Passive Diffusion and Sediment Sampling Work Plan – Operable Unit 3 – Third Addendum

Kerr-McGee Chemical Corp.—Navassa Superfund Site
Navassa, North Carolina
EPA ID #NCD980557805

Prepared for

Greenfield Environmental Multistate Trust LLC
Trustee of the Multistate Environmental Response Trust

Prepared by

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September 1, 2022

1 INTRODUCTION

This third addendum to the Passive Diffusion and Sediment Sampling Work Plan – Operable Unit 3 (hereafter referred to as the "Work Plan"), dated August 2020 (Ramboll and Earthcon, 2020[1]) details the collection of additional sediment, porewater, and surface water data from OU3 at the Kerr-McGee Chemical Corp – Navassa Superfund Site (Site; U.S. Environmental Protection Agency [EPA] ID# NCD980557805) in Navassa, North Carolina. Additional sampling is proposed to address gaps in the existing data set to support the ecological risk assessment for OU3. This addendum is being submitted by Integral Engineering, P.C. (Integral) on behalf of Greenfield Environmental Multistate Trust LLC, not individually but solely in its representative capacity as Trustee of the Multistate Environmental Response Trust (the Multistate Trust).

As discussed with EPA and North Carolina Department of Environmental Quality (NCDEQ) on June 30, 2022 and July 19, 2022, additional sediment, porewater, and surface water sampling locations were identified to: (1) fill in data gaps in the existing data set, (2) bound the areas of elevated sediment and/or porewater polycyclic aromatic hydrocarbon (PAH) concentrations, and (3) support long-term monitoring of changes in sediment and porewater concentrations. Figure 1 presents the proposed locations, which are as follows:

- 5 sediment only (SD22-01 through SD22-05) and 4 porewater and sediment (SD22-06 through SD22-09) sampling locations to fill gaps in near shore data and to provide data where the Navassa Road drainage ditch enters the marsh

- 4 sediment only (SD22-10 through SD22-12, and SD22-14) and 5 porewater and sediment (SD22-13, SD22-15 through SD22-17, and SD61) to bound the area of elevated sediment/ porewater concentrations

- 12 porewater and sediment sampling locations (SD10, SD11, SD21, SD41, SD44, SD53, SD62, SD125, SD129, TA9B, TA11B, and TA13) for long-term monitoring of changes in sediment and porewater PAH concentrations over time. These include 7 out of the 10 "re-occupied" sediment sampling locations from the 2020 sampling and 5 locations (SD62, SD129, TA9B, TA11B, and TA13) with elevated sediment and/or porewater PAH concentrations from the 2020 sampling. These 12 locations will provide an understanding of any potential changes in sediment and porewater PAH concentrations since 2020. These locations may be monitored in the future as part of a long-term monitoring program.

[1] Ramboll and EarthCon. 2020. Passive diffusion and sediment sampling work plan - Operable Unit 3 Kerr-McGee Chemical Corp – Navassa Superfund Site Navassa, North Carolina, EPA ID #NCD980557805. Ramboll US Corporation and EarthCon Consultants of North Carolina, P.C. August.

- 2 surface water locations (SW-1 and SW-2) to provide a point of comparison between porewater and surface water.

2 SAMPLE COLLECTION AND ANALYSIS

Field activities will be conducted in general accordance with the most recent EPA Region 4 Laboratory Services and Applied Science Division operating procedures, and procedures described in the Work Plan. Additional procedures for surface water sampling have been developed and are discussed below.

2.1 POREWATER AND SURFACE WATER

Porewater samples will be collected from 21 locations, and surface water samples will be collected from 2 locations, as shown on Figure 1. One passive diffusion sampler (PDS) device will be placed at each porewater and surface water location and allowed to equilibrate for approximately 4 weeks. SiREM's SP3 samplers, or a similar PDS device, will be used. SP3 samplers were used in the 2020 porewater data collection effort.

The PDS devices will be deployed to a depth of 4 to 6 inches below the surface at porewater locations in accordance with the Work Plan and manufacturer specifications (Attachment A of this Addendum). A polyvinyl chloride (PVC) marker will be installed at each location, and coordinates will be collected using a handheld Global Positioning System (GPS) unit capable of achieving an accuracy of ±1 ft horizontally. For long-term monitoring locations, rebar will be installed to approximately 5 ft below the marsh surface to further anchor the PVC markers.

For surface water locations, the PDS devices will be installed in the surface water standpipes that are to be installed as part of the Supplemental Remedial Investigation (SRI) – Phase I work (Integral 2022[2]). As part of the SRI work, the water level in the standpipe locations will be observed to verify that there is sufficient surface water at low tide to allow for continuous inundation of the PDS devices at these locations. Each PDS sampler will be attached to the standpipe using a zip tie or similar method. Any changes required due to field conditions for implementation of the surface water PDS devices will be discussed with EPA and NCDEQ during deployment for concurrence with the revised approach.

