

Baker

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

Re: Contract N62470-10-D-3000
IQC for A/E Services for Multi-Media
Environmental Compliance Engineering Support
Delivery Order (DO) JM01
U.S. Naval Activity Puerto Rico (NAPR)
EPA I.D. No. PR2170027203
Final Phase I RCRA Facility Investigation Work Plan for SWMU 79

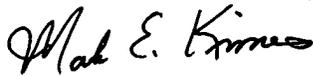
Dear Mr. Everett:

Michael Baker Jr., Inc. (Baker), on behalf of the Navy, is pleased to provide you with one hard copy and one electronic copy on CD of the replacement pages for the Draft Phase I RCRA Facility Investigation Work Plan for SWMU 79. These replacement pages make up the Final Phase I RCRA Facility Investigation Work Plan for SWMU 79. Directions for inserting the replacement pages into the Draft Phase I RCRA Facility Investigation Work Plan for SWMU 79 are provided for your use.

This document is being submitted in accordance with EPA comments dated October 7, 2010. The Navy responses to these comments are attached for your review. Additional distribution has been made as indicated below.

If you have questions regarding this submittal, please contact Mr. Mark Davidson at (843) 743-2124. Additional distribution has been made as indicated below.

Sincerely,
MICHAEL BAKER JR., INC.



Mark E. Kimes, P.E.
Activity Coordinator

MEK/vk
Attachments

cc: Ms. Debra Evans-Ripley, BRAC PMO SE (letter only)
Mr. David Criswell, BRAC PMO SE (letter only)
Mr. Mark E. Davidson, BRAC PMO SE (1 hard copy and 1 CD)
Mr. Pedro Ruiz, NAPR (1 CD)
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)
Ms. Bonnie Capito, NAVFAC Atlantic – Code EV42 (1 hard copy)
Ms. Gloria Toro, PREQB (1 hard copy and 1 CD)
Ms. Wilmarie Rivera, PREQB (1 CD)
Mr. Felix Lopez, US F&WS (1CD)
Ms. Brenda Smith, TechLaw, Inc. (1 CD)
Ms. Pat Dixon, U.S. Coast Guard (2 hard copies and 1 CD)

**NAVY RESPONSE TO EPA COMMENTS DATED OCTOBER 7, 2010
DRAFT PHASE I RCRA FACILITY INVESTIGATION WORK PLAN
SWMU 79 - NAVY OPERATIONS ON CABRAS ISLAND
DATED AUGUST 20, 2010**

EPA COMMENTS

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

GENERAL COMMENTS

1. *The Work Plan is lacking several elements required by EPA Requirements of Quality Assurance Project Plans (QAPP), dated March 2001 (QA/R-5). These elements are necessary to evaluate the proposed Work Plan:*
 - *Laboratory specific information including standard operating procedures (SOPs) for subsampling, sample preparation, and analysis; method detection limits; reporting limits (RLs); quality control (QC) acceptance limits; analytical calibration procedures and acceptance criteria; and corrective actions should the calibration/QC criteria be exceeded must be provided for the currently proposed analytical methods. Ensure that laboratory RLs are provided alongside the screening values.*
 - *Project specific completeness goals for both the field and laboratory have not been provided. In addition, the Work Plan does not indicate if any proposed samples are deemed critical to this investigation.*
 - *Field SOPs have not been provided for XRF, including sample preparation and analysis.*
 - *There is no project specific discussion of how precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS) measures will be incorporated into a data quality assessment, how completeness will be measured for this project, or if an evaluation of significant trends and biases will be included as part of a data quality assessment.*
 - *The Work Plan indicates the data validator will be determined at a later date. Per EPA QA/R-5, the data validator and independence from data generation activities must be ensured.*

Revise the Work Plan to provide this information.

