

**RESPONSE TO COMMENTS FROM THE
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
ON THE DRAFT WORK PLAN FOR
ADDITIONAL INVESTIGATION FOR THE DIRECT-PUSH INVESTIGATION
OF THE SOUTHERN BOUNDARY OF THE EASTERN PLUME AND SITE 11
AT THE NAVAL AIR STATION, BRUNSWICK, MAINE
9 OCTOBER 2002**

COMMENTOR: Larry Dearborn, Certified Geologist

DATED: 25 October 2002

GENERAL COMMENTS

1. MEDEP concurs with the proposed subject investigation at the Southern Boundary of the Eastern Plume, but has several minor concerns expressed below for the Navy's consideration. Previously the Navy has stated that the exact locations will be jointly staked in the field in the presence of the regulators. The State expects that its staff will be afforded this opportunity, and therefore this task should not be scheduled for a weekend day or holiday (i.e., 11 November).

As Claudia Sait stated in the 22 October 2002 Technical Meeting, the State is not sending comments on the proposed Site 11 work.

Response—On 18 June 2002, during an NAS Brunswick Technical Meeting, the soil boring locations in the Southern Boundary were jointly staked with representatives of the Navy (Lonnie Monaco, Michael Fohner, and Tony Williams), MEDEP (Claudia Sait and Larry Dearborn), EPA (Mike Barry and Alastair Lough), EA (Al Easterday, Peter Nimmer, and Gina Calderone), and Lepage Environmental (Carolyn Lepage). During the site visit to the soil boring locations, regulators requested adjustments to certain soil boring locations, which the Navy concurred as well, and the staked locations were adjusted accordingly. At the end of the site visit, it was agreed that these were the locations of the soil borings as proposed by the Navy in the proposal letter dated 8 April 2002. Based on the 18 June 2002 Technical Meeting site visit, the Southern Boundary soil boring locations have been staked and agreed to by the regulators; therefore, the drilling of the soil borings can proceed once the Work Plan is finalized. MEDEP and EPA will be notified of the field schedule for the soil borings and direct-push ground-water sampling to allow the regulators to participate during the execution of this field work. Tentative dates have been established for executing the soil borings (12-15 November 2002) and the direct-push ground-water sampling (18-22 November 2002).

SPECIFIC COMMENTS

2. *Section 1.1, Work Plan Objectives, p. 1, 1st para.*—In light of the recent technical meeting, please clarify the second sentence as follows:

The objectives of these investigations are to satisfy EPA's and MEDEP's regulatory concerns that were expressed at the 12 February 2002 Technical Meeting related to potential data gaps in the Southern Boundary area, and EPA's concern for potential bedrock contamination impact in the Site 11 area.

Response—Referring to MEDEP's letter dated 30 May 2002, although not formally commenting on specific Site 11 tasks presented in the Navy's draft Work Plan, MEDEP is cooperating with, supportive of, and concurs with EPA comments regarding Site 11 proposed tasks for the bedrock well. During the 22 October 2002 NAS Brunswick project meeting, EPA verbally concurred with the Navy's draft Work Plan and had no comments regarding the Navy's proposed tasks at Site 11.

The second sentence from Section 1.1, first paragraph, as presented in the Work Plan is:

The objectives of these investigations are to satisfy regulatory concerns that existed at the 12 February 2002 Technical Meeting related to potential data gaps in the Southern Boundary area and the potential for bedrock impact at Site 11.

The text as currently written in the draft is clear and concise; therefore, no edits will be made to this text as presented in the draft Work Plan.

3. **Section 1.1, Work Plan Objectives, p. 1, 1st bullet**—Installation of 4 deep monitoring well and 3 shallow monitoring wells at the southern end of the Eastern Plume. Please modify the second item to read as follows to improve clarity:

Installation of 4 deep monitoring wells and 3 shallow monitoring wells just beyond the end of the presently mapped Eastern Plume.

Response—The text that the MEDEP has suggested is more subjective (i.e., “just beyond”), than the text that the Navy has presented in the draft Work Plan and it does not improve the clarity of the text. The Navy respectfully requests to let the text stand as it is presented in the draft version.