The PDS devices will be properly labeled with the date and time of the sample collection initiation, and with the sample IDs provided in Table 1. Following retrieval of the PDS devices after approximately 4 weeks, the samples will be properly packed on ice and delivered under chain-of-custody protocol for analysis at Eurofins Environment Testing America (previously

[2] Integral. 2022. DRAFT Supplemental Remedial Investigation Work Plan Phase I Marsh Reconnaissance Kerr-McGee Chemical Corp – Navassa Superfund Site Navassa, North Carolina, EPA ID #NCD980557805. Integral Engineering, P.C. September.

operated as Test America) in Knoxville, Tennessee. Samples will be analyzed for alkylated and nonalkylated PAHs by Modified EPA 8270M.

2.2 SEDIMENT

Sediment samples will be collected from 30 locations as shown on Figure 1. Sediment will be collected to a depth of 6 inches utilizing a stainless-steel spade or trowel in accordance with the Work Plan. The sediment will be collected and homogenized in a decontaminated stainless-steel bowl before being placed directly into laboratory supplied sample containers. For sampling locations where both sediment and porewater are to be collected, the sediment sampling location will be co-located approximately 5 feet away from the PDS device to minimize disturbance to the sediments at the PDS location.[3] Coordinates will be collected at each sampling location using a handheld GPS unit capable of achieving an accuracy of ±1 ft horizontally.

The sample containers will be properly labeled with the date and time of the sample collection, and with the sample IDs provided in Table 1. The samples will be properly packed on ice in accordance with the Work Plan and delivered under chain-of-custody protocol for analysis at Eurofins Environment Testing America in Knoxville, Tennessee. Samples will be analyzed for alkylated and nonalkylated PAHs by Modified EPA 8270M.

[3] The sediment samples will not be directly co-located with the sediment porewater samples collected during the field event and will be some distance (approximately 5 feet) away from the locations where sediment and porewater samples were collected in the area during past Site investigations. It is acknowledged that this will introduce some uncertainty to future data evaluations, such as comparisons of sediment data to porewater data from the field event to evaluate PAH partitioning, and comparisons of the sediment data set from this field event to past sediment sampling results.

3 QUALITY CONTROL, DATA ANALYSIS, AND REPORTING

Field quality control samples will be collected in general accordance with the Work Plan and as detailed in Table 2. As discussed with EPA and NCDEQ on June 30, 2022, triplicates will not be collected, rather only one PDS device will be deployed at each location. Laboratory analyses and reporting will be conducted in accordance with the SRI QAPP (CH2M Hill 2015c). The laboratory method detection limits for alkylated and nonalkylated PAHs by Modified EPA 8270M are listed in Table 3. The laboratory data will be validated, including a Level III (EPA Stage 2A) validation of 90 percent of the data and a Level IV validation (EPA Stage 4) of 10 percent of the laboratory data.

Results of the porewater and sediment sampling effort will be provided in a technical memorandum.

Tables

Table 1. Sampling Locations

Sample Location	Sample Type			Coordinates	
	Sediment	Porewater	Surface Water	Northing (ft)	Easting (ft)
SD10	x	x		182319.422	2302817.25
SD11	x	x		182369.688	2302931.50
SD21	x	x		182215.578	2302892.50
SD41	x	x		182106.766	2302644.00
SD44	x	x		182204.125	2302772.75
SD53	x	x		182370.219	2303121.00
SD61	x	x		182139.609	2302882.75
SD62	x	x		182195.797	2303003.25
SD125	x	x		182269.859	2302774.00
SD129	x	x		182341.578	2302956.50
SD22-01	x			182376.563	2302261.75
SD22-02	x			182370.000	2302335.00
SD22-03	x			182363.016	2302415.00
SD22-04	x			182349.016	2302496.50
SD22-05	x			182335.016	2302580.25
SD22-06	x	x		182332.141	2302686.50
SD22-07	x	x		182358.234	2302786.25
SD22-08	x	x		182380.625	2302869.50
SD22-09	x	x		182430.094	2303001.25
SD22-10	x			182499.938	2303208.75
SD22-11	x			182208.359	2302571.00
SD22-12	x			182127.484	2302569.50
SD22-13	x	x		182280.016	2303001.75
SD22-14	x			182051.219	2302856.75
SD22-15	x	x		182165.078	2303096.00
SD22-16	x	x		182235.359	2303200.75
SD22-17	x	x		182046.891	2303040.75
TA9B	x	x		182102.078	2303002.75
TA11B	x	x		182375.938	2303031.50
TA13	x	x		182247.859	2303110.50
SW-1			x	182331.286	2303305.224
SW-2			x	182281.373	2304125.536

Notes:

Coordinates are presented in North Carolina State Plane, North American Datum 1983.

