Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
Airside Business Park
100 Airside Drive
Moon Township, PA 15108
Office: 412-269-6300
Fax: 412-375-3995

February 29, 2008

U.S. Environmental Protection Agency - Region II
290 Broadway – 22nd 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
Navy Responses to EPA Comments dated January 25, 2008

Dear Mr. Everett:

Baker Environmental, Inc. (Baker), on behalf of the Navy, is pleased to provide you with the Navy Responses to EPA Comments dated January 25, 2008. These responses address EPA comments on the December 6, 2007 Final Corrective Measures Study Work Plans for SWMUs 56, 59, 61, 69, and 74.

If you have questions regarding this submittal, please contact Mr. Jeffrey G. Meyers at (843) 743-2134. Additional distribution has been made as indicated below.

Sincerely,

MICHAEL BAKER JR., INC.

Mark E. Kimes, P.E.
Activity Coordinator

MEK/lp
Attachments

cc: Ms. Debra Evans-Ripley, BRAC PMO SE (letter only)
Mr. David Criswell, Navy BRAC PMO SE (1 hard copy)
Mr. Jeffrey G. Meyers, Navy BRAC PMO SE (1 hard copy)
Mr. Pedro Ruiz, NAPR (1 hard copy)
Ms. Bonnie Capito, NAVFAC Atlantic – Code EV42 (1 hard copy for Administrative Record)
Mr. Tim Gordon, US EPA Region II (1 hard copy)
Mr. Andrew Dorn, TechLaw Inc. (1 hard copy)
Mr. Carl Soderberg, US EPA Caribbean Office (1 hard copy)
Mr. Manny Vargas, PR EQB (1 hard copy)
Ms. Josefina Gonzalez, PR EQB (1 hard copy)
Mr. Felix Lopez, U.S. F&WS (1 hard copy)

NAVY RESPONSES TO EPA COMMENT LETTER DATED JANUARY 25, 2008 ON THE CORRECTIVE MEASURES STUDY (CMS) WORK PLANS FOR SWMUS 56, 59, 61, 69, AND 74 DATED DECEMBER 6, 2007

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

EPA Comment 1

1. The Navy has not included a Quality Assurance Project Plan with the CMS Work Plan. Rather, the Navy's response to General Comment 1 in EPA's letter of October 2, 2007 indicates that appropriate text has been added to the CMS Work Plans indicating that the procedures outlined in the Data Collection Quality Assurance Plan (DCQAP), Health and Safety Plan, and other Plans (together referred to as "the Master Plans") in the EPA approved, September 1995 RCRA Facility Investigation Management Plans for the facility will be followed. The changes made to the text of the work plans provide a general approach to the field data quality procedures that will be implemented during the supplemental CMS investigation stages. However, it should be noted that the Master Plans for NAPR were prepared prior to the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), dated March 2005, and that EPA and TechLaw have not reviewed the 1995 Master Plans for their consistence with procedures required under the 1005 UFP-QAPP.

Several of the Navy's responses discuss the 1995 Master DCQAP. The Navy's responses state that the general elements required under the UFP-QAPP were included in the 1995 Master DCQAP. This approach may be acceptable, however, additional detail about the Master DCQAP should be presented in the Navy's responses. Alternatively, more detailed references to the specific components of the DCQAP need to be provided so that EPA can confirm the QA elements required under the UFP-QAPP are present in the Master DCQAP. Without this additional detail, it is unclear from the Navy's responses whether the data quality produced by following the Master DCQAP will be adequate to support the required risk management or remedial design decisions, in accordance with the UFP-QAPP procedures.

Several other federal facilities that initiated investigations before the adoption of the UFP-QAPP guidance have followed quality assurance plans that were not drafted in accordance with the UFP-QAPP procedures, and have produced data of sufficient quality to support the risk management decisions.

Rather than re-evaluate the entire quality assurance program at the NAPR facility, EPA requests that the Navy either revise their Response to Comments to discuss in more detail how the 1995 Master DCQAP will assure that data of sufficient quality, i.e., consistent with requirements of the 2005 UFP-QAPP, is achieved under the CMS work plans, to support any risk management decisions; or revise those portions of the 1995 Master DCQAP, as necessary, to make it consistent with requirements of the 2005 UFP-QAPP.