Navy Response to EPA General Comment 1: The Navy plans to implement this investigation at NAPR in accordance with the EPA approved Master Project Management Plan (PMP), Master Data Collection Quality Assurance Plan (DCQAP), Data Management Plan (DMP), and Master Health and Safety Plan (HASP) for NAPR (Baker, 1995. [Final RCRA Facility Investigation Management Plans, Naval Station Roosevelt Roads, Ceiba, Puerto Rico](#). September 14, 1995. Coraopolis, Pennsylvania.) The EPA approved the work plan on September 25, 1995. These Master Plans 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, this work plan has been revised using the Navy's EPA approved Master Plans for this facility.

In response to previous comments by the EPA on Phase I RFI Work Plans for SWMUs 62 and 71 (see the April 17, 2008 letter from Baker on behalf of the Navy to the EPA); the Navy provided an evaluation of the Master Project Plans (Baker, September 14, 1995) in relation to the QA/R-5 requirements (“EPA Requirements for Quality Assurance Project Plans.” EPA/240/B-01/003. [EPA, March 2001]). Table 1 of the April 17, 2008 letter provides a map between the DCQAP sections, the work plan content and the sections required by QA/R-5 and 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. For example, data validation is discussed in Section 10 of the DCQAP and PARCCS measures are discussed in Section 4 of the DCQAP; and forms and checklists are provided in the tables and appendices of the DCQAPP. Some additional examples of forms and checklists that may be found in the DCQAP are shown in the following table:

Item	Location in the DCQAP
System Audit Checklist	Table 12-1
Test Boring Record	Appendix B – SOP F101 – Borehole and Sample Logging
Typical Monitoring Well Construction Details and Test Boring and Well Construction Records	Appendix B – SOP F103 – Monitoring Well Installation
Chain of Custody Form	Appendix B – SOP F302 – Chain of Custody
Sample Label	Appendix B – SOP F302 – Chain of Custody
Data Validation Checklists	Appendix D – Data Validation Methodologies

There are a number of new forms that are primarily associated with groundwater sampling. These include the Well Detail and Sampling Log, the Low Flow Purge Data Sheet and the Daily Meter Calibration Record. The new groundwater sampling and equipment calibration forms will be included as an appendix to the Phase I RFI Work Plan for SWMU 79. The field procedures for operation, sample preparation and analysis using the XRF also will be included in the appendix.

The analytical methods, analyte lists, detection limits, etc. may have changed to some degree since publication of the DCQAP. Consequently, the Phase I RFI Work Plans contain the following tables specifying the sampling and analytical program requirements so that data of sufficient quality for future risk management decisions is collected:

- Table 3-1 Summary of Sampling and Analytical Program – Environmental Samples
- Table 3-2 Method Performance Limits
- Table 3-3 Summary of Sampling and Analytical Program – QA/QC Samples and IDW Samples

The information provided in these tables has been reviewed against screening levels and have been determined to generally meet these levels. Table 3-2 has been revised to include preparation methods. Soil screening values are presented on Tables 4-1. Groundwater and surface water screening values are presented on Table 4-2. In addition, a table with sediment screening values (Table 4-3) was added for easy comparison to the analytical method detection limits. These quantitation limits have also been reviewed by an 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 LQM will be provided on request (after selection of the analytical laboratory).

This evaluation (presented in the April 17, 2008 letter), which was approved by EPA on May 13, 2008, indicated that the Phase I RFI Work Plan structure, with reference to the 1995 Master Project Plans and inclusion of project-specific tables summarizing the sampling and analysis program for environmental and QA/QC samples and method performance limits, and other factors as discussed in the April 17, 2008 letter, when 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. The structure of the Phase I RFI Work Plan for SWMU 79 is in accordance with the QA/R-5 QAPP requirements.

The procedures for sample preparation and analysis for the XRF are provided in Section 3.1.2. The procedures for operation of the XRF device are provided in Appendix E.

2. *A data quality objective (DQO) section should be provided in the Work Plan. The DQO section should clearly define the problem and the environmental questions that should be answered for the current investigation. Project decision “If..., then...” statements should be developed, linking data results with possible actions. The DQOs should also identify the type, quantity, and quality of data needed to answer the study questions. The following information should be added to the Work Plan so that complete DQOs are presented:*

- *Provide project decision conditions (“If..., then...” statements) for each matrix and/or decision area.*
- *For each sample matrix, provide the rationale for the proposed number, location, analyses, and depth of samples. In addition, provide the rationale for the proposed type of sample (e.g., grab samples vs. composite samples as well as random samples vs. judgmental samples). The rationale should provide sufficient detail to explain why each of these will address the environmental questions being asked.*

Revise the Work Plan to include this information.