Table 2. Laboratory Methods and Quality Control Sample Summary

Analysis	Laboratory	Analytes	Method	No. Samples	Field Duplicates [a]	Equipment Blanks [b]	Field Blanks (est.) [c]	MS	MSD	Total No. Samples
Porewater	SiREM via Eurofins (or similar)	Alkylated and nonalkylated PAHs	Modified EPA 8270M	21	3	0	1	na	na	25
Surface Water	SiREM via Eurofins (or similar)			2	1	0		na	na	3
Sediment	Eurofins			21	3	2	1	2	2	31

Notes:
MS = matrix spike
MSD = matrix spike duplicate
na = not applicable
PAHs = polyaromatic hydrocarbons

[a] Field duplicates will be collected at a frequency of 1 per 10 samples for discrete samples.
[b] Equipment blanks will be collected at a frequency of 1 per 20 samples per piece of equipment.
[c] Field blanks will be collected at the rate of one per week.

Table 3. Target Parameters, Analytical Methods, and Project Minimum Reporting Limits

Parameter	Group	Units	Lab Method Detection Limit	Lab Reporting Limit
Passive Diffusion Sampler - PAHs				
Acenaphthene	Priority Pollutant PAH	ng/L	20	100
Acenaphthylene	Priority Pollutant PAH	ng/L	9	100
Anthracene	Priority Pollutant PAH	ng/L	6	30
Benzo(a)anthracene	Priority Pollutant PAH	ng/L	0.6	2
Benzo(a)pyrene	Priority Pollutant PAH	ng/L	0.2	1
Benzo(b)fluoranthene	Priority Pollutant PAH	ng/L	0.3	1
Benzo(ghi)perylene	Priority Pollutant PAH	ng/L	0.07	0.5
Benzo(k)fluoranthene	Priority Pollutant PAH	ng/L	0.3	1
Chrysene	Priority Pollutant PAH	ng/L	0.4	2
Dibenz(a,h)anthracene	Priority Pollutant PAH	ng/L	0.08	1
Fluoranthene	Priority Pollutant PAH	ng/L	2	7
Fluorene	Priority Pollutant PAH	ng/L	30	60
Indeno(1,2,3-cd)pyrene	Priority Pollutant PAH	ng/L	0.2	0.9
Naphthalene	Priority Pollutant PAH	ng/L	3000	10000
Phenanthrene	Priority Pollutant PAH	ng/L	50	60
Pyrene	Priority Pollutant PAH	ng/L	7	10
Benzo(e)pyrene	Other PAH	ng/L	0.2	1
Perylene	Other PAH	ng/L	0.1	1
1-Methylnaphthalene	Alkylated PAH	ng/L	300	1000
2-Methylnaphthalene	Alkylated PAH	ng/L	700	2000
C1-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	1
C2-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	1
C3-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	0.7	0.7
C4-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	0.5	0.5
C1-Fluoranthenes/pyrenes	Alkylated PAH	ng/L	3	3
C1-Fluorenes	Alkylated PAH	ng/L	30	30
C2-Fluorenes	Alkylated PAH	ng/L	9	9
C3-Fluorenes	Alkylated PAH	ng/L	4	4
C2-Naphthalenes	Alkylated PAH	ng/L	200	200
C3-Naphthalenes	Alkylated PAH	ng/L	50	50
C4-Naphthalenes	Alkylated PAH	ng/L	10	10
C1-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	10	10
C2-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	4	4
C3-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	2	2
C4-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	1	1

Table 3. Target Parameters, Analytical Methods, and Project Minimum Reporting Limits

