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August 28, 2008

U.S. Environmental Protection Agency - Region II  
290 Broadway – 22<sup>nd</sup> Floor  
New York, New York 10007-1866

Attn: Mr. Adolph Everett, P.E.  
Chief, RCRA Programs Branch

Re: Contract N62470-07-D-0502  
IQC for A/E Services for Multi-Media  
Environmental Compliance Engineering Support  
Delivery Order (DO) 0002  
U.S. Naval Activity Puerto Rico (NAPR)  
EPA I.D. No. PR2170027203  
Final Full RCRA Facility Investigation Reports for SWMUs 27, 28, and 29  
Navy Responses to EPA Comments dated July 23, 2008

Dear Mr. Everett:

Baker Environmental, Inc. (Baker), on behalf of the Navy, is pleased to provide you with one hard copy and one electronic copy provided on CD of the replacement pages of the Draft Full RCRA Facility Investigation Reports for SWMUs 27, 28, and 29. Directions for inserting the replacement pages are provided for your use. These replacement pages make up the Final Full RCRA Facility Investigation Reports for SWMUs 27, 28, and 29. Additional distribution has been made as indicated below.

This document is being submitted in accordance with the EPA comments dated July 23, 2008. The Navy Responses to these comments are attached for your review.

If you have questions regarding this submittal, please contact Mr. David Criswell at (843) 743-2130.

Sincerely,  
**MICHAEL BAKER JR., INC.**

A handwritten signature in black ink that reads "Mark E. Kimes".

Mark E. Kimes, P.E.  
Activity Coordinator

MEK/lp  
Attachments

cc: Ms. Debra Evans-Ripley, BRAC PMO SE (letter only)  
Mr. David Criswell, BRAC PMO SE (1 hard copy and 1 CD)  
Mr. Pedro Ruiz, NAPR (1 CD)  
Ms. Bonnie Capito, NAVFAC Atlantic – Code EV 42 (1 HARD COPY FOR Admin Record)  
Mr. Tim Gordon, US EPA Region II (1 hard copy and 1 CD)  
Mr. Carl Soderberg, US EPA Caribbean Office (1 hard copy and 1 CD)  
Mr. Julio I. Rodriguez Colon, PR EQB (1 hard copy and 1 CD)  
Ms. Willmarie Rivera, PR EQB (1 CD)  
Mr. Felix Lopez, US F&WS (1CD)  
Mr. Andrew Dorn, TechLaw, Inc. (1 CD)

**NAVY RESPONSE TO EPA COMMENTS DATED JULY 23, 2008**

**EPA COMMENTS ON THE DRAFT FULL RFI REPORTS  
FOR SWMUs 27, 28, AND 29 DATED JUNE 24, 2008**

*(EPA comments are provided in italics while the Navy Responses are in regular print)*

**III. Full RFI Reports for SWMUs 27, 28, and 29**

***EPA Comment***

*EPA has completed its review of the Full RFI Reports for the sludge drying beds at the facility's three wastewater treatment plants, which were submitted by Baker Environmental's letter of June 24, 2008. As part of that review, EPA also requested that our consultant, TechLaw Inc, review the reports. Based on those reviews, EPA has determined that the Full RFI Reports for SWMUs 27, 28, and 29 are acceptable, except as noted in the attached technical reviews. Rather than resubmitting the Full RFI reports, please submit an addendum to each report addressing the enclosed comments. Please submit those addendums to the Full RFI reports within thirty days of your receipt of this letter.*

*Since the RFI Reports indicate that the recently issued (June 2008) EPA Regional Screening Levels are not reflected in the Full RFI reports, those 2008 Regional Screening Levels should be reflected in the Corrective Measures Studies (CMS) that are proposed for each SWMU (refer to the Recommendations Section of each RFI Report). If based on evaluations using those 2008 Regional Screening Levels, additional sampling appears warranted to further delineate contamination and/or quantify risk, the proposals for such additional sampling should be included with the draft CMS work plans for those SWMUs, when submitted. Pursuant to Paragraph 23.F of the Consent Order, the draft CMS Work Plans shall be submitted within 60 days of your receipt of this letter.*

**Navy Response to EPA Comment:**

Addendums making up the Final Full RFI Reports for SWMUs 27, 28, and 29 are being submitted in accordance with the Navy Responses to TechLaw comments provided in the following pages.

