

## NTN/PFAS Quarterly QC Field Blanking and Field Spiking Procedures



### Notes:

- Ensure you have all of the required quarterly QC supplies on hand before starting. These are shipped to the site on a quarterly basis from the PFAS Research Center. For missing supplies call 608-265-9193.
- Perform the QC procedures where you normally perform your routine bucket-prep and sample pour-off procedures.
- Perform the QC procedures on any convenient day within two weeks of receiving the supplies.
- SAVE the QC supply box and packing materials for return shipment.
- Use the available NADP/NTN standard sampling bucket (along with a strap, plug and lid you have on hand) to perform the quarterly QC procedures.

### Items needed/Supplies:

- Quarterly QC supplies
  - 1000 mL bottle labeled **Source Water** - full
  - 1000 mL bottle labeled **Field Blank** – empty
  - 1000mL bottle labeled **Field Spike** – half full (contains 500 mL of PFAS-free reagent water)
  - 2mL vial labeled **PFAS spike solution**
  - Chain of custody (COC) form
  - NTN sample bags (2)
  - 4"x15" Ziploc bag (3) – **See IMPORTANT PROCEDURE CHANGE note on page 2.**
- Tyvek lab coat
- Vinyl gloves
- NTN Sample bucket
- Bucket Lid, strap and plug
- Lid seal bag, 16"x18" (3; not needed for QC procedures; provided to perform monthly lid seal bag replacement)

### PFAS Field Blank Procedure

1. Wear PFAS PPE (provided Tyvek jacket and **NTN vinyl gloves**) throughout the QC field blank procedure.
2. Prepare an NTN bucket with a new NTN sample bag following standard protocol (Use the sample bags included in your quarterly supplies specifically for the blank and spike procedures).
3. Pour half (500 mL) of the 1000 mL **SOURCE WATER** into the newly prepared sample bag/bucket.
4. Gently swirl the bucket, loosely cover, and let sit for 30 minutes.
  - a. Pour the 500 mL of **SOURCE WATER** from the sample bag/bucket into the provided 1 L bottle labeled "**FIELD BLANK**".

- b. Remove, fold, and place the bucket bag into the provided 4" x 15" zip-lock bag – Label bag with “**FIELD BLANK**”. For bag folding instructions refer to SOP *PFAS\_2213\_Bag\_Folding\_Instructions*.
5. Fill out the Field Blank section of the COC form.

### **PFAS Field Spike Procedure**

6. Wear PFAS PPE (provided Tyvek jacket and **NTN vinyl** gloves) throughout the QC field spike procedure.
7. Prepare an NTN bucket with a new NTN sample bag following standard protocol (Use the sample bags included in your quarterly supplies specifically for the blank and spike procedures).
8. Pour the full 500 mL from the **FIELD SPIKE** bottle into the prepared sample bag/bucket.
9. Pour the full contents of **PFAS spike solution** (2 mL vial) into the prepared sample bag/bucket.
10. Gently swirl the bucket, loosely cover, and let sit for 30 minutes
  - a. Pour the 500 mL of spiked water back into the 1 L bottle labeled “**FIELD SPIKE**”
  - b. Remove, fold, and place the bucket bag into the provided 4" x 15" zip-lock bag – Label bag “**FIELD SPIKE**”. For bag folding instructions refer to SOP *PFAS\_2213\_Bag\_Folding\_Instructions*
11. Fill out the Field Spike section of the COC form.

#### **IMPORTANT PROCEDURE CHANGE:**

Sites are **no longer required to send back the folded sample collection bag with each routine weekly sample, with the following exception:**

On the week that the QC procedures are performed, please send back the folded sample collection bag *from the routine sample* collected that same week. If you had a dry week, return the bag from the next wet sample that is collected.

In your QC Kit you have 3 long narrow bags:

One is for the QC Blank collection bag

One is for the QC Spike collection bag

One is for the routine weekly sample bag described above

**Shipment**

12. Send back the **FIELD BLANK** sample along with the folded bucket bag.
13. Send back the **FIELD SPIKE** sample along with the folded bucket bag.
14. Send back the remaining **SOURCE WATER** in its original bottle.
15. Confirm that all information is completed on the COC form, and place it back in the Ziploc bag it was received in.
16. Place all three bottles, two folded bags and the COC in the box that they came in for shipping and ship back to the lab.