Parameter	Group	Units	Lab Method Detection Limit	Lab Reporting Limit
Sediment - PAHs				
Acenaphthene	Priority Pollutant PAH	ng/g	0.26	1
Acenaphthylene	Priority Pollutant PAH	ng/g	0.17	1
Anthracene	Priority Pollutant PAH	ng/g	0.32	1
Benzo(a)anthracene	Priority Pollutant PAH	ng/g	0.37	1
Benzo(a)pyrene	Priority Pollutant PAH	ng/g	0.28	1
Benzo(b)fluoranthene	Priority Pollutant PAH	ng/g	0.35	1
Benzo(e)pyrene	Priority Pollutant PAH	ng/g	0.38	1
Benzo(ghi)perylene	Priority Pollutant PAH	ng/g	0.24	1
Benzo(k)fluoranthene	Priority Pollutant PAH	ng/g	0.23	1
Chrysene	Priority Pollutant PAH	ng/g	0.37	1
Dibenz(a,h)anthracene	Priority Pollutant PAH	ng/g	0.082	1
Fluoranthene	Priority Pollutant PAH	ng/g	0.81	1
Fluorene	Priority Pollutant PAH	ng/g	0.32	1
Indeno(1,2,3-cd)pyrene	Priority Pollutant PAH	ng/g	0.23	1
Naphthalene	Priority Pollutant PAH	ng/g	2.9	20
Phenanthrene	Priority Pollutant PAH	ng/g	1.73	2
Pyrene	Priority Pollutant PAH	ng/g	0.78	2
Perylene	Other PAH	ng/g	0.15	1
1-Methylnaphthalene	Alkylated PAH	ng/g	0.5	5
2-Methylnaphthalene	Alkylated PAH	ng/g	0.7	5
C1-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/g	1	1
C2-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/g	1	1
C3-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/g	1	1
C4-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/g	1	1
C1-Fluoranthenes/pyrenes	Alkylated PAH	ng/g	1	1
C1-Fluorenes	Alkylated PAH	ng/g	1	1
C2-Fluorenes	Alkylated PAH	ng/g	1	1
C3-Fluorenes	Alkylated PAH	ng/g	1	1
C2-Naphthalenes	Alkylated PAH	ng/g	2	2
C3-Naphthalenes	Alkylated PAH	ng/g	2	2
C4-Naphthalenes	Alkylated PAH	ng/g	2.8	3
C1-Phenanthrenes/anthracenes	Alkylated PAH	ng/g	3.4	4
C2-Phenanthrenes/anthracenes	Alkylated PAH	ng/g	1	1
C3-Phenanthrenes/anthracenes	Alkylated PAH	ng/g	1	1
C4-Phenanthrenes/anthracenes	Alkylated PAH	ng/g	1	1

Table 3. Target Parameters, Analytical Methods, and Project Minimum Reporting Limits

