

## **PPCP Sample Collection Protocols**

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- a) FREEZE GELPAKS UPON RECEIPT OF SAMPLE KIT AND ADD FROZEN GELPAKS TO THE COOLER ON THE DAY OF SAMPLING.
  - b) WHEN SAMPLING, BRING OTHER AVAILABLE BAGGED WET ICE IN SEALED BAGS OR FROZEN GELPAKS TO CHILL SAMPLES DURING SAMPLE COLLECTION.
- 2. The sampler will receive a sample kit from our lab as follows:
  - 2 x 40 ml amber vials with preservative are provided for the small volume test, or
  - 2 x 500 ml or 1L amber glass bottles with preservative are provide for large volume tests

Upon special request, our lab might include one or both additional kits below:

Field Blank (FB) or Equipment blank (EB): 1 container filled with DI water and 1 container of FB/EB Sample Bottle

**Note:** Sample bottle contains toxic preservatives to prevent biological degradation of PPCP. Be sure to NOT rinse out the container. Preservatives vary, depending upon the matrix being sampled and the target analyte(s).

- 3. We are measuring compounds at ng/L levels, so it is very prone to contamination. Please take additional precautions below when sampling for PPCPs
  - a) Put on powderless nitrile gloves at all times, during sampling and processing. Change to clean gloves with each change in activity to avoid potential glove contamination.
  - b) Avoid touching or even breathing into the samples and/or equipment.
  - c) Avoid direct contact between yourself (including clothing) and the sample, sampling device, and processing equipment. Clothing is a source of detergents, fragrances, and fire retardants
  - d) On the day of sampling activities, avoid contact with or consumption of the products listed below. Where contact with or consumption of these products is unavoidable, the collection of field blanks is strongly recommended.

Wastewater and Personal Care or Pharmaceutical Product compounds:

- Soaps and detergents, including antibacterial cleansers
- DEET (active ingredient in most insect repellents)
- Fragrances (cologne, aftershave, perfume)
- Caffeine or Sweeteners (coffee, tea, colas)
- Prescription drugs, medications, and hormonal substances
- Over-the-counter medication

- Human antibiotics
- Veterinary antibiotics
- Tobacco
- Sunscreen
- Antibiotics
- 4. If your kits include any additional blank samples, please follow the special instruction below: Field Blank (FB):
  - Transfer the DI water provided with your sample kit into the FB sample bottle.
  - Cap both containers and return them to the laboratory.

## Equipment Blank(EB):

- Pour the DI water provided with your sample kit into the equipment (i.e. bailer or other non-tap sampling device) and transfer it into the EB sample bottle(s).
- Cap all containers and return them to the laboratory.
- 5. Use indelible ink to clearly identify the sample bottles with the information listed below.
  - Client Name

- Analysis required, if not already on label

- Sample ID

- Date and Time of collection
- Source of sample, if not already on label
- Preservative used, if not already on label

- 6. If sampling from a faucet,
  - a) Remove the aerator, screen and/or hose attachments.
  - b) Open the tap and let the water of the sample source run at fast flow for approximately 5 minutes.



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- c) Slow water flow to thickness of a pencil (to minimize splashing) and fill sample bottles.
- 7. Fill sample bottles to <u>the base of the neck</u>. Make sure the mouth of the bottle does not come in contact with anything other than the sample water. **DO NOT RINSE OUT PRESERVATIVE.**
- 8. Cap and invert the bottles at least 5 times to mix the sample and preservative.
- 9. Use indelible ink to clearly identify the sample bottles with the information listed below.

- Client Name - Analysis required, if not already on label

- Sample ID - Date and Time of collection

- Source of sample, if not already on label - Preservative used, if not already on label

- 10. Store at 1-4°C but above the freezing point of water for a minimum of 2 hours until transported to the lab. Note that some test suites do not require chilling. Check with your analytical service manager for details.
- 11. If sampling **NOT** from a faucet, please follow the following instruction to collect and process the sample(s):
  - a) Select sampling and processing equipment made of fluorocarbon polymers, glass, aluminum, or stainless steel. **Avoid** equipment made of Tygon, polyethylene, or other plastics.
  - b) Clean equipment thoroughly before use.
  - c) Use non-antibacterial detergents.
  - d) Take extra care to ensure that equipment is copiously rinsed with deionized (DI) water after the detergent wash. (Detergents are a source of interference in the analysis of pharmaceutical compounds and may include a target analyte (triclosan) of the method.)
  - e) Follow the DI water rinse with a methanol rinse. Collect the used methanol solution into an appropriate container for disposal.
  - f) **DO NOT** clean or field-rinse the sample bottles from the laboratory.
  - g) And follow steps 7-10 above.

## **SAMPLE SHIPPING AND STORAGE**

- 1. If shipping samples on the same day of sampling, chill samples until ≤6°C by exchanging the ice used during sampling with available sealed bags of fresh frozen ice or frozen gelpaks.
- 2. Pack chilled samples in a cooler with FROZEN gelpaks or sealed bags of WET ICE.
- 3. Complete the Chain of Custody during sample collection. Place Kit Order and completed Chain of Custody in a ziplock bag in the cooler on top of packing material. The following information is required on the completed Chain of Custody.

- Collector's name & signature

-Date and time of collection

- Client Name

-Comments about the sample, if applicable

- Sample site

-Sample type

- 4. Ship via overnight service such as FEDEX, UPS, or DHL, etc. Maintain an environment at ≤6°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  $>10^{\circ}$ C with evidence of cooling.
- 6. Maximum HOLDING TIME FOR SAMPLES varies by test list, but it is generally 30 days from time of collection.
- 7. Alternatively, cool the samples down by placing them <u>overnight</u> in a cooler with frozen refrigerant packs or water 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.