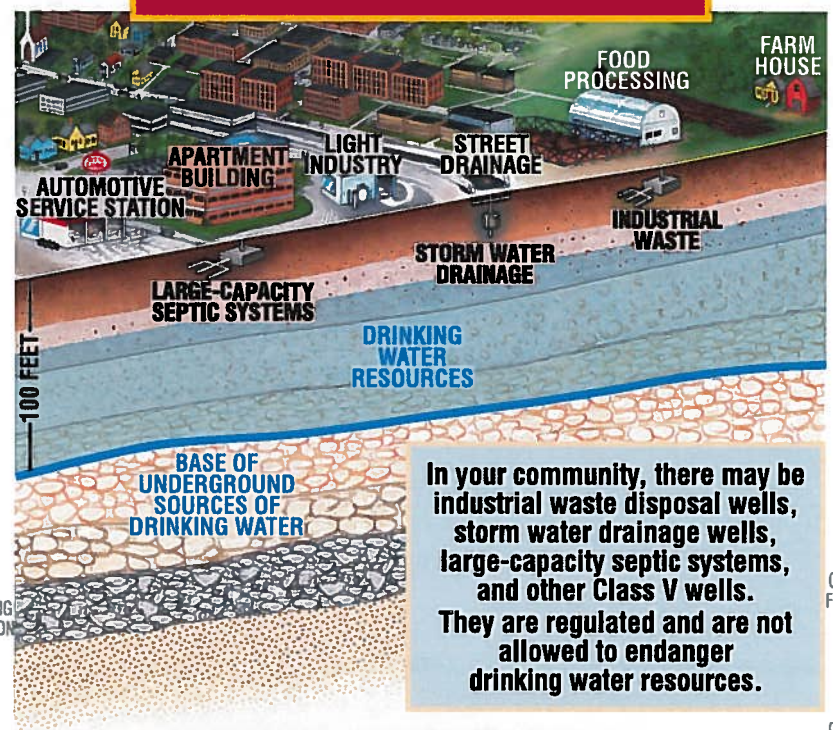
Class II wells- Inject oil and gas production fluids

Class III wells- Minimize environmental impacts from solution mining operations



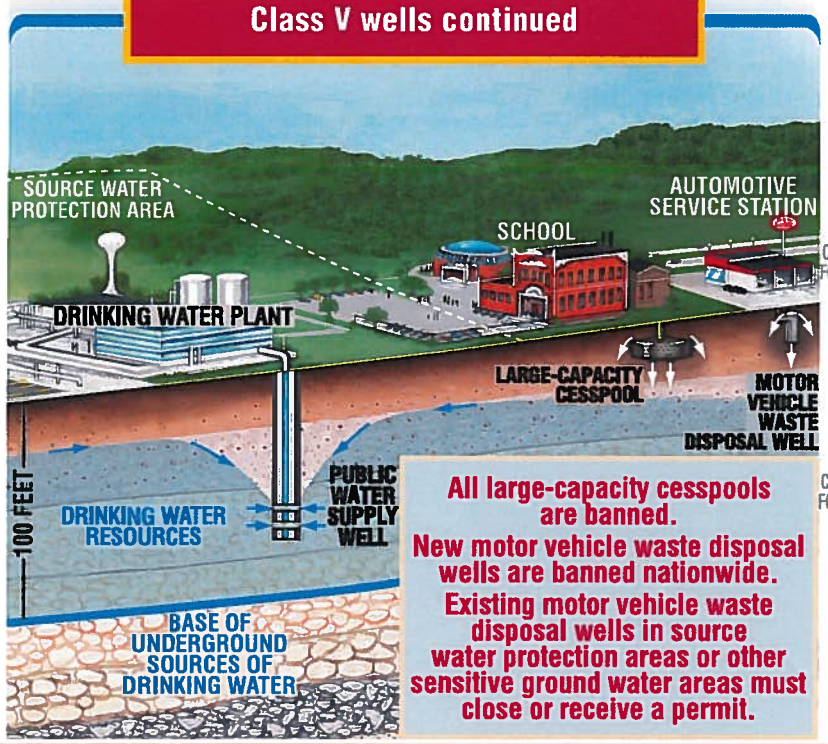
Class IV wells- Banned under all scenarios except as part of authorized hazardous waste cleanup activities

