



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
NEW ENGLAND - REGION I  
1 CONGRESS STREET, SUITE 1100 (HBT)  
BOSTON, MASSACHUSETTS 02114-2023

October 30, 2007

Kirk A. Stevens, P.E.  
NAVFAC Mid-Atlantic  
Bldg N-26, Room 3208  
OPNEEV  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Re: ***EPA comments on Site 32 Draft Quality Assurance Project Plan, Portsmouth Naval Shipyard, Kittery, Maine***

Dear Mr. Stevens:

EPA has reviewed the subject documents provided by the Navy. Comments are included in Attachment 1.

If you have any questions, please feel free to contact me at [audet.matthew@epa.gov](mailto:audet.matthew@epa.gov) or 617.918.1449.

Sincerely,

A handwritten signature in black ink, reading "Matthew R. Audet".

Matthew R. Audet, P.G.  
Remedial Project Manager  
Office of Site Remediation and Restoration

cc. Iver McLeod/ME DEP  
Deb Cohen/Tetra Tech NUS  
RAB Members

## Attachment 1

### US EPA Comments on Draft QAPP, Site 32, Portsmouth Naval Shipyard

#### 1. Page 7-3, 7.1.4 Phase I and Offshore Investigations

The second paragraph discusses collecting sediment samples with the emphasis on the finer sediment material. This QAPP and SOP SA-1.2 Surface Water and Sediment sampling do not define "finer sediment" or describe how the "finer sediment" materials will be collected. SOP SA-1.2 is a collection of general sampling procedures. What is needed is a site specific sampling SOP to collect the "finer sediment" materials.

#### 2. Page 7-13, 7.4.2 Soil Sampling for Phase II Investigation

This Section references SOP SA-1.3 for the hollow-stem auger or direct push technology. However, SOP SA-1.3 references SOP SA-2.5 for this procedure which was not included in Appendix H. Add SOP SA-2.5 to Appendix H.

#### 3. Page 7-14, Monitoring Well Purging and Groundwater Sampling, Table 7-3

This Section and Table 7-3 indicate that the ground water samples will be collected using the USEPA low-flow sampling procedure and at "low-tide". The "low-tide" criterion needs to be included in the low-flow criteria to determine when the sample is to be collected. Also, the sampling SOP needs to include instructions as how one determines that the water level in the monitoring well has reached the "low-tide" level. If samples are to be collected during high-tide then the above information needs to be added for the samples collected at high-tide.

The equipment (pump, type of tubing, field instruments, calibration standards, etc.) identification (manufacturer, model number, etc.) information is missing from the QAPP. Please provide the information.

#### 4. Appendix H SOP SA-1-1 Groundwater Sample Acquisition and Onsite Water Quality Testing

Include the following in the SOP: All field instruments need to be calibrated at the beginning of the day they are used and checked at the end of the day to determine if the instrument remained in calibration throughout the day.

Use the USEPA Region 1 *Draft Calibration of Field Instruments (temperature, pH, dissolved oxygen, conductivity/specific conductance, oxidation/reduction potential [ORP], and turbidity)*, June 3, 1998, procedure for calibrating the field instruments instead of the procedure in the SOP. A minimum of two standards are needed to bracket the instrument's measurement range. The exception is ORP which uses one standard (Zobell solution).

Section 5.7 Low Flow Purging and Sampling is unclear on how the low-flow equipment is setup. Include a diagram of the equipment setup. Note the turbidity samples are collected prior to the flow-through-cell. This can be easily performed by placing a "T" connector with a valve between the pump's tubing and flow-through-cell. The valve can direct the ground water to either the turbidity sampling port or to the flow-through-cell. When it is time to collect the samples, the pump's tubing is disconnected from the "T" connector so the samples can be collected directly from the pumps' tubing.