Navy Response to EPA Comment 1: EPA's General Comment 1, dated July 31, 2007 indicates that the QAPP submitted as an appendix to the draft CMS Work Plans for SWMUs 56, 59, 61, 69 and 74 does not meet the specific requirement provided in QA/R-5. The Navy concurs with this comment. The Navy also concurs with EPA's comment (January 25, 2008) that further explanation may be needed to clarify the adequacy of the referenced DCQAP in the revised CMS Work plans and provides the following revision to our previous response to this comment:

The draft CMS Work Plans for SWMUs 56, 59, 61, 69 and 74 were originally prepared with the understanding that an as yet undetermined third party would be responsible for implementation of the activities; consequently, the draft Work Plans were written in an open-ended fashion to allow the third party entity the flexibility of identifying DQOs, SOPs, and QAPP requirements for USEPA approval. However, since the Navy plans to implement the Work Plans prior to transfer of the property to a third party, the QAPP "template" that was appended to the draft Work Plans for SWMUs 56, 59, 61, 69 and 74 has been deleted and references to the Data Control Quality Assurance Plan (DCQAP), as discussed below, have been included in its place.

The Navy has implemented previous investigations at NAPR in accordance with the EPA approved Master Project Plans, which include the Project Management Plan (PMP), Data Collection Quality Assurance Plan (DCQAP), Data Management Plan (DMP), and Health and Safety Plan (HASP) for NAPR. These Master Plans, and specifically, the Final Data Collection Quality Assurance Plan (DCQAP) (Baker, September 14, 1995) define acceptable data requirements and error levels associated with the field and analytical portions of this investigation. Therefore, to maintain consistency with past Navy work under the Consent Agreement, the Work Plans for SWMUs 56, 59, 61, 69 and 74 have been revised to include references to the Navy's EPA approved Master Project Plans for this facility.

The Final DCQAP portion of the Master Project Plans was prepared following guidance given in:

- Interim Final RCRA Correct Action Plans, USEPA, EPA/530-SW-88-028, June 1988; and

- Interim Final RCRA Facility Investigation Guidance – Volume 1, USEPA, EPA/530/SW-89-031, May 1989.

Table 1 provides a map between the DCQAP sections and the sections required by "EPA Requirements for Quality Assurance Project Plans" (QA/R-5) (EPA 2001). Table 1 illustrates that although there are format and minor content differences, the DCQAP is generally consistent with and includes all of the main elements required by QA/R-5. As stated in part from EPA General Comment 1: "The UFP-QAPP was developed using the same standard as that used for development of QA/R-5. QAPPs developed in accordance with UFP-QAPP will meet the requirement of QA/R-5." Similarly, it is assumed that a QAPP meeting the requirements of QA/R-5 (i.e., DCQAP) will also meet the quality goals of the UFP-QAPP.

Of particular interest when considering overall data quality are the development of DQOs, the use of standard operating procedures for data collection and analysis, and the use of appropriate analytical methods.

DQOs

As we indicated in our response to TechLaw General Comment 6 on the Draft CMS Work Plan for SWMU 56 (and other SWMUs), although the seven step DQO process was not rigorously applied, elements essential to the process (with the exception of statistically determining the number of samples) have been considered in the development of the sampling design. The CMS Work Plans are developed with input from our human health and ecological risk assessors to assure that the investigation will provide the data that is needed for risk management decisions. The human health and ecological risk assessors review the sampling (number, frequency, location and collection methods) and analytical programs (analytical methods, parameter lists, detection limits) and compare applicable screening values to method performance limits to maximize the usability of the resultant data.

SOPs

The standard operating procedures for field data acquisition and laboratory analysis may have changed to some degree since publication of the DCQAP. The SOPs are routinely updated to reflect the currently used equipment and accepted procedures. The most current SOPs are referenced and/or included in the CMS Work Plans for SMWUs 56, 59, 61, 69 and 74 to assure consistency in data collection and analysis. Any specialized or site-specific procedures are discussed in detail in the text of the Work Plan.