Class V wells- Manage the shallow injection of all other fluids to prevent contamination of drinking water resources



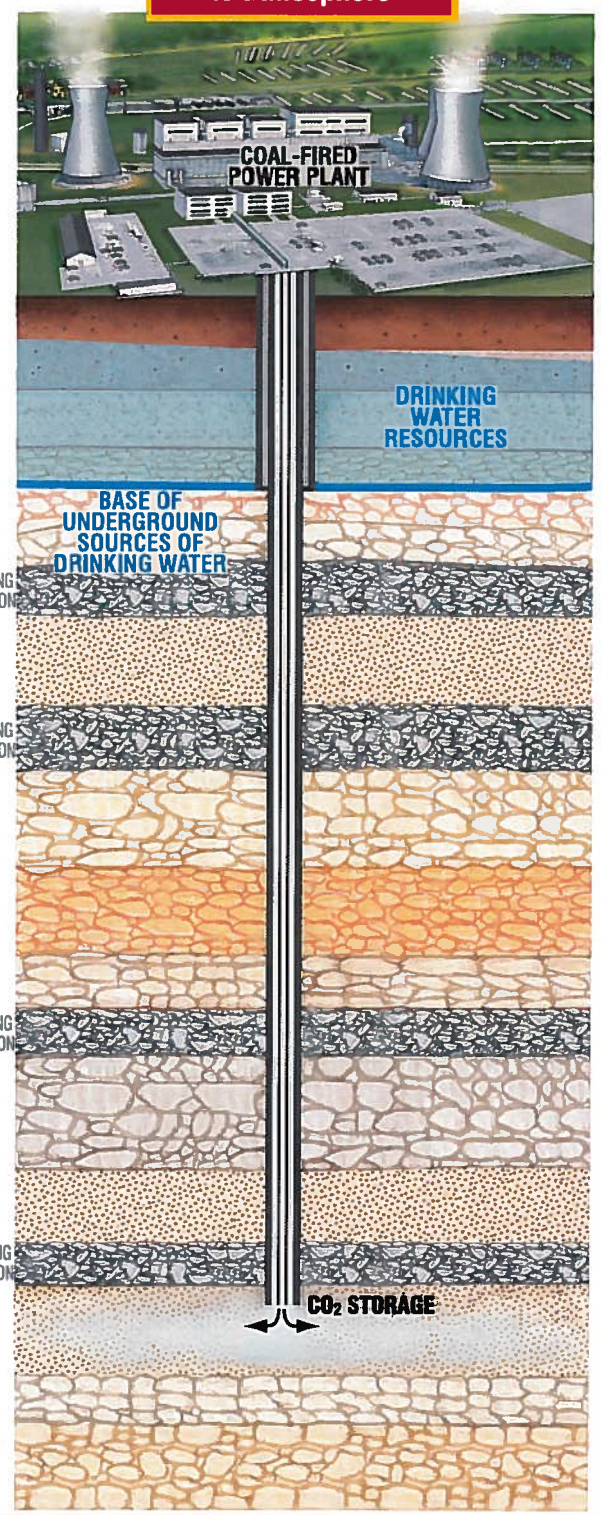
In your community, there may be industrial waste disposal wells, storm water drainage wells, large-capacity septic systems, and other Class V wells. They are regulated and are not allowed to endanger drinking water resources.

Class V wells continued



All large-capacity cesspools are banned.
New motor vehicle waste disposal wells are banned nationwide.
Existing motor vehicle waste disposal wells in source water protection areas or other sensitive ground water areas must close or receive a permit.

