RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

5 February 2009

Mr. Curtis Frye, Remedial Project Manager
Base Realignment and Closure
US Department of the Navy
BRAC PMO, Northeast
4911 South Broad Street
Philadelphia, PA 19112-1303

RE: Preliminary Alternatives Analysis Summary for
Installation Restoration Program (IRP) Site 16
Naval Construction Battalion Center
Davisville, Rhode Island
Submitted 9 January 2009, Dated 7 January 2009

Dear Mr. Frye:

The Rhode Island Department of Environmental Management, Office of Waste Management (RIDEM) has reviewed the above referenced document and offers the following comments:

1. Page 3, Section 1.2.4, Sediments, Sentence 1 – It is stated that sediments are not considered a medium of concern for this feasibility study because the potential for direct human exposure is very limited. The Remedial Investigation for this site (Section 6.4.3.4) notes that the carcinogenic risk equaled the upper bound of EPA's risk range for adult recreational users of 1×10^{-4} and exceeded RIDEM's cumulative risk range of 1×10^{-5}. For the child recreational user EPA's risk range was exceeded (5×10^{-4}) as well as RIDEM's cumulative risk range of 1×10^{-5}. One of Rhode Island's favorite pastimes is clam digging, especially by children who will go into the water barefoot and dig clams. Even though this activity is currently very limited that could change depending upon how this area develops. Therefore, the Navy needs to consider remedial options for this medium.

2. Page 4; Section 1.2.6, Summary, Whole Section – The media of concern to be evaluated in the Feasibility Study are to include soil (assuming both surface and sub-surface soil) in the Northwest North Central Area and groundwater beneath the entire site. In addition to this, alternatives to deal with vapor intrusion also need to be evaluated. Chloroform and trichloroethylene were major contributors

for the vapor intrusion pathway. The RIDEM cumulative benchmark of 1×10^{-5} were exceeded in the Building 41 Area (2×10^{-5}: industrial worker and 3×10^{-5}: residential) and equal to 1×10^{-5} in the undeveloped area. While there currently may be no buildings over the most contaminated areas of the trichloroethene plume, that could change in the future. One possible alternative for the Navy to consider would be an ELUR over the affected areas to require proper ventilation of any constructed buildings. Since the plume will move over time, consideration should also be given to any existing buildings in the path of the plume.

3. Page 10, Section 3.1, Chemicals of Concern, Bullet 3 – This bullet notes that metals concentrations in unfiltered samples are higher than in filtered samples. As a result, the only metal in groundwater which exceeds MCLs is arsenic in shallow groundwater in the North Central Area. Please be advised that the RIDEM Remediation Regulations Groundwater Objectives are based on unfiltered samples. The rationale is that most people do not filter groundwater prior to consumption. Therefore, the COCs for metals should be based on unfiltered samples and the alternatives should consider those metals as well.

4. Page 13, Section 3.4, Alternatives, Paragraph 2, next to Last Sentence - This sentence states that arsenic will be addressed by monitored natural attenuation in Alternatives G-2 through G-6. Monitored natural attenuation is appropriate where it can be shown that the contaminate of concern will breakdown into a less harmful product. Please explain how arsenic would be further broken down to a less harmful product.

5. Table 2-1, Page 1 of 5, Limited Action, LUCs, Screening Comment – This screening comment prohibits future residential land use and seems to rely on the MARAD Agreement and LIFOC. Please be advised that an Environmental Land Use Restriction (ELUR) would still be required as the restrictions contained in the MARAD Agreement and LIFOC are not environmentally based and could disappear if the land use changed even from one industry to another.

6. Table 2-1, Page 1 of 5, Containment, Cover/Barrier and Erosion Control – It is proposed to retain the cover/Barrier technology, but eliminate the erosion control technology because the site is not steeply sloped. While it is agreed the site is not steeply sloped, erosion still needs to be considered to insure that any soil cap or barrier does not erode away so that no contact with contaminates is maintained.

7. Table 2-2, Alternative S-2 – The main area proposed for a soil cover/cap is the Northwest North Central Area. This area for the most part is undeveloped. Please explain how development would take place in this area without adversely affecting the covers/caps.

8. Table 3-1, Page 6 of 6 – For process options of indirect discharge and off-site treatment facility these options are being eliminated because it is stated there are

no treatment facilities nearby. Please state if the Navy investigated the possible use of the QDC wastewater treatment facility.

9. General Comment – It is stated on page 8 that that the preliminary screening of alternatives was based on effectiveness, implementability and cost. Please provide the cost estimates for the alternatives.

RIDEM would like to thank you for the opportunity to comment on this document and looks forward to working with the Navy and USEPA. If you have any questions or require additional information please call me at (401) 222-2797 ext. 7138 or email me at richard.gottlieb@dem.ri.gov.

Sincerely,

Richard Gottlieb

Cc: M. Destefano, DEM OWM
C. Williams, EPA Region 1
D. Barney, BRAC Environmental Coordinator
S. King, RIEDC
S. Licardi, ToNK
S. Vetere, TTNUS