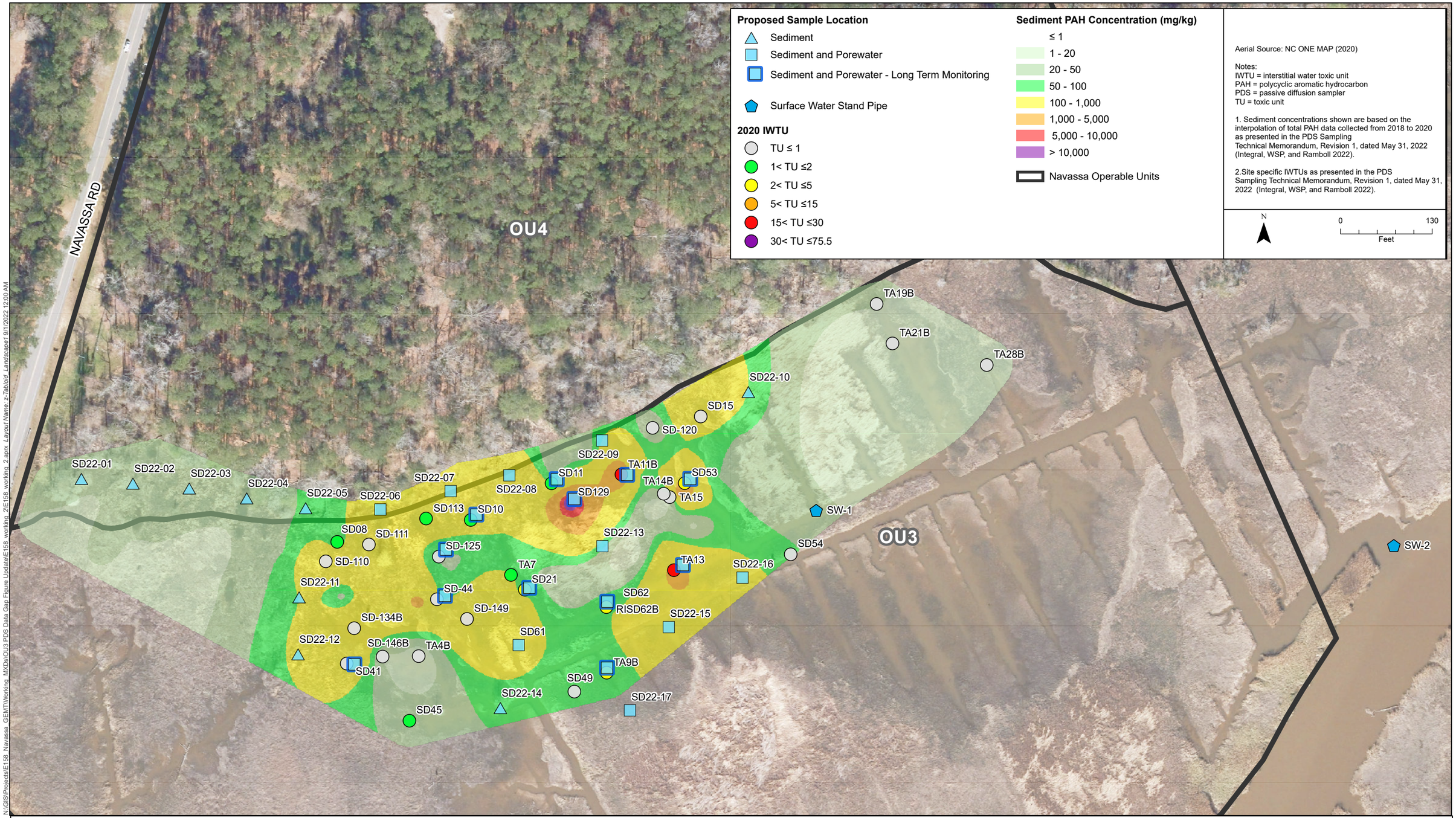
Parameter	Group	Units	Lab Method Detection Limit	Lab Reporting Limit
Water - PAHs				
Acenaphthene	Priority Pollutant PAH	ng/L	2.5	10
Acenaphthylene	Priority Pollutant PAH	ng/L	1.3	10
Anthracene	Priority Pollutant PAH	ng/L	3	10
Benzo(a)anthracene	Priority Pollutant PAH	ng/L	2.6	10
Benzo(a)pyrene	Priority Pollutant PAH	ng/L	1.6	10
Benzo(b)fluoranthene	Priority Pollutant PAH	ng/L	2.7	10
Benzo(e)pyrene	Priority Pollutant PAH	ng/L	0.65	10
Benzo(ghi)perylene	Priority Pollutant PAH	ng/L	0.99	10
Benzo(k)fluoranthene	Priority Pollutant PAH	ng/L	1.5	10
Chrysene	Priority Pollutant PAH	ng/L	0.6	10
Dibenz(a,h)anthracene	Priority Pollutant PAH	ng/L	0.49	10
Fluoranthene	Priority Pollutant PAH	ng/L	5.5	10
Fluorene	Priority Pollutant PAH	ng/L	3.8	10
Indeno(1,2,3-cd)pyrene	Priority Pollutant PAH	ng/L	0.62	10
Naphthalene	Priority Pollutant PAH	ng/L	35	50
Phenanthrene	Priority Pollutant PAH	ng/L	14	20
Pyrene	Priority Pollutant PAH	ng/L	1.9	10
Perylene	Other PAH	ng/L	0.56	10
1-Methylnaphthalene	Alkylated PAH	ng/L	4.6	10
2-Methylnaphthalene	Alkylated PAH	ng/L	6.3	20
C1-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	10
C2-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	10
C3-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	10
C4-Chrysenes/benz(a)anthracenes	Alkylated PAH	ng/L	1	10
C1-Fluoranthenes/pyrenes	Alkylated PAH	ng/L	10	10
C1-Fluorenes	Alkylated PAH	ng/L	10	10
C2-Fluorenes	Alkylated PAH	ng/L	10	10
C3-Fluorenes	Alkylated PAH	ng/L	10	10
C2-Naphthalenes	Alkylated PAH	ng/L	10	10
C3-Naphthalenes	Alkylated PAH	ng/L	10	10
C4-Naphthalenes	Alkylated PAH	ng/L	10	10
C1-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	10	10
C2-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	10	10
C3-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	10	10
C4-Phenanthrenes/anthracenes	Alkylated PAH	ng/L	10	10

Notes:

PAH - polyaromatic hydrocarbon

Passive diffusion sampler levels are approximate. The ability to quantify the freely dissolved portion for each analyte, as well as the overall analytical performance of the sampler, is subject to site- and sampler-specific sampling conditions.

Figure



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Prepared for: Greenfield Environmental Multistate Trust LLC
Trustee of the Multistate Environmental Response Trust

Prepared by: integral engineering pc.

Figure 1
Proposed Marsh Sampling Locations
Kerr-McGee Chemical Corp. - Navassa Superfund Site
Navassa, North Carolina
September 2022

Appendix A

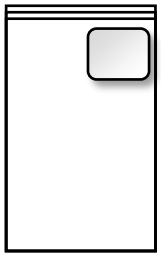
SiREM SP3™Sampler Instructions

SiREM
130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

SP3™ Sampler Deployment and Retrieval

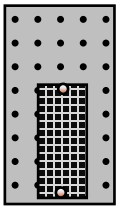
Deployment

1. The SP3™ samplers are shipped in a cooler at 4°C or lower. Each SP3™ sampler is stored in an opaque Ziploc bag and the opaque bag is stored inside a large clear plastic Ziploc bag.



