Well construction costs

Prior to the adoption of the 62-524, F.A.C. rule, wells were being constructed within the surficial sand deposits at depths ranging from 50 to 250 feet below land surface. These sand deposits are extremely vulnerable to contamination. During an extensive testing program funded by the DEP and conducted by the Department of Health, the majority of wells with contamination were the surficial type. These wells typically had elevated levels of nitrates and EDB. Nitrates are the result of fertilizers, septic tanks, dairy farming, land spreading and other miscellaneous sources.

Your new well in a delineated area should be constructed to a depth below these surficial deposits. The design of your new well will be reviewed by a professional geologist. This review will place the well in an aquifer with the best probability of being contaminant-free. In most cases, the natural geologic materials that are present between the sands and the aquifer will provide a barrier, preventing the contaminants above from reaching your water source. As a result of the wells going deeper, the drilling material costs are higher.

If the well is constructed to the District's specifications and contamination is found after testing, then the DEP will take remediation steps, such as a filter system, to eliminate the contamination problem.

Where can I get more information?

Your county health department or the DEP can give you more information on EDB in your area. Other information can be obtained by calling the numbers below:

Filter installation and maintenance:
Water Supply Restoration
Bureau of Drinking and Ground Water Resources
(850) 245-8369

Testing data and eligibility:
Bureau of Drinking and Ground Water Resources
Department of Environmental Protection
(850) 245-8648

Human health and field and laboratory testing:
Florida Bureau of Water Programs
(850) 245-4241

Well construction regulation:
Southwest Florida Water Management District (FL only toll-free numbers)

- Brooksville 1-800-423-1476
- Bartow 1-800-492-7862
- Tampa 1-800-836-0797
- Sarasota 1-800-320-3503

Southwest Florida
Water Management District
WATERMATTERS.ORG · 1-800-423-1476

This information will be made available in accessible formats upon request. Please contact the Communications Department at (352) 796-7211 or 1-800-423-1476 (FL only), ext. 4757; TDD only at 1-800-231-6103 (FL only).

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CHAPTER 62-524, F.A.C.

Potable Water

Well Permitting in Delineated Areas

Introduction

Are you planning to have a potable water supply well drilled? Did you know that some areas of Florida have contaminated ground water that could affect the quality of your drinking water? This brochure describes some of those groundwater problems, where they occur and what the Southwest Florida Water Management District (District) is doing to help prevent new well contamination. Also included are reference sources for additional information.

History

Ground water is a good source of sanitary drinking water in most of the District's 16-county area. Certain areas of the District, however, have proven more vulnerable to contamination. As a result, the Legislature required that the Florida Department of Environmental Protection (DEP) establish rules to help prevent further contamination of potable water wells. Chapter 62-524, F.A.C., delegates implementation of these rules to the water management districts, specifically well construction regulations. As part of these rules, the DEP has provided the water management districts with maps delineating known areas of contamination. Many chemicals and toxic substances have been developed, used and discarded in the past without thinking about how they might affect our water resources. Today we know that numerous man-made compounds are contaminating groundwater supplies. Some of these chemicals can increase your risk of cancer. One such chemical is ethylene dibromide, or EDB. Areas along the Lake Wales Ridge in Polk and Highlands counties are the most extensive delineated areas within the District's jurisdiction. In 1983, EDB was found in drinking water wells in some parts of Florida. Since that time, the state has been testing water supplies and providing clean drinking water to people with contaminated wells.

Water Quality Assurance Act of 1983

The Water Quality Assurance Act of 1983 established a fund for cleaning up pollution. This fund is used to provide alternative sources of clean water to people with contaminated wells. The DEP and the Department of Agriculture and Consumer Services have installed more than 1,000 well filters and miles of potable waterline using these funds. The Department of Health tests domestic potable water wells. If they find EDB in a test sample, they will notify the DEP. The DEP decides the most cost-effective way to fix the well. They will most likely contract to have a filter installed or to connect the house to a community water supply line. In most cases, this is done at little or no direct cost to the homeowner. The DEP may also contract to provide bottled water as an interim measure before a filter is equipped on the well.

What is EDB?

EDB is a man-made chemical that was produced in the United States for over 70 years. By the 1980s, millions of pounds were being produced and used to kill termites and insects in fruit and grain, and it was found in leaded gasoline. Until banned by Florida in 1984, EDB was applied as a soil fumigant to control nematodes in citrus groves.

How much EDB in my well water is a safe level?

In 1984, Florida adopted a maximum contaminant level of 0.02 parts per billion (ppb) for EDB in drinking water. Private home wells are under the supervision of the Department of Health. Your county health department can provide a well sampling service for a nominal fee. If your well is tested and found to contain 0.02 ppb or greater of EDB, you should follow the local health official's advice and not drink or cook with that water. Any new well constructed within a delineated area is required to be sampled after the well construction has been completed and prior to its use as a drinking water supply. This will establish the presence or absence of EDB.