Class VI wells- Inject CO_2 for long-term storage to reduce emissions to atmosphere



Not drawn to scale

Safe Drinking Water Act Underground Injection Control (UIC) Program

Protecting Public Health and Drinking Water Resources

WHY DO WE HAVE A PROGRAM TO REGULATE UNDERGROUND INJECTION?

Each year Americans generate large amounts of waste fluids. More than 750 billion gallons of hazardous and nonhazardous fluids are disposed of safely through underground injection. The Underground Injection Control (UIC) Program is designed to protect underground sources of drinking water (USDWs) and provide a safe and cost-effective means for industries, municipalities, and small businesses to dispose of their wastewater, extract mineral resources, and store water for the future. Illegal discharges have the potential to contaminate our underground drinking water resources. Preventing this contamination is vital because most accessible fresh drinking water is found underground in shallow formations called aquifers. Aquifers provide water for more than 90 percent of the public water systems in America. They also supply agricultural wells, feed our lakes, and help recharge our streams and rivers, particularly during dry periods. In addition, millions of Americans living in rural areas rely on private wells that draw their water from aquifers. Safe and clean drinking water resources are essential for our growing population. The UIC Program prevents contaminants from entering our drinking water resources to protect our public health.

WHAT ARE INJECTION WELLS?

An injection well is any bored, drilled, or driven shaft, or dug hole, whose depth is greater than its largest surface dimension; an improved sinkhole; or a subsurface distribution system used to discharge fluids underground. These wells range from deep, highly technical, and more frequently monitored wells to shallow on-site drainage systems, such as septic systems, cesspools, and storm water drainage wells. There are six categories or "classes" of injection wells based on function, construction, and operating features.

WHAT IS THE STATUTORY BASIS FOR THE UIC PROGRAM?

In 1974, Congress passed the Safe Drinking Water Act (SDWA). Part of SDWA required the U.S. Environmental Protection Agency (EPA) to report back to Congress on waste disposal practices, and develop minimum federal requirements for injection practices that protect public health by preventing injection wells from contaminating USDWs. USDWs are defined as aquifers or portions of aquifers that have a sufficient quantity of ground water to supply a public water system and contain fewer than 10,000 milligrams per liter (mg/l) or parts per million (ppm) total dissolved solids (water that can be treated to drinking water standards). This includes all current and future underground drinking water resources.

HOW DOES THE UIC PROGRAM PROTECT PUBLIC HEALTH?

EPA established the UIC Program to set minimum federal requirements for all injection wells that discharge hazardous and non-hazardous fluids above, into, or below USDWs. They affect the siting, construction, operation, maintenance, monitoring, testing, and closure of injection wells. All operational injection wells require authorization under general rules or specific permits. Fluids cannot be injected if they may endanger a drinking water source.

