



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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July 19, 2005

Mr. Orlando Monaco
Department of Navy
Engineering Field Activity-Northeast
Code 1823/OM
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

Re: Pore Water Sampling Workplan-Mere Brook
Naval Air Station, Brunswick, Maine

Dear Mr. Monaco:

The Maine Department of Environmental Protection (MEDEP) has reviewed the draft "Letter Workplan for Pore Water Sampling, Mere Brook", dated July 11, 2005, prepared by Environmental Chemical Corporation. Based on that review MEDEP has the following comments and issues.

Thanks to the Navy for producing the workplan as part of the team effort on the pore water sampling.

General Comments:

1. It appears from Figure 2 that much of the targeted stream reach is located off base property on private property. MEDEP has determined that the off base property belongs to Charles and Judith Ferguson and has received verbal permission to conduct pore water sampling on their portion of Mere Brook. (MEDEP will follow up the phone conversation with a letter to the Fergusons.)
2. MEDEP recommends recording the sampling locations with a GPS after the sampling has been performed in case the sampling locations have to be moved.
3. MEDEP plans on starting at the northern most sampling location and working southward. Unlike surface water sampling, pore water sampling is not affected by the streambed disturbance by the samplers. Based on our reconnaissance it appears we will be able to walk along the edge of the stream with minimal need to be in the stream except for sampling.

If we have any hits from the first days collection we may decide to perform a transect in the vicinity of the hit. Therefore to ensure that there is enough sampling points MEDEP recommends having enough bottles to collect two additional samples if necessary.

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Specific Comments:

4. Page 2, Background para 1:

a.) MEDEP requested that pore water sampling be conducted along a limited segment of Mere brook to assess whether VOCs from the Eastern Plume in the vicinity of monitoring well MW-313 may be upwelling in this area."

MEDEP thinks there is more value in moving at least fourteen of the samples to the north to be in the area of where the plume may be shifting and into the area east-northeast of DP LOG-02 which had a concentration of 26 ppb of DCE. Therefore MEDEP suggests the following language: MEDEP requested that pore water sampling be conducted along a limited segment of Mere brook to assess whether VOCs from the Eastern Plume in the vicinity of monitoring well MW-313 *and DP-LOG-02 that may be upwelling in this area.*"

b.) "The above-referenced field activities, equipment calibration, and sampling protocols, will be performed in accordance with the draft base-Wide Quality Assurance Project Plan (QAPP) specific to Sites 1 & 3 and Eastern Plume Long-Term Monitoring Plan (EA 2004)..

Normally MEDEP would not be able to accept a draft QAPP however since the previous Long Term Monitoring Plan and QAPP (Feb. 2000) for Sites 1, 3, & the Eastern Plume did not contain protocols for 1, 4, dioxane MEDEP will accept the draft QAPP for this specific project.

5. Page 2, Pore Water Sample Locations, para 1:

"Prior to initiation of pore water sampling, ECC will use sub-meter GPS to locate the proposed sample intervals along the stream bank of Mere Brook (Figure 3).

See General Comment 2 above. MEDEP has GPS units and will bring one for the sampling event so that the locations can be GPS'd as we go along. MEDEP does agree that approximate sampling location should be staked out prior to the sampling event.

6. Pages 2 & 3, Pore Water Sample Locations, para 2:

Samples will be collected every 20 ft along the tow 500 sections to the north and south of monitoring well MW-313.

Based on the extent of the southeastern boundary of the Eastern Plume, data from DP-LOG-02, and the recent shift in the plume MEDEP would prefer move 14 of the southern most proposed sampling points upstream using the same 20 foot spacing. This should extend approximately to the confluence of the Mere Brook and Merriconeag Stream. If necessary the other four samples could be used to run transects or be used in seeps or runs found along the stream. In any event, four proposed sampling locations on the east side of what appears to be an island in the stream may need to be moved to the west side. We will need to make this determination in the field.

7. Page 3, Pore Water Sample Locations, para 1:

a.) "Pore water samples will be collected from the top six inches of sediment...

The pore water will be collected from the top 6 to 18 inches of sediment. Please revise. (This portion of the discussion should under a different heading, for example, sample collection.)

b.) "The pore water sample device consists of a steel drive point with a six inch long screen at the end. A metal stopper plate attached to the drive point will prevent the probe from being installed further than the target depth of six inches. Pore water samples will be collected using a peristaltic pump and a length of Teflon lined tubing inserted to the depth of the screen.

To be consistent with equipment to be used MEDEP suggests the following language: "The pore water sample device consists of a steel drive point with *1.5 inch slotted screen at the end.* ~~six inch long screen at the end. A metal stopper plate attached to the drive point will prevent the probe from being installed further than the target depth of six inches.~~ Pore water samples will be collected using a peristaltic pump attached to the end silicon tubing connected to the pore water sampler. ~~and a length of Teflon lined tubing inserted to the depth of the screen.~~

The web site for the sampler to be used can be found at MHEproducts.com if more information on the pore water sampler is needed for the workplan.

8. Page 3, Pore Water Sample Locations, para 2 -4:

Field parameters (DO, ORP, ph, temperature, turbidity and conductivity) will be measured and recorded.

To streamline the sampling effort, the field parameters to be collected will be temperature and conductivity, but not pH, ORP, DO or turbidity. Temperature and conductivity will be taken from the pore water sample prior to taking the sample to be analyzed for VOC. The readings will be taken from an open container while pore water is pumped and overflowing (and collected), The flow through cell will not be used due to the amount of water and time needed to fill the cell and take the readings. Stabilization of these parameters is not necessary for pore water sampling, the pore water sampler will be purged until the water is visually free of sediment. Please revise these paragraphs.

9. Page 4, Decontamination and Investigation-Derived waste, bullet 4:

a.) Please delete the bullet 4-rinse with methanol.

b.) The stakeholders will need to discuss the logistics of removing the IDW and the best way to do this on our Thursday conference call.

10. Figures 2 and 3 will need to be revised to move proposed sampling locations upstream in the area with more potential for impact from the Eastern Plume.

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Thank you for the opportunity to review this report. If you have any questions or comments please call me at (207) 287-7713 or email me at claudia.b.sait@maine.gov.

Respectfully,

A handwritten signature in cursive script, appearing to read "Claudia Sait". The signature is written in black ink and is positioned above the printed name and title.

Claudia Sait
Project Manager-Federal Facilities
Bureau of Remediation & Waste Management

Cf: File
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