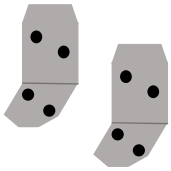
Clear Ziploc Bag

Opaque Ziploc Bag

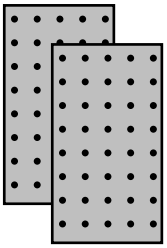


SP3™ Sampler

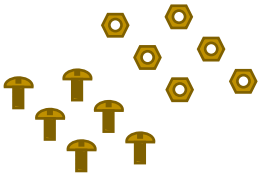
2. Also included in the cooler are bags of pre-cleaned wing brackets, landing wings and screws and nuts used to attach the landing wings to the SP3™.



Wing Brackets

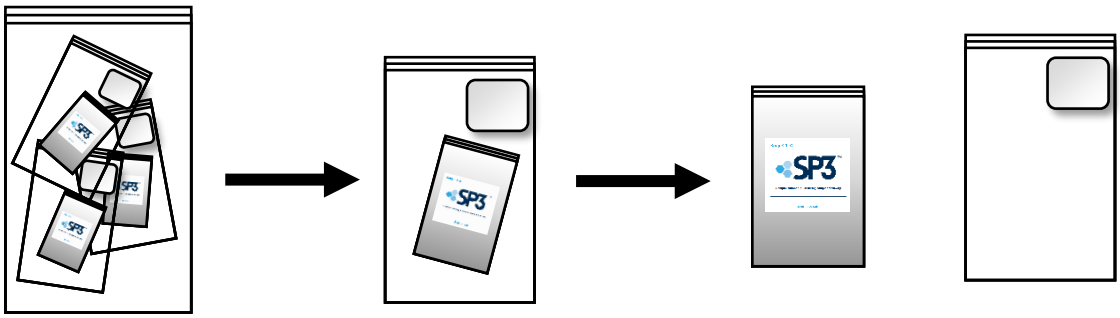


Landing Wings



Screws and Nuts

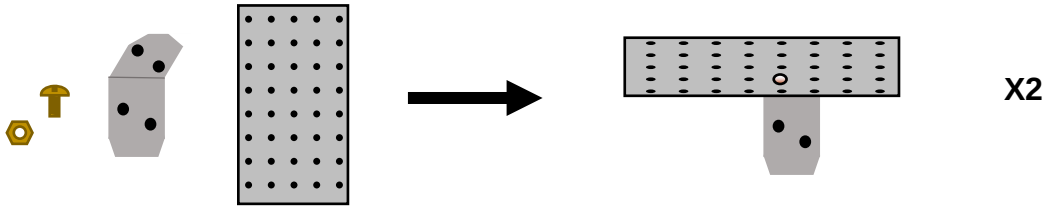
3. Keep the SP3™ samplers cool (4°C or lower) and in the dark prior to use.
4. No more than 30 minutes prior to deployment, remove a single bagged SP3™ sampler from the large bag of samplers or cooler. Then remove the labeled opaque Ziploc sampler bag from the clear plastic Ziploc bag (keep Ziploc bag for next step).



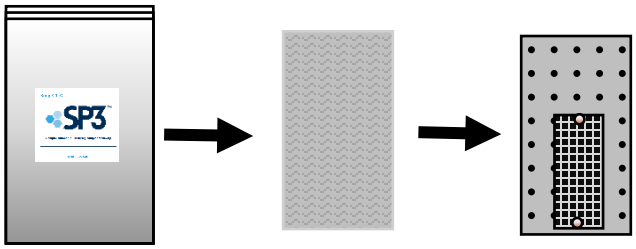
SP3

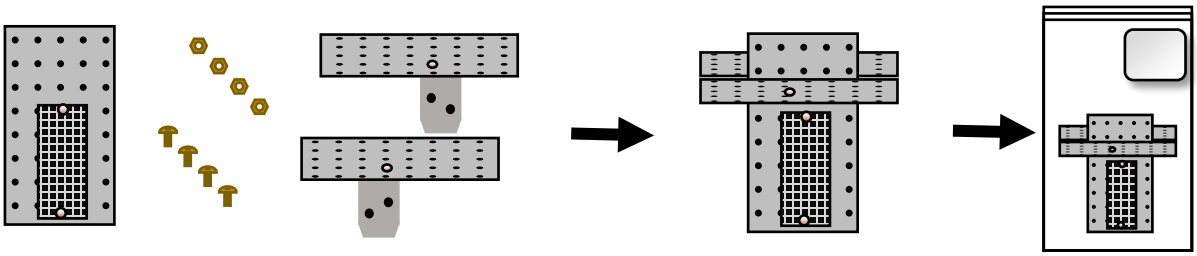
130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

