

- The client will receive sample containers from EEA for either chlorinated or unchlorinated sources. A pH adjustment kit is a necessary part of the field sampler's equipment for this testing. A pH adjustment kit consists of a glass beaker, glass stir rod, and narrow range pH paper (0-6). Please speak with your Analytical Services Manager if you need assistance with these equipment/supplies for your field samplers

2. WHEN SAMPLING, BRING ICE IN SEALED BAGS TO CHILL SAMPLES DURING SAMPLE COLLECTION.

- Put on nitrile gloves. Open the tap and let the water of the sample source run at fast flow for approximately 5 minutes.
- The sample kit will include sample bottles depending on the type of test. Bottles, volumes, and preservatives required per test are as follows:

TEST NAME	BOTTLES	PRESERVATIVE	HOLD TIME
Acrolein/Acrylonitrile <u>Chlorinated Source</u>	(4) 40 ml amber vials ~5mL acid and base droppers	Sodium Thiosulfate (~10mg per 40mL vial) as a dechlorinating agent 1:1 HCl Acid and 10N NaOH base with droppers*	14 days
Acrolein/Acrylonitrile <u>non-Chlorinated Source</u>	(4) 40 ml amber vials ~5mL acid and base droppers	1:1 HCl Acid and 10N NaOH base with droppers*	14 days
*1:1 HCl and 10N NaOH droppers (~5 mL) are provided as a means to adjust sample pH.			

- Use indelible ink (i.e. Sharpie pens) to clearly identify the sample bottles with the information listed below (if not already on the label).
 - Client Name - Analysis required - Preservative used
 - Sample ID - **Date and Time of collection**
- Slow water flow to thickness of a pencil (to minimize splashing).
- As samples for Acrolein/Acrylonitrile must be preserved to a pH of 4 to 5. Nearly fill a large, clean beaker or glass bottle (400-600mL) with sample. Using the provided HCl and NaOH droppers and a glass stir rod or other suitable stirrer, gently mix the sample and adjust the pH to between 4 to 5 with the dropwise addition of the relevant acid or base, noting that HCl will adjust the pH downward, and NaOH will adjust the pH upwards. Occasionally verify the pH after addition of acid or base by pouring a small amount of sample over a pH strip. **Do not** dip the pH strip into the sample.
- From the pH adjusted sample remaining in the beaker/bottle, fill sample vials within 1/2 inch of the top. Carefully, using the vial cap, add just enough water to completely fill the vials, slightly overfilling them. Make sure the mouth of the bottle does not come in contact with anything other than the sample water. **DO NOT RINSE OUT THE SODIUM THIOSULFATE PRESERVATIVE (if present).**

Note that sample pH is temperature dependent and may drift during transit and receipt at the lab. Samples requiring Acrolein/Acrylonitrile that are not between pH 4 to 5 are not acceptable for compliance reporting.

9. Cap and invert the vials at least 5 times to mix the sample and preservative (if present). Invert each sample vial and tap it to check for trapped air bubbles. If air bubbles are detected, carefully open the vial (right side up), and add more sample.
10. Store at $\leq 6^{\circ}\text{C}$ but above the freezing point of water until transported to the lab.

SAMPLE SHIPPING AND STORAGE

1. If shipping samples on the same day of sampling, chill samples until $\leq 6^{\circ}\text{C}$ by exchanging the wet ice used during sampling with **FRESH** wet ice.
2. **Pack chilled samples** in a cooler and add enough **FRESH** wet ice to take up 30-50% of the cooler (e.g. most of the remaining space) inside two large plastic bags as recommended in our "**Wet Ice Packing Instructions.**"
3. Complete the Chain of Custody during sample collection. Place Kit Order and completed Chain of Custody in a Ziploc style bag in the cooler on top of packing material. The following information is required on the completed Chain of Custody.
 - Collector's name - Sample site -Comments about the sample (if applicable)
 - Client Name -Date and time of collection -Sample type
4. **Ship via overnight service such as FEDEX, UPS, or DHL, etc.** Maintain an environment at $\leq 6^{\circ}\text{C}$ but above the freezing point of water during transit. It is recommended that samples arrive within 48 hours of sampling, with no more than 40 hours for transit.
5. If samples are received on the same day as collection, temperature may be $>10^{\circ}\text{C}$ with evidence of cooling.
6. Maximum **HOLDING TIME FOR SAMPLES** is **14 days** from time of collection if Acrolein/Acrylonitrile is preserved between a pH of 4 to 5.
7. Alternatively, cool the samples down by placing them **overnight** in a cooler with wet ice, or in a refrigerator (store chilled for at least 12 hours before packing for shipment). Maintain the cold samples until repacked in the cooler for shipment to the lab.

ADDITIONAL NOTES

- Try to collect only on a Monday, Tuesday or Wednesday and ship no later than Thursday of each week, and try to **NOT** collect samples on Friday, Saturday, or Sunday unless special arrangements have been made for the receipt of samples at the laboratory within 48-hours of collection.
- If shipping to the laboratory with **frozen gel packs** rather than wet ice, please be sure that the gel packs have **been frozen for at least 48 hours** prior to the shipment time