4. **Section 2.1 and Section 2.2 Order of Completion**—It is our understanding via a telephone call with Mr. Easterday of EA Engineering, Science, and Technology on 24 October 2002 that the continuous split-spoon soil sampling will now precede direct-push groundwater sampling. MEDEP believes that this change is very logical and will provide for better overall results. If possible, the order of presentation within the Work Plan should also be switched. In the last sentence of the first paragraph under the Section 2.1 (draft), “ground-water sampling” should be replaced by “soil sampling.”

Given that the order of data collection will be reversed between ground water and soil, an opportunity is now afforded to more specifically locate the allocated vertical ground-water samples than just using a default spacing of very 5 ft. A more effective and efficient sampling plan for each direct-push location should be achievable.

Response—The order of these tasks will be changed to reflect the current schedule of completion of the direct-push ground-water sampling and the soil boring sampling for the final Work Plan. MEDEP’s suggestion for changing “ground-water sampling” to “soil sampling” will be incorporated.

5. **Section 2.2, Soil Boring Program, p. 5, top bullet**—This paragraph implies that a single 2-oz sample of soil will be containerized in a jar for each 2-foot soil core for the purpose of obtaining a headspace reading. A PID scan should be done along the full length of each core prior to selecting which 2 oz of soil to collect for the headspace jar. An alternative is to collect 2 oz of soil from each 6 in. along the core (emphasizing the finest grained intervals) for compositing into a larger jar.

Response—Comment noted. Text will be added to clarify the field screen process for 2-in. split-spoon samplers for the final Work Plan.

The revised text will indicate that each 2-ft split-barrel soil sample will be opened and immediately scanned with a photoionization detector (PID). Additionally, a composite soil sample will be collected from the 2-ft core and field screened using the PID. The finest grained intervals and any soil zones with an odor or appearing to be impacted will be selected for the PID composite sampling. The PID measurements from each soil sampler will be recorded by the field geologist. The soil intervals identified to have elevated PID measurements, odor, and/or impacted appearance will be targeted for subsequent ground-water sampling.

6. **Section 2.3, Monitoring Well Installation, p. 5, 2nd para**—It is anticipated that each deep monitoring well will have a total depth of 70 ft bgs. The Navy should not assume that all deep wells will have the same depth. The average of the four wells might be close to 70 ft, but MEDEP believes that a range between 60 and 90 ft should be anticipated, and planned for.

Response—Agreed.

7. **Section 2.8, Management of Investigation-Derived Waste, p. 12, last bullet**—Used personal protective equipment will be double-bagged and disposed on onsite as general refuse. Please reword so that “onsite” cannot be interpreted as where the work is occurring at the Southern Boundary area.

Response—The following edit will be made to the text:

Used personal protective equipment will be double-bagged and disposed of ~~onsite~~ on the Naval Air Station as general refuse.

8. **Figure 2**—Only one cone penetrometer exploration (CP-144) is shown on this map, although 12 other CPs occur in the displayed area along and south of New Gurnett Road. All CPs shown be shown as each contributes to the understanding of the subsurface hydrogeology, and also serves as a locational reference.

As received, the figure is displayed at a scale of 1 in. equals 190 ft. The figure would be more user-friendly for locational purposes in the field if the map scale were changed slightly to 1 in. equals 200 ft.

Response—Only this cone penetrometer location (CP-144) was shown on the Work Plan Figure 2 since it is a boundary endpoint for soil boring location nos. 6 and 7. This new boring/monitoring wells location figure will be used in the field and will be more useful if kept simple. Once this work is completed, the new boring and monitoring well locations will be surveyed, and the final summary report will be generated which will include all existing site wells, cone penetrometers, direct-push locations, etc. on the figures. However, detailed proposed soil boring and monitoring well location maps will not be included in this Work Plan. The scale of Figure 2 in this Work Plan is considered to be adequate for field use and will, therefore, not be changed for the final Work Plan. The 7 soil boring locations have already been located and staked in the field in coordination with the Navy, EA, EPA, and MEDEP on 18 June (see response to MEDEP's general comment).