The Navy will initiate the development of the CMS work plans or ICM work plans for SWMUs 27, 28, and 29 once the appropriate funding becomes available and awarded. It is anticipated that first quarter FY09 funding will be available to fund this work.

**TECHLAW COMMENTS ON THE DRAFT FULL RCRA FACILITY  
INVESTIGATION REPORT FOR SWMU 27- CAPEHART  
WASTEWATER TREATMENT PLANT SLUDGE DRYING BEDS**

*(TechLaw comments are provided in italics while the Navy Responses are in regular print)*

**GENERAL COMMENT**

- 1. For some of the analytes (e.g., arsenic) the Contract Required Quantitation Limit (CRQL) is higher than the screening values for USEPA Region IX Residential Soil PRGs and/or the Selected Ecological Surface Soil Screening Values. It is unclear if and how results that fall below the CRQL, but are above the screening levels are qualified. Please include a discussion on the qualification of these results.*

### **Navy Response to TechLaw General Comment 1:**

Comment noted. However, the non-detected results reported for the samples analyzed during this investigation are below the USEPA Region IX Residential Soil PRGs and/or the Selected Ecological Surface Soil Screening Values. Therefore the issue mentioned in the comment does not apply to this report and no additional revision is required since all non-detected results reported for the samples are below the above mentioned screening criteria.

### **SPECIFIC COMMENTS**

1. *Section 4.4.1 Surface and Subsurface Soils: A surface soil sample was collected at 27SB08, which was not included in Table 3.1 of the Full RCRA Facility Investigation [RFI] Work Plan, SWMUs 27, 28, and 29 (Work Plan). Based on Section 3.1.1 and Figure 3-1 of the Work Plan, a concrete pad exists at this location of 27SB08. Please revise the Draft Full RFI Report, SWMU 27 Capeheart Wastewater Treatment Plant Sludge Drying Beds to provide the rationale for the collection of the surface soil Sample at 27B08.*

### **Navy Response to TechLaw Specific Comment 1:**

Text will be added to Section 4.1 of the text to describe how soil boring 27SB08 was installed in a small grassy area at the edge on the concrete slab which enabled the collection of the surface soil sample from that location. During the development of the work plan a surface soil sample was not selected for this location because it was believed that the concrete slab extended up against the structures west of the sludge drying beds. Upon locating the soil boring locations in the field it was identified that 27SB08 actually fell within a small grassy area instead of on the concrete slab.

2. *Table 5-1: In sample 27SS02 zinc is listed as exceeding the ecological screening value and NAPR basewide background value in Figure 5-2. However, in Table 5-1 the concentration of zinc is not highlighted (as exceeding the ecological screening value), even though the value is equivalent to the value listed in the table. For consistency, please revise the formatting of Table 5-1 so that the information matches that in Figure 5-2.*

### **Navy Response to TechLaw Specific Comment 2:**

The screening value for zinc is an ECO SSL which is based on a no effect concentration. Therefore a concentration equal to this screening value does not provide an indication of unacceptable risks. Figure 5-2 will be revised by removing the shading for zinc from the box associated with 27SS02 to match Table 5-1. The presentation in Table 5-1 is correct since the concentration of zinc in sample 27SS02 does not exceed the ecological surface soil screening criteria. Figure 5-2 presents Exceedances of ecological screening criteria and background criteria for surface soil. The concentration of zinc detected in sample 27SS02 at 120 mg/kg equals the ecological surface soil screening value of 120 mg/kg and does not exceed the screening value.

## **TECHLAW COMMENTS ON THE DRAFT FULL RCRA FACILITY INVESTIGATION REPORT FOR SWMU 28- BUNDY WASTEWATER TREATMENT PLANT SLUDGE DRYING BEDS**

*(TechLaw comments are provided in italics while the Navy Responses are in regular print)*

## **GENERAL COMMENT**

1. For some of the analytes (e.g., arsenic) the Contract Required Quantitation Limit (CRQL) is higher than the screening values for USEPA Region IX Residential Soil PRGs and/or the Selected Ecological Surface Soil Screening Values. It is unclear if and how results that fall below the CRQL, but are above the screening levels are qualified. Please include a discussion on the qualification of these results.