- **Class I wells — *Isolate hazardous, industrial and municipal wastes through deep injection.*** Class I wells inject hazardous and nonhazardous wastes into deep, isolated rock formations below the lowermost USDW. There are specific siting, construction, operating, monitoring and testing, reporting and record keeping, permitting, and closure requirements for all Class I wells. There are two main types of Class I wells: hazardous waste wells and non-hazardous waste wells. There are approximately 650 Class I wells in operation in the United States.
  - *Class I Hazardous Waste Disposal Wells* are mainly used by industries such as petroleum refining and metal, chemical, and pharmaceutical production. These wells inject up to 2 miles below the surface and are designed to prevent any waste from escaping the injection zone. Because of the hazardous nature of the waste, Class I hazardous well owners must also show that the hazardous waste will not move from the injection zone for 10,000 years, or for as long as the waste remains hazardous. Class I hazardous waste wells are stringently regulated under the SDWA (UIC Program) and the Resource, Conservation, and Recovery Act (RCRA).
  - *Class I Non-Hazardous Waste Disposal Wells* are used by industries and municipal wastewater treatment facilities to dispose of nonhazardous waste, such as dilute manufacturing process waste and treated sanitary wastewater. All Class I non-hazardous wells are monitored, inspected, and tested regularly.
- **Class II wells — *Inject oil and gas production fluids.*** Class II wells inject fluids associated with oil and natural gas production. Most of the injected fluid is brine pumped to the surface along with oil and gas. This brine is often saltier than seawater and can contain toxic metals and radioactive substances. By injecting the brine, Class II wells prevent surface contamination of soil and water. In addition, well operators inject residual brines, steam, polymers, and other fluids to enhance the production of oil and gas. Class II well operators must follow strict construction and conversion (from production wells) requirements, except when historical practices in the state and geology allow for different standards. In general, a production well (e.g., oil and gas well) is not covered by the UIC program unless that well is hydraulically fractured for the purpose of production stimulation when diesel is used as a fracturing fluid. Class II wells are permitted or authorized by rule; the well owner or operator must meet all applicable requirements; and the wells are tested and inspected regularly. There are about 154,000 Class II wells in operation in the United States.
- **Class III wells — *Minimize environmental impacts from solution mining operations.*** Class III wells inject fluids into rock formations to dissolve and extract minerals. The injected fluids are pumped to the surface and the minerals in solution are extracted. Generally, the fluid is recycled into the same formation for further mineral extraction. More than 50 percent of the salt and 80 percent of the uranium extraction in the United States involves Class III injection wells. These wells are permitted or authorized by rule. Class III well owners or operators must case and cement their wells, and the wells must be tested regularly. There are about 20,700 Class III wells operating in the United States.
- **Class IV wells — *Prevent ground water contamination by prohibiting the shallow injection of hazardous waste except as part of authorized cleanup activities.*** Class IV wells were shallow wells used to inject hazardous or radioactive wastes. They are banned except when operated to inject treated contaminated ground water back into the original aquifer. These wells can be operated only with federal or state approval under the RCRA or Superfund programs. There are about 20 waste cleanup sites with Class IV wells in operation in the U.S.
- **Class V wells — *Manage the shallow injection of all other fluids.*** Class V wells are injection wells that are not included in Classes I through IV and VI. Class V wells inject nonhazardous fluids into or above an aquifer. They are typically shallow, on-site disposal systems, such as floor and sink drains that discharge into dry wells, septic systems, leach fields, and similar types of drainage wells, although there are some Class V wells that are deep injection wells. When properly designed, sited, operated, and maintained, Class V wells do not endanger drinking water sources. Most Class V wells are authorized by rule. An estimated 400,000 to 650,000 Class V wells are in operation in the United States. Examples of Class V wells include the following:
  - *Agricultural Drainage Wells* are used to drain farmland for cultivation. They include improved sinkholes, abandoned drinking water wells, and underground drain tiles and cisterns.
  - *Industrial Waste Disposal Wells* are used to dispose of non-hazardous industrial or commercial waste and fluids. These wastes and fluids include wastewater from a wide variety of industries including petroleum refineries, car washes, laundromats, commercial printers, food processors, chemical manufacturers, electroplaters, small machinery, tool and die, and other industrial operations.
  - *Motor Vehicle Waste Disposal Wells* are used to dispose of fluids from the repair or maintenance of motor vehicles. Fluids entering these wells include organic chemicals such as petroleum products and inorganic chemicals such as heavy metals. New motor vehicle waste disposal wells are banned, and existing wells must close or receive a permit.
  - *Storm Water Drainage Wells* are used to remove storm water and urban runoff from surfaces such as roadways, roofs, and paved surfaces to prevent flooding.

There are many other subcategories of Class V wells. Additional information can be found by visiting EPA's UIC Program Web site at http://www.epa.gov/safewater/uic.html.

- **Class VI wells — *Inject carbon dioxide (CO_2) for the purpose of long-term storage, also known as geologic sequestration (GS).*** Geologic sequestration is the process of injecting CO_2 that has been captured from an emission source, such as a power plant or industrial facility, into subsurface formations including deep saline formations, depleted oil and gas fields, and unmineable coal seams, for long-term storage. Injection into Class VI wells requires the owner or operator of the well to obtain a permit before injection occurs to prevent endangerment of USDWs.