Navy Response to EPA General Comment 2: Although the seven-step DQO process was not applied rigorously, 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. Because the investigation is designed to determine if impacts have occurred to soil, sediment, groundwater or surface water at the site, the sample locations have been selected to reflect the most likely impacted areas based on site history and professional judgment. All samples are grab samples with locations biased towards meeting the project objective of determining the presence of contamination. Detailed sampling rationale, including the number and location of samples from each media, specific rationale for each sample, sampling procedures, and associated laboratory analyses is provided in Section 3 of the SWMU 79 Phase I RFI Work Plan.

Project decision conditions include comparing analytical data to human health-, ecological-, and background-based screening values. Exceedances of human health and/or ecological screening values and background screening values will result in a recommendation of additional sampling locations under the Full RFI Work Plan to further delineate the site. Human health and ecological risk assessments will not be conducted as part of the Phase I RFI or Full RFI. The Full RFI Work Plan will be developed with input from our human health and ecological risk assessors to assure that the investigation will provide the data that is needed for future 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. The decision criteria for this project (comparison of environmental media analytical results to screening criteria), are discussed extensively in

Sections 4.6.1, 4.6.2 and 4.6.3 of the Phase I RFI Work Plan. The approved final DCQAP document provides additional data quality criteria in Section 4.1.1.2 (data quality levels) and Section 14.3 (data completeness and other criteria). Based on the above, no revisions to the text of the Phase I RFI Work Plan for SWMU 79 are required.

3. *The scope of the Work Plan is not clear and contains several inconsistencies. For example, Section 2.3, Area of Investigation at SWMU 79, states, “The soil investigation will focus on the determination of the extent of contamination in and around the areas where metals, semi-volatile organic compounds (SVOCs), and polynuclear aromatic hydrocarbons (PAHs) contaminated soil were identified during the ECP investigation.” However, this is not consistent with the scope outlined in Section 3.0, Scope of Investigation, which focuses only on metals contamination. Further Section 3.1.3, Surface & Subsurface Soil Sampling Program for Fixed-Base Analysis, includes analysis for Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO) and Diesel Range Organics (DRO), and perchlorate, which indicates that the scope of the investigation includes evaluation of petroleum/volatile organic compounds (VOC) and explosive-related contamination. Revise the Work Plan to address these inconsistencies and provide a clear purpose and scope to the investigation.*

Navy Response to EPA General Comment 3: The inconsistencies have been corrected across Sections 2.3, 3.0 and 3.1.3 and throughout the Work Plan providing a clear purpose and scope to the investigation.

4. *The Work Plan does not specify that exceedances of human health and/or ecological risk-based screening criteria warrant the need for a Human Health Risk Assessment (HHRA) and/or Ecological Risk Assessment (ERA) if complete exposure pathways exist. Clarify that detected concentrations of chemicals will be compared to generic human health and/or ecological risk-based screening criteria as part of the RCRA Facility Investigation (RFI), and that if exceedances exist, a HHRA and/or ERA will be conducted as part of the Corrective Measures Study (CMS) Work Plan, unless sufficient justification is provided to demonstrate that a HHRA and/or ERA is not warranted.*

Further, in order to assist in this decision process, include a Conceptual Site Model (CSM) for human and ecological receptors (i.e., show sources, potentially complete exposure pathways, and receptors) based on the current level of understanding of site conditions.

