

KEY TERMS (Continued)

Secondary Drinking Water Standards (SDWS) - MCLs for contaminants to protect the taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Notification or Action Level (AL) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirement which a water system must follow.

No Standard (NS) - Contaminant for which there is no established MCL.

Not Detected (ND) - Contaminant is not detectable at testing limit.

pCi/L - picoCuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/L)

ppb - parts per billion, or micrograms per liter (µg/L)

CU - color units

NTU - Nephelometric Turbidity Unit

TON - Threshold Odor Number

LI - Langelier Index; Noncorrosive = Any positive value, Corrosive = Any negative value

2004 Water Statistics

- **Shandon Water Production**
⇒ 50.5 million gallons
- **Average Daily Demand**
⇒ 138,000 gallons

SOURCES OF DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

- Contaminants that may be present in source water include:**
- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
 - *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
 - *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
 - *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
 - *Radioactive contaminants* which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Health Services (CDHS) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

OPERATIONS

The Shandon water system is assigned one primary operator who, like all operators who work for the County, is certified by the CDHS. They are knowledgeable professionals dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Operators conduct weekly inspections of the wells, tank, and distribution system to ensure a safe and reliable water supply. In addition, the CDHS routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

WATER TESTING

Water analyses are performed by the San Luis Obispo County Water Quality Laboratory. The lab is certified by the CDHS as an environmental testing laboratory for bacteriological and chemical analyses. Federal and State requirements dictate that all regulatory analyses be performed by certified labs following approved procedures.

GENERAL DRINKING WATER INFORMATION

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline, 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline, 1-800-426-4791.

Additionally, the EPA Office of Ground Water and Drinking Water maintains a website with useful information on drinking water. The address is www.epa.gov/safewater/. Additional information can be obtained by accessing the American Water Works Association's website at www.awwa.org, the DHS website at www.dhs.ca.gov/ps/ddwem/index.htm, or by calling John Beaton, Water Quality Manager, at 781-5111.

WATER NEEDS

A complete assessment of Shandon's existing water system is underway to identify system strengths and shortcomings. Initial evaluations show that although the system is capable of meeting average daily demands at build-out, there are deficiencies that need to be addressed in order to meet fire-flow requirements and emergency needs, following a disaster.

It is common for a community to improve their water system, not only because it experiences growth, but because requirements become more stringent as time progresses. For example, in 1971 when Shandon's master plan was written, the fire-flow requirement was 500 gpm for residential areas and 1000 gpm for commercial areas and schools. In the current building and fire codes, these flow requirements have been doubled, depending on building size and type. The master plan is presently being updated and identifies projects needed for improved fire flows and increased water storage.

The ultimate goal of assessing Shandon's water system is to identify and implement projects that will provide excellent service to the community, maintaining water quality while enabling the system to handle water needs in the event of a fire or other emergency.

SYSTEM IMPROVEMENTS

Plans for the current year include looping water mains in the distribution system for improved fire flow and service. Looping water mains also minimizes dead zones within the distribution system to help provide high quality water to consumers at all times.