Analytical Methods

Similar to the SOPs, the analytical methods, analyte lists, detection limits, etc. may have changed to some degree since publication of the DCQAP. Consequently, the current CMS Work Plans for SWMUs 56, 59, 61, 69 and 74 contain the following tables specifying the sampling and analytical program requirements so that data of sufficient quality for risk management decisions is collected. As discussed above, these tables have been reviewed by the human health and ecological risk assessors to ensure acceptable data quality.

- **Table 3-1 Summary of Sampling and Analytical Program – Environmental Samples** – this table specifies media that is to be sampled, the number of environmental samples per media, the number of sample related QA samples that are required (i.e., duplicates, matrix spike and matrix spike duplicates) and the associated analytical requirement for each sample. In some Work Plans, the information from Table 3-3 may also be provided on Table 3-1.

- **Table 3-2 – Method Performance Limits** – This table specifies the required parameter/analyte list for each analytical suite (e.g., volatiles, metals, etc.), the required analytical method and the contract required quantitation limits that are needed to produce data of sufficient quality for risk management based decisions.

- **Table 3-3 – Summary of Sampling and Analytical Program – QA/QC and IDW Samples** – This table may be combined with Table 3-1 in some Work plans. This table specifies the type and number of non-environmental media QA/QC samples (e.g., blanks and rinsates) and IDW samples that are required for collection during the field investigation and the associated analysis

The information provided in these tables has been reviewed against the screening levels and have been determined to generally meet these levels. These quantitation limits have also been reviewed by the analytical laboratory to ensure that they can be met. In all cases, the quantitation limits are the lowest achievable by the laboratory for the specified analytical method. These tables are then provided to the analytical laboratory subcontractor as part of their scope of work so that the laboratory is clearly aware of the analytical requirements of the project. Additionally, only laboratories capable of providing an acceptable Laboratory Quality Manual (LQM) will be selected for this project. The laboratory LQM may be provided on request (after selection of the analytical laboratory).

These elements: consistency with the substantive elements of QA/R-5; following the planning elements of the DQO process; using current data acquisition SOPs; and, providing current sampling and analytical requirements tables within the current CMS Work Plans for SWMUs 56, 59, 61, 69 and 74, taken together provide the information and guidance necessary for the project team to generate good quality data and to use that data for developing risk management based recommendations and decisions.

EPA Comment 2

*2) **Specific Comment re, Section 5.2, and Screening-Level Ecological Effects Evaluation:** The comment requested that all detected contaminants be used in the Screening Level Ecological Risk Assessment (SLERA). Section 5.2 of the revised CMS Work Plans indicates that organic contaminants with a K_{ow} less than 3.0 will not be included in the SLERA, because these contaminants are not considered to be bio-accumulative. The CMS Work Plan also states that the EPA has previously approved this methodology. However, the text does not provide a reference to support the EPA's agreement. In the Response to Comments, please either provide a citation for EPA's approval of the above methodology, or revise the text of Section 5.2 of the above CMS Work Plans to state that all detected contaminants will be included in the SLERA.*

Navy Response to EPA Comment 2:

This procedure has previously been used in EPA-approved ecological risk assessments (ERAs) conducted at NAPR for SWMUs 1 and 2 (Baker, 2006a) approved in EPA letter dated June 22, 2006; SWMU 45 (Baker, 2006b) approved in EPA letter dated January 25, 2006; SWMU 9 (Baker, 2003a) approved in EPA letter dated June 3, 2003; Tow Way Fuel Farm (SWMU 7/8) (Baker, 2003b) approved in EPA letter dated June 10, 2003; and SWMU 53 (Baker, 2003c) approved in EPA letter dated January 23, 2004.

References:

Baker Environmental, Inc (Baker), 2006a. Final Additional Data Collection Report and Screening-Level Ecological Risk Assessment and Step 3a of the Baseline Ecological Risk Assessment for SWMUs 1 and 2, Naval Activity Puerto Rico, Ceiba, Puerto Rico. Coraopolis, Pennsylvania. May 18, 2006.