### **Navy Response to TechLaw General Comment 1:**

Based on recommendations contained in the Draft Full RFI Report, SWMU 28 will proceed to a CMS. As part of the CMS a screening level ecological risk assessment and Step 3a of the Baseline ERA will be conducted as well as a human health risk assessment. The ecological risk assessment will include a quantitative evaluation while the human health risk assessment will include a qualitative evaluation of all non-detected results from the entire data set. No further discussion is required in the Full RFI for SWMU 28.

## **TECHLAW COMMENTS ON THE DRAFT FULL RCRA FACILITY INVESTIGATION REPORT FOR SWMU 29- INDUSTRIAL AREA WASTEWATER TREATMENT PLANT SLUDGE DRYING BEDS**

*(TechLaw comments are provided in italics while the Navy Responses are in regular print)*

## **GENERAL COMMENT**

1. *For some of the analytes (e.g., arsenic) the Contract Required Quantitation Limit (CRQL) is higher than the screening values for USEPA Region IX Residential Soil PRGs and/or the Selected Ecological Surface Soil Screening Values. It is unclear if and how results that fall below the CRQL, but are above the screening levels are qualified. Please include a discussion on the qualification of these results.*

### **Navy Response to TechLaw General Comment 1:**

Comment noted. However, the non-detected results reported for the samples analyzed during this investigation are below the USEPA Region IX Residential Soil PRGs and/or the Selected Ecological Surface Soil Screening Values. Therefore the issue mentioned in the comment does not apply to this report and no additional revision is required since all non-detected results reported for the samples are below the above mentioned screening criteria.

## **SPECIFIC COMMENTS:**

1. *Section 4.2.1 Surface and Subsurface Soils: For soil borings 29SB13 and 29SB14, only four subsurface soil samples were collected even though no groundwater was encountered. However, Section 3.1.3 of the Full RCRA Facility Investigation [RFI] Work Plan, SWMUs 27, 28, and 29 (Work Plan) proposes the collection of five subsurface soil samples at each soil boring location. Please revise the Draft Full RFI Report, SWMU 29 Industrial Area Wastewater Treatment Plant Sludge Drying Beds report to explain this deviation from the Work Plan.*

### **Navy Response to TechLaw Specific Comment 1:**

Groundwater was observed in 29SB13 at 9 feet below ground surface as shown on the boring log in Appendix A, therefore, soil sampling was terminated at 9 feet and the fifth subsurface sample was not collected. The boring log for 29SB14 indicates sandy clay present beginning at 7.5 feet below ground surface and is damp. Because of the shallow groundwater across the site, the on site geologist chose not to collect a fifth sample from 9 to 11 feet within the groundwater zone. In addition, no visual evidence of environmental impact was observed. The narrative will be revised to reflect groundwater was encountered at 29SB13 and 29SB14 at approximately 9 feet below ground surface.

- 2. Section 5.3 Subsurface Soils and Section 6.1 Conclusions: Both sections state that "Arsenic exceeded the PRGs at six out of the seven subsurface locations." However, there were subsurface soils collected at eight locations. Table 5-2 indicates that results for arsenic exceeded the Project Remediation Goals (PRGs) at seven of the eight locations. Please revise the text so that it is consistent with the information presented in Table 5-2.*

### **Navy Response to TechLaw Specific Comment 2:**

The text in Section 5.3 and Section 6.1 will be corrected to read "Arsenic exceeded the PRGs at seven out of eight subsurface locations,".

- 3. Figure 5-1: Figure 5-1, Exceedances of Human Health Screening Criteria and Background for Surface Soil includes sample 29SB 13-00. However, while arsenic and vanadium exceed the human health PRG in 29SB 13-00, the concentrations of these metals do not exceed the background level. To be consistent with the information presented for the other samples, please revise Figure 5-1 to only include results exceeding both human health screening levels and the background concentration. Alternatively, explain in the text why 29SB13-00 is included in the figure.*

### **Navy Response to TechLaw Specific Comment 3:**

The information presented on Figure 5-1 for Sample 29SB13-00 will be deleted from the figure.