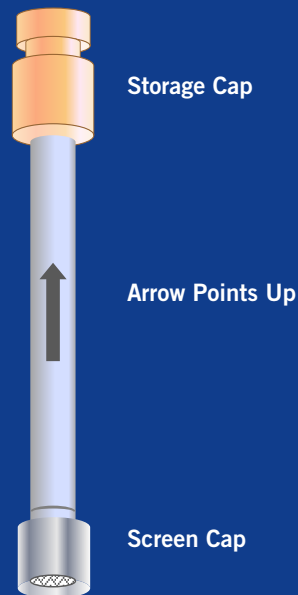




# EPA Method 325 Fenceline Monitoring Sampling Protocol



# Equipment List

**EPA 325 Sampling Kits** (Two kits are in the field at a given time, identified as Kit A and Kit B)\*.

Contents include:

- **Tube storage containers** with a numbered cap each containing a clean, certified sorbent tube.
- **Sorbent tubes sealed with long-term storage caps** on each end. Storage caps include a nut and PTFE white ferrule. Spare sorbent tubes are provided for additional sample collection or as a replacement.
- **Screen caps.** Initial kit contains full set of screen caps for each sample. Screen caps are reusable and remain in the field. Follow-up kits will only contain several screen caps if replacement is needed.
- **Chain-of-Custody (COC) forms**
- **Ball-point pen**
- **Powder-free nitrile gloves**
- **Blue ice blocks**
- **Return shipping label**
- **Numbered Zip Tie for custody seal and regular zip ties**
- **Clipboard**
- **9/16" and 1/2" wrenches**

*\*Actual label affixed on outer case of kit may be Kit A, Kit B, Kit C, or Kit D.*

# Pre-Sampling Activities

1. Upon receipt, store kit inside a temperature controlled building such as an office until sample deployment.
2. The ice pack can be removed and placed in a freezer for re-use for return shipping post sample collection.
3. Verify contents of kit for planned sampling event.
4. Inspect the sorbent tubes in the kit to insure no containers or tubes were compromised during shipping.

Do not use for sample collection if a sorbent tube has:

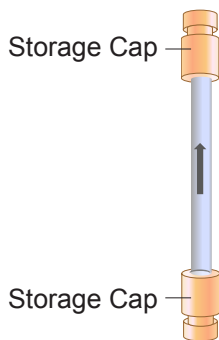
- Loose storage cap(s)
- Missing storage cap(s)
- Leaking sorbent
- Bent, crimped or damaged tube

5. Use sorbent tubes within 30 days of lab conditioning.

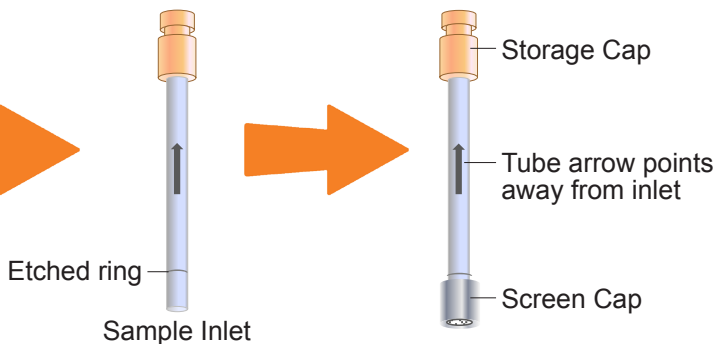
# Sample Deployment

1. If tubes are cold, allow tubes to equilibrate to field temperature conditions for approximately 30 minutes before removing from the storage containers.
2. Wearing the provided gloves, remove tube from its storage container and record the station location ID and the tube barcode on COC.
3. Remove the long-term storage cap from the inlet side of the tube. The arrow on the tube points away from the inlet and the ring on the tube indicates the inlet side. The cap is removed using 9/16" and 1/2" wrenches.
4. Place the cap, nut, and ferrule in the storage container during sample collection.
5. Immediately push the diffusive screen cap flush on the open side of the tube.

## Storage/Shipping Mode



## Deployment Mode



6. Place the tube vertically in the shelter with the diffusive cap pointed toward the ground so that the storage cap sits on the tube clip. **(THE ARROW ON THE TUBE SHOULD BE POINTING UP.)**
7. Record Date and Time of Deployment on the COC.

# Field Blanks

**Field blanks** are deployed in the same manner as samples except the long-term storage caps remain on both ends of the tube. Field blanks are placed in the shelter alongside the field sample.

A minimum of two field blanks, or 10% whichever is greater, is required per sampling event. Field Blanks are placed in two different quadrants.

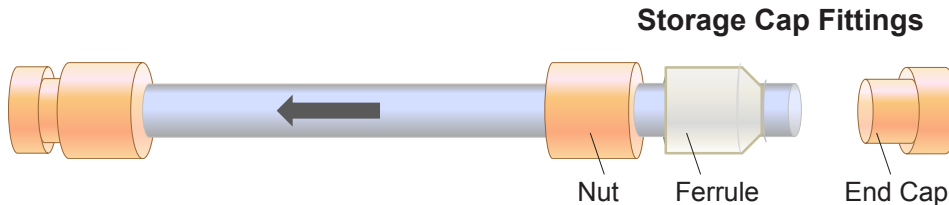
# Field Duplicates

**Field duplicates:** Collect at least one co-located duplicate for every 10 field samples following the normal deployment procedure.

*Several extra tubes are provided with each kit as back-ups in the event a storage cap is loose or missing. Extra tubes can also be deployed for shorter durations alongside 14-day samples to provide additional temporal information.*

# Sample Retrieval

1. After the 14-day sampling period is completed, return to the station with the empty sampling kit (Kit A) to pack sampled tubes as well as a full sampling kit (Kit B) containing clean tubes. It is recommended that this occur at approximately the same time of the day as deployment for consistency of data sets.
2. Wearing gloves, remove the diffusive screen cap placing aside for the new set of samples. Replace the long-term storage caps in Kit A on the tube. Hand-tighten the fitting and then use the wrenches to tighten the fitting another quarter turn. Do not over-tighten as the tube may get crimped, thereby preventing sample analysis.
3. Record Date and Time of Retrieval on the COC.
4. Place sampled tubes back in the storage containers for the proper station location, verifying bar code on tube and location against COC.
5. Place the storage containers into the foam inserts in Kit A for return shipping to lab.
6. Deploy clean tubes from Kit B at the station following Sample Deployment steps.



***Hand-tighten the fittings and then use the wrenches to tighten the fitting another quarter turn. Do not over-tighten fittings as the tube may get crimped, thereby preventing sample analysis.***

# Sample Shipping

When all samples at a site have been retrieved and returned to Kit A, prepare the kit for shipping to the laboratory for analysis.

1. Verify all sample tubes are present in their containers and sealed.
2. Verify the Deployment and Retrieval dates and times have been entered on the COC for each sample.
3. If average Ambient Temperature and Barometric Pressure data for the sampling period is available, record the data in the provided area in the lower right corner of the COC.
4. Sign the COC in the "Relinquished By:" box and enter the date and time, placing the COC in the sleeve inside the kit.
5. Insert the frozen blue ice block(s) into the kit.
6. Latch the case and secure with zip ties provided with the case. The blue numbered zip tie serves as a custody seal.
7. Affix return shipping label to outside of case, and submit kit to FedEx for delivery.

Shipping Address: **Eurofins Air Toxics**  
180 Blue Ravine Rd, Suite B  
Folsom, CA 95630

***If you have any questions, please contact your project manager at 916-985-1000.***