5. Prepare the landing wing apparatus by screwing the wing bracket to the landing wings:

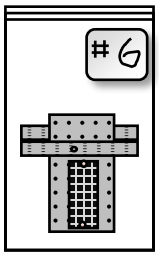


6. Remove the SP3™ sampler from the opaque Ziploc sample bag (keep bag for re-use upon retrieval). Unwrap the aluminum foil around the sample and attach the prepared wing assemblies to the top of the plate (the end of the plate that will remain above the sediment surface when deployed [see below]) using the two screws per wing apparatus. Place the entire SP3™ sampler in the original clear Ziploc bag, and seal bag.





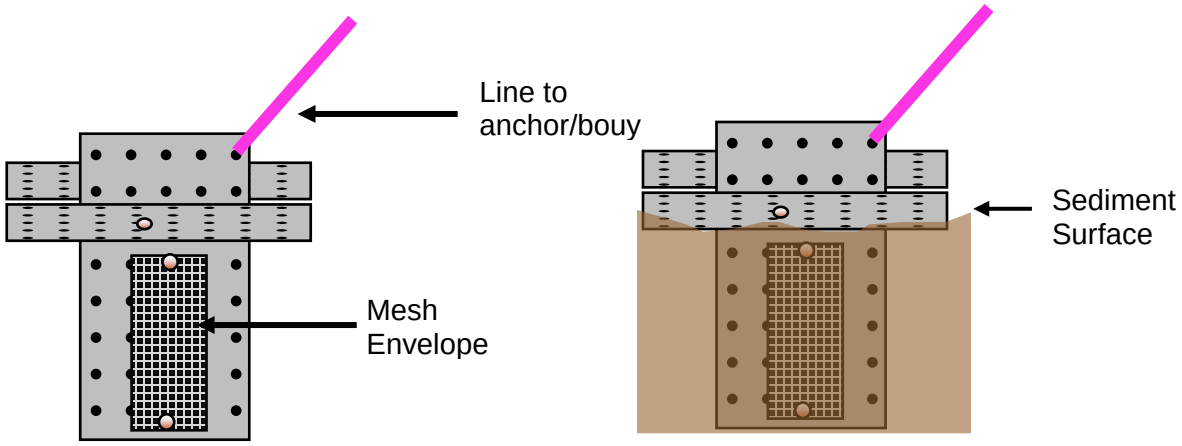
7. It is recommended to mark the sample station at which the sampler will be deployed on the outside label (using a permanent marker or grease pen) so that it can be easily read during deployment.



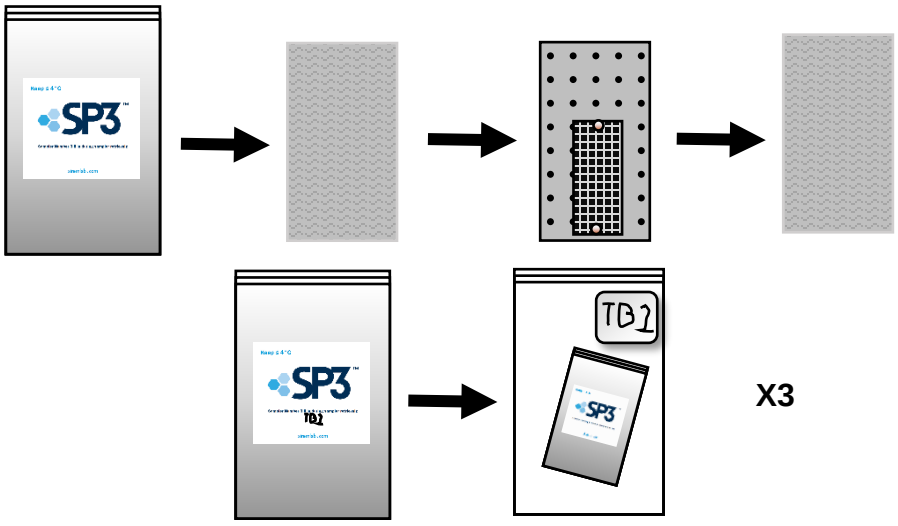
8. Keep the bag out of direct sunlight and heat, to the extent practicable, during the above preparation steps.