Baker, 2006b. Final Additional Data Collection Report and Screening-Level Ecological Risk Assessment and Step 3a of the Baseline Ecological Risk Assessment for SWMU 45, Naval Activity Puerto Rico, Ceiba, Puerto Rico. Coraopolis, Pennsylvania. January 25, 2006.

Baker, 2003a. Final Corrective Measures Study Investigation Report for SWMU 9, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. Coraopolis, Pennsylvania. April 25, 2003.

Baker, 2003b. Final Corrective Measures Study Task I Report for the Tow Way Fuel Farm, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. Coraopolis, Pennsylvania. May 23, 2003.

Baker, 2003c. Final Corrective Measures Study Final Report for SWMU 53, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. Coraopolis, Pennsylvania. November 24, 2003.

TABLE 1
MAPPING OF DCQAP ELEMENTS TO EPA QA/R-5 ELEMENTS
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

EPA QA/R-5 Elements		Corresponding DCQAP Elements		Comments
		Section	Element	
Group A - Project Management Elements		---		No Group designation in the DCQAP.
A1	Title and Approval Sheet	---	Title Page	---
A2	Table of Contents	---	Table of Contents	---
A3	Distribution List	---	---	The distribution list is provided on the cover letter to the document.
A4	Project/Task Organization	6	Project Organization	---
A5	Problem Definition/Background	2	Permit Requirements for Data Collection	---
		3	SWMU/AOC Status	---
A6	Project/Task Description	4	Data Collection Strategy and Requirements	---
A7	Quality Objectives and Criteria	4	Data Collection Strategy and Requirements	---
A8	Special Training/Certification	---	---	Special training/certification are not required for sampling and anaysis. Health and safety training/certification requirements are given in the master Health and Safety Plan. Other training requirements, if any are specified in the CMS Work Plans.
A9	Documents and Records	16	Quality Assurance Reporting Procedures	---
		---	---	This element is also discussed in the master Data Management Plan (DMP).
Group B - Data Generation and Acquisition Elements		---		No Group designation in the DCQAP.
B1	Sampling Process Design (Experimental Design)	4	Data Collection Strategy and Requirements	This elements is also covered by Tables 3-1, 3-2 and 3-3 in the CMS Work Plans.
B2	Sampling Methods	5	Field Investigation and Sampling Procedures	---
B3	Sample Handling and Custody	7	Sample and Document Custody Procedures	---
B4	Analytical Methods	9	Analytical Procedures	---
B5	Quality Control	11	Internal Quality Control Checks	---
B6	Instrument/Equipment Testing, Inspection and Maintenance	12	Performance and System Audits	---
		13	Preventive Maintenance	---
B7	Instrument/Equipment Calibration and Frequency	8	Calibration Procedures and Freequency	---
B8	Inspection/Acceptance of Supplies and Consumables	---	---	This item is not covered in the Master Project Plans or CMS Work Plans.
B9	Non-Direct Measurements	---	---	The need for data from non-measurement sources is discussed in the task description of the CMS Work Plan, if necessary. For example, media-specific screening values for soil for conducting a screening-level ecological effects evaluation are discussed in the Ecological Risk Assessment section of the CMS Work Plan.
B10	Data Management	---	---	This element is also discussed in the Data Management Plan
Group C - Assessments and		---		No Group designation in the DCQAP.
C1	Assessments and Response	12	Performance and System Audits	---
		14	Data Measurement Assessment Procedures	---
		15	Corrective Actions	---
C2	Reports to Management	16	Quality Assurance Reporting Procedures	---
Group D - Data Validation and			---	No Group designation in the DCQAP.
D1	Data Review, Verification and Validation	10	Data Reduction, Validation and Reporting	---
D2	Verification and Validation Methods	10	Data Reduction, Validation and Reporting	---
D3	Reconciliation with User Requirements	---	---	This element is discussed in the Data Management Plan.