

Monterey County Health Department Consolidated Environmental Laboratory

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

TRIHALOMETHANES (THM's) & HALOACETIC ACIDS - 5 TYPES (HAA5's)

PURPOSE: Trihalomethanes (THMs), Haloacetic Acids - 5 types (HAA5's) are disinfection byproducts formed when organic compounds, which occur naturally in drinking water, react with chlorine or other disinfectants during water treatment. The principal THMs are chloroform, bromodichloromethane, chlorodibromomethane, and bromoform. Chloroform is a known carcinogen. The other THMs are also suspected of being carcinogens or have been demonstrated to have other adverse health effects.

SAMPLE COLLECTION: Water samples taken for THMs use 40 ml glass vials containing sodium thiosulfate to neutralize any chlorine that may be present. From an appropriate sample site (after the disinfection step) <u>fill three vials for each sample as follows</u>:

- 1. Collect sample from a suitable tap in the distribution system downstream from the point of chlorination. Flow rate of tap should be adjusted so that the preservatives in the sample container are not flushed out.
- 2. Carefully fill each vial to the rim. Immediately replace the cap on the vials.
- 3. Invert the vials and examine for air bubbles; it is very important that no air bubbles are trapped in the container. If necessary remove cap and add more sample to eliminate all air.
- 4. Label the sample with description of sample point, date and time of collection, and name of sample collector.
- 5. Complete the laboratory form including mailing address, name of sample collector, description of sample point, date and time of collection, and test ordered (i.e. "THMs").
- 6. Collect HAA5 at the same time you take the TTHM samples.
- 7. The proper container for HAA5 is a 250 ml amber bottle with NH4CL.
- 8. Chill sample immediately.

CARE OF SAMPLE: Samples can be dropped off directly at the laboratory by 2:00 p.m., Monday thru Friday, or at one of the following health department offices:

Monterey Co. Environmental Health
1200 Aguajito Rd.
Monterey, CA
Monterey, CA
831-647-7654
Monterey Co. Environmental Health
200 Broadway St. Suite 70
King City, CA
831-386-6899

Monterey - Drop off by 9:00 a.m. King City – Drop off by 9:00 a.m.

Samples that cannot be delivered to the laboratory within one hour after collection should be refrigerated (e.g. iced cooler). Health department offices can provide for cold storage/transport from point of receipt.

FEE FOR TESTING

Testing for THM's and HAA5's is performed by a certified reference laboratory that we have selected based on high quality and competitive pricing. While subject to change, the current fees for THM and HAA5's testing are \$145 and \$135 respectively. 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 Maximum Contaminant Level (MCL) for each chemical tested will accompany your laboratory result. This is a number established by Federal and State drinking water standards; levels above the MCL have been associated with adverse health effects. One should be able to drink water for a lifetime without ill effects from THM's if the levels are below the MCL. If you have any questions regarding laboratory results, please call. We appreciate your business and look forward to providing you the highest quality laboratory services.