

Monterey County Health Department Consolidated Environmental Laboratory

1270 Natividad Rd. Salinas, CA 93906 (831) 755-4516

ARSENIC

PURPOSE:

Some people who drink water with Arsenic in excess of the MCL of 10 ppb over many years may experience skin damage, circulatory system problems and may have an increased risk of cancer and the enhancement of cancer progression. Arsenic also appears to act as endocrine disrupter to block glucocorticoid action which may contribute to the incidence of diabetes, hypertension, and cancer.

More specifically, a variety of human cancers are associated with Arsenic ingestion such as, but not limited to, lung, bladder, prostate, skin, and liver cancer. At the cellular level, Arsenic can also inhibit chromosomal repair and mitochondrial respiration. In addition, Arsenic can also cause circulatory system and neurological damage and promote diabetes. Therefore, all users of water from wells and other sources with Arsenic levels over 10 ppb are required to drink and cook with potable bottled water.

SAMPLE COLLECTION: Water samples taken for arsenic testing must be collected and handled properly in order to insure reliability of laboratory results. The following procedures will help you in this regard:

- 1. Select a tap as close to the well as possible. When you have found a suitable faucet, open it and allow water to flow for a few minutes before collecting a sample.
- 2. Carefully fill the one-½ pint plastic container with nitric acid (HNO3) provided by the laboratory.
- 3. Label the sample with sample identification, date and time of collection.
- 4. Complete the laboratory form including mailing address, name of sample collector, well number, description of sample point, date and time of collection, and test ordered (i.e. "ARSENIC").

CARE OF SAMPLE:

Arsenic samples should be submitted directly to the laboratory, Monday thru Friday (8:00 a.m. to 3:00 p.m.) or one of the following health department offices on the same day of collection:

Monterey Co. Environmental Health

Monterey Co. Environmental Health

1200 Aguajito Rd. 200 Broadway St. Suite 70

Monterey, CA King City, CA 831-647-7654 831-386-6899

Monterey - Drop off by 9:00 a.m.

King City – Drop off by 9:00 a.m.

FEE FOR TESTING

The fee for arsenic testing is \$32.00. If you do not have an account with our laboratory, you must pay in advance for this testing. Clients who have an account will be billed at the end of the month that the results are reported.

INTERPRETATION OF RESULTS

The Environmental Protection Agency and the State Department of Health consider 10 mg/L to be the maximum allowable level of arsenic in drinking water. Individuals connected to a water system that exceeds the maximum contaminant level for Arsenic should be promptly notified. Effective treatment methods are available for reducing the level of arsenic in drinking water. Further information on drinking water requirements and treatment can be obtained from Monterey County Environmental Health (755-4507).