# THM

## State Environmental Laboratory

Oklahoma Department of Environmental Quality

### TRIHALOMETHANES

Sampling Guide For The Collection Of EPA 524.3 Trihalomethanes

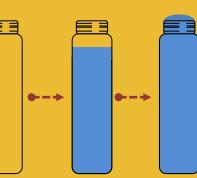
### **PRIOR TO COLLECTION**

- Plan enough time to complete all sampling; THM
  & HAA <u>must</u> be collected on the same day and returned within 48 hours of collection
- Ensure the Sample Kit has the following items:
  - Chain of Custody form
  - three 40mL amber glass bottle per collection point
  - three barcode labels
  - Cooler for return shipping

**NOTE!** Sample vials are pre-filled with 25mg ascorbic acid & 200mg maleic acid for preservation. **Do not rinse out!** If skin contact occurs, flush with water for five minutes.

### SAMPLE COLLECTION

- 1. Allow water from tap to run for five minutes then reduce flow to slow, steady stream.
- 2. Fill to the neck of the bottle then use the vial cap to carefully transfer the remaining sample to the vial until a positive meniscus forms (see figure to the right).
- 3. Replace bottle cap and tighten carefully.
- Allow vial to sit for 30 seconds then turn vial upside down to check for air bubbles. If bubbles are present, use the cap to add more water.
- 5. Vertically place one barcode to finished sample.



### SAMPLE REJECTION

Samples will be rejected (not analyzed) if any of the criteria below is met:

- forms are incomplete, illegible, or missing
- vials are not labeled to match sampling point
- vials are not on ice or at proper temperature of  $\leq 10^{\circ}$ C
- samples are frozen
- vial contains air bubbles
- samples are not received within method holding time of 48 hours
- samples are without the provided preservative
- samples are not received in DEQ-provided amber glass vials with PTFE lined lids
- damaged beyond usability
- not collected from approved sample site

**NOTE!** For Stage II samples, if THM sample from one site is canceled, the associated HAA sample is canceled.

The barcode must match the Chain of Custody for each collection point.

- 6. Repeat steps 2-5 for each remaining bottle. There will be a total of three vials per collection point.
- 7. Measure free or total chlorine based on your disinfection method. Record it anywhere on your chain of custody.
- 8. Combine the three vials with provided rubber band and mesh sleeve. Place all bottles in provided cooler and fill completely with ice. **Do not store samples in freezer as they may break**.
- 8. Complete the Chain of Custody.
- 9. If necessary, proceed to the next collection site and repeat steps 1-8 for all sites.
- 10. See back for "Sample Delivery" details.

Note! If sample begins to foam, discard bottle and contact the lab.

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### **SAMPLE DELIVERY**

### Mail

Sign and date each Chain of Custody form before mailing. Place all completed forms in a Ziploc<sup>®</sup> bag or another waterproof container. Place forms in cooler with your THM samples, HAA samples, and ice. If using a courier, i.e. FedEx, UPS, etc., address your label as the following;

Oklahoma Department of Environmental Quality 707 N. Robinson Oklahoma City, OK 73102

For USPS shipments, address your label as the following: Oklahoma Department of Environmental Quality P.O. Box 1677 Oklahoma City, OK. 73102

\*\*Ensure postage is marked for next-day priority shipping to ensure that ice does not melt before delivery\*\*

### **Personal Delivery**

The person delivering samples will sign all Chain of Custody forms at the receiving window of the DEQ Sample Management Unit located through the door on the northeast corner of the DEQ building. Hours of operation are Monday – Friday 8:00am to 4:30pm except on state holidays.

For collection assistance, scan the QR code to the right or visit DEQ's YouTube page, OklahomaDEQ, to view the "THM & HAA tutorial."



For analytical prices and fees, scan the QR code to the right, or visit the SEL's page of the DEQ's website at www.deq.ok.gov





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#### For further assistance or concerns, call 405-702-1000 or email us at selsd@deq.ok.gov

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