  EPA finalized Federal requirements for underground injection of CO_2 for purposes of geologic sequestration in November 2010. The tailored requirements address the unique characteristics of CO_2, including the potential for large injection volumes; the buoyancy and mobility of CO_2 within the subsurface; and its corrosivity in the presence of water. Minimum technical criteria are set for permitting, geologic site characterization, area of review (AoR) and corrective action, financial responsibility, well construction, operation, testing and monitoring, well plugging, post-injection site care (PISC), and site closure. The rule helps ensure consistency in permitting underground injection of CO_2 at GS operations across the U.S. and provides requirements to prevent endangerment of USDWs in anticipation of the use of GS to reduce CO_2 emissions to the atmosphere.

  - *How does GS work?* CO_2 is first captured from fossil-fueled power plants or other emission sources. To transport captured CO_2 for GS, operators typically compress CO_2 to convert it from a gaseous state to a supercritical state, in which it exhibits properties of both a liquid and a gas. After capture and compression, the CO_2 is delivered to the sequestration site and injected into deep subsurface rock formations through one or more wells, using technologies developed and refined by the oil, gas, and chemical manufacturing industries over the past several decades. When injected into an appropriate receiving formation, CO_2 is sequestered by a combination of trapping mechanisms, including physical and geochemical processes. Physical trapping occurs when the relatively buoyant CO_2 is trapped under the low permeability confining system. Physical trapping can also occur as CO_2 is immobilized in formation pore spaces. Geochemical trapping occurs when chemical reactions between the dissolved CO_2 and minerals in the formation lead to the precipitation of solid carbonate minerals. The timeframe over which CO_2 will be trapped by these mechanisms depends on properties of the receiving formation and the injected CO_2 stream. The effectiveness of physical CO_2 trapping is demonstrated by natural analogs in a range of geologic settings where CO_2 has remained trapped for millions of years.

WHO IMPLEMENTS THE UIC PROGRAM?

States and tribes may apply to EPA to obtain primary enforcemer responsibility, or primacy, to administer the UIC Program. Primac programs must meet the minimum federal requirements but ma have more stringent requirements. Thirty-three states, Guar the Commonwealth of the Mariana Islands, and Puerto Rico hav primacy for all classes of injection wells. Seven states and two tribe share primacy with EPA. EPA directly implements the UIC program for the remaining states, the Virgin Islands, American Samoa, an Indian Country.

WHAT CAN YOU DO TO PROTECT YOUR DRINKING WATER?

Preventing contamination can save you money and protect your fan ily's health. Here are some of the things you can do to help prote your drinking water source:

- **Know where your drains go.** Many homes or businesses us septic systems or drywells for waste disposal. These system are designed for household sanitary wastes only.
- **Become involved in Source Water Protection.** States hav completed Source Water Assessments for their public wat systems that identify the major potential sources of co tamination (including Class V wells) to public drinking wat supplies. The Safe Drinking Water Act Amendments of 199 require States to make the results of source water asses ments available to the public.

  Communities are using this information to plan protectio activities and identify Class V wells for proper managemer to prevent contamination of drinking water sources. The UI Program has banned motor vehicle waste disposal wells i source water protection areas. States are also encouraged t target these areas for UIC protective measures.
- **Read your consumer confidence report.** This report, publishe once a year by the agency providing you with your drinkin water, gives you information about the quality of your drinkin water and information about your state's source water asses ment for your system, when it has been completed.

FOR MORE INFORMATION:

Call the Safe Drinking Water Hotline (800) 426-4791 or the Office Ground Water and Drinking Water (202) 564-3750; write to The UI Program, Mail Code 4606, U.S. EPA, 1200 Pennsylvania Avenue, NV Washington, D.C. 20460; or visit the Web site at http://water.epa.gov drink/.