SiREM
130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

9. Provide the bag for deployment to (i.e., push pole technician, SCUBA diver, wader or direct from small boat). Note, multiple bags can be prepared for deployment if multiple samplers will be deployed in a single mobilization. It is acceptable if water enters the bag. Minimize the time the sampler is underwater in the bag, to the extent practicable, up to a maximum time of approximately 30 minutes.
10. At the deployment location, remove the sampler from the plastic bag, attach the sampler to your anchor or bouy line, etc. Insert the sampler plate into the sediment to the desired depth and retain plastic bag, if possible, for re-use after retrieval.



11. If needed, plant a marker flag. Record the GPS co-ordinates of the deployed sampler and date of deployment.
12. Deploy all but three samplers (as needed). The remaining 3 samplers are for Field Blank (FB) use. For each FB sampler, remove the sampler from its labeled opaque Ziploc sampler bag and unwrap it from the aluminum foil. Expose the sampler to air/light/ambient conditions at sampling site for 5-10 minutes (or however long it took to prepare a sampler for deployment). Re-wrap the sampler in aluminum foil and place back in the labeled opaque Ziploc sampler bag, mark label with a unique sample code (e.g., “FB1”), and place in a clear ziploc bag.



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13. For FB samplers, maintain at 4°C or less until they can be shipped to the analytical lab (ideally within 1 to 4 days of deployment).
14. Shipping of FB samplers:
    a. Include ice (double-ziploc bagged) or bagged blue ice packs.
    b. Samplers.
    c. Extra packaging (bubble wrap) as needed.
    d. Chain of custody
        i. Note EPA 1668A for PCB congeners, and/or modified EPA 8270 for PAHs (specify parent PAHs, alkylated PAHs, or both)
        ii. Test America contact is Ryan Henry
    e. Address to ship:
        Test America
        5815 Middlebrook Pike
        Knoxville, TN 37921
        Attn: Sample Receiving, Ryan Henry
        Phone: 865-291-3000
    f. Ship overnight for next morning delivery.

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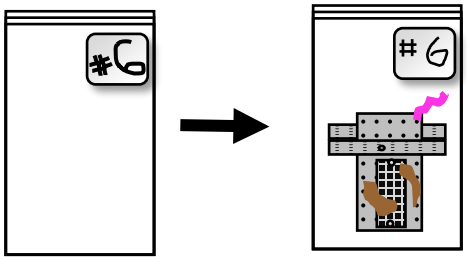
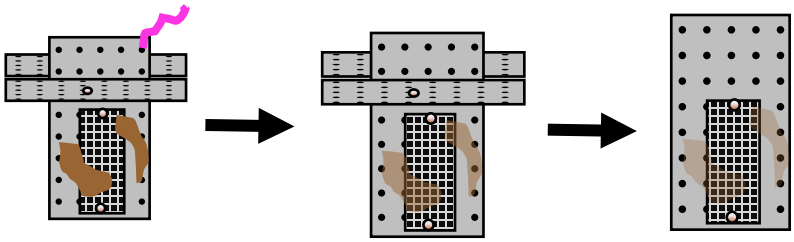
Retrieval

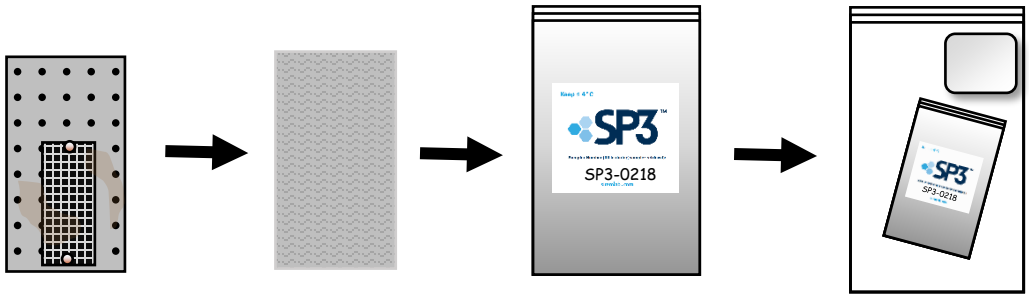
15. Use the original clear Ziploc bag for sample location, retrieve sampler from sediment, place in bag (seal if possible), and return bag to cooler within approximately 20 minutes.



16. Detach any remaining rope from the anchor, wipe off any excess sediment, and remove the wing assembly. Some sediment remaining on the sampler is acceptable.



17. Wrap the sampler in aluminum foil, place the wrapped SP3™ sampler in labeled opaque Ziploc sampler bag, mark label with the unique sample ID (e.g., “SP3-0218”), and place in a Ziploc bag.



18. Place in a cooler with ice/cold packs and maintain cold until shipping; samples can be held for several days as needed as long as they are kept cool (4°C or lower) and dark.
19. Ship the cooler as per the instructions in number 14 described above.