



7940 Memorial Drive

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Low-Level Mercury EPA 1631 E Sampling Instructions

Low-Level Mercury sampling kit contains the following in one large storage bag:

- Field Blanks: one medium storage bag with two bottles, which are individually double bagged: one empty and one containing DI Water.
- Sample Bottle: one single bottle, which is double bagged.
- 2- pair -non-powdered latex gloves.

LLHg Sampling Procedures:

- When possible the samples are to be collected while facing upstream and upwind of the location of the sampling team.
- Surface samples are collected using the "grab" sampling technique: rapid submersion of the sample bottle then filling and capping while still submerged to minimize exposure to contamination.
- Subsurface and groundwater samples should be collected using a peristaltic pump and pump tubing to pump the sample into the bottles. Any tubing or other apparatus which will have direct contact with the sample during sampling should be cleaned and an "Equipment Blank" be tested to ensure it will not contaminate the sample prior to the sampling event.
- "Clean Hands" / "Dirty Hands"

On the two member sampling team, one member will be designated as "Clean Hands" and the other "Dirty Hands."

"Clean Hands": This team member will only be involved in the steps that have direct contact with the sample. This includes opening and closing of the inner storage bags, handling of the sample container, sampling device and the transfer of the sample from the sampling device to the sample bottle.

"Dirty Hands": This team member will be involved with actions that do not require direct contact with the sample and inner storage bags. This includes removal of the sampling kit from the cooler and opening and holding the outer storage bags, documentation of the field notes and completion of the COC's etc.

Sample Collection Procedure:

- "Dirty Hands" removes both storage bags from the kit and opens the outer bag of the "LLHg Sample" bottle.
- "Clean Hands" should remove the "LLHg Sample" bottle from the inner bag and reseal the inner bag to keep clean. Sample bottles should be filled completely to minimize any contact with the atmosphere and capped tightly immediately.
- While "Dirty Hands" holds open the outer storage bag, "Clean Hands" opens the inner bag places the filled sample bottle into the inner bag and reseals the inner bag.
- "Dirty Hands" then reseals the outer bag and places in cooler.

Field Blank Collection:

- "Dirty Hands" removes both storage bags from the "Field Blank" storage bag and opens the outer bags of the bottles.
- "Clean Hands" opens the inner bags, removes and pours the entire contents of the "Field Blank Source" bottle into the "Field Blank Empty" bottle.
- While "Dirty Hands" holds open the outer storage bag, "Clean Hands" opens the inner bags and returns the bottles into the inner bags and reseals.
- "Dirty Hands" then reseals the outer bag and places in cooler.

Record AR Sheet number in the white "write on" area of each outer bag and on the outside of the large main bag on the provided label.

Once all samples have been collected and labeled, complete the provided Chain, of Custody Record, on reverse. Bottles may be stored at room temperature. Prompt return of collected samples is encouraged.

Preservation: Will be done at the lab to reduce risk of contamination.

If Mercury dissolved is needed, samples must be kept cool and arrive at the lab for filtration with in 48 hours of sampling.