Navy Response to EPA General Comment 4: The need for a HHRA and ERA will be identified by the Phase I RFI or Full RFI, which will determine if impacts to the environment have occurred at SWMU 79 based on the presence or absence of chemical concentrations in soil greater than human health/ecological screening values and background screening values. The proposed sampling program for the Phase I RFI will attempt to delineate the extent of contamination detected at SWMU 79 during previous sampling events by comparing analytical data to human health-, ecological-, and background-based screening values. Exceedances of human health and/or ecological screening values and background screening values will result in the site moving to a Full RFI and preparation of a Full RFI Work Plan. If needed, based on the results of the Full RFI, a HHRA and ERA will be conducted as part of a CMS. The CMS work plan will present the specific methodology that will be employed for conducting the human health and ecological risk assessments. The first paragraph of Section 4.7 will be revised as follows:

Information from the physical and analytical results of the Phase I RFI will be synthesized into conclusions regarding site conditions. Recommendations will be made from these conclusions as to whether a Full RFI is needed to further delineate contamination or whether the SWMU can proceed toward corrective action complete. If the conclusions from the Phase I RFI indicate exceedances of human health and/or ecological screening values and background screening values, then a Full RFI will be completed, including preparation of a Full RFI Work Plan which will contain conceptual site models for human and ecological receptors. The Full RFI report will recommend moving the SWMU

to a CMS with the preparation of a Draft CMS Work Plan. A HHRA and ERA will be conducted as part of the CMS and the CMS Work Plan will present the specific methodology that will be employed for conducting these assessments.

5. *Consistent with EPA guidance and following agreements with the Navy, inorganics that exceed human health risk-based screening criteria cannot be eliminated from the quantification of risk and hazard regardless of background concentrations. Specifically, the EPA raised this issue in a comment letter dated January 23, 2009 on the Draft Final Corrective Measures Study for Solid Waste Management Unit (SWMU) 68. The Navy responses to the EPA comment letter, dated June 12, 2009, stated that chemicals detected above risk-based screening criteria will be retained as Chemicals of Potential Concern (COPCs) and assessed under total baseline conditions. The Navy responses further stated that those chemicals at or below background levels (non-site related) will be discussed as part of the risk characterization and then exit the risk assessment process. This approach is consistent with U.S. Navy Human Health Risk Assessment Guidance (available at <http://www-nmcphc.med.navy.mil/downloads/ep/Chapters%201-12.pdf>). Note that this approach appears to be acceptable based on EPA's approval letter dated August 6, 2009 on the Final Corrective Measures Study for SWMU 68. Ensure that the Work Plan is revised to reflect these previous agreements to maintain consistency among all HHRAs performed at NAPR SWMUs and demonstrate compliance with EPA-recommended risk assessment methodologies. HHRAs conducted for NAPR SWMUs should quantify risk and hazard for any and/or all inorganic compounds that exceed residential or industrial health-based screening criteria. Further, the uncertainty analysis, presented as part of the risk characterization, should include a refinement of risk. This refined risk evaluation should present a breakdown of the total risk as site-related risk and background risk. This will provide the basis for exiting such inorganic COPCs from the HHRA process (i.e., show that such inorganic COPCs should exit at the end of Tier 2, Baseline HHRA, and not continue to the Tier 3 process, risk assessment for selection of remedial alternatives).*

Navy Response to EPA General Comment 5: The Navy offers the following points of clarification relative to this comment. The Phase I RFI analytical data will not be statistically compared to background analytical data as part of the RFI. Instead, RFI analytical data will be compared to the background-screening values (i.e., ULM background concentrations) presented within the Revised Final II Summary Report for Environmental Background Concentrations of Inorganic Compounds, Naval Activity Puerto Rico, Ceiba, Puerto Rico [Baker, 2010]), as well as human health and ecological screening values, to define the extent of contamination that was detected by the Phase I RFI. Exceedances of human health and/or ecological screening values and background screening values will result in the site moving to a Full RFI with the preparation of a Full RFI Work Plan. If needed, based on the results of the Full RFI, a HHRA and ERA will be conducted as part of a CMS; the specific methods that will be employed for conducting these assessments will be detailed in the CMS Work Plan.

Inorganic concentrations below background levels will be eliminated from further consideration as site-related contaminants in the Phase I RFI. However, this does not eliminate them from the quantification of risk in the event an HHRA is warranted. Rather, in HHRAs conducted for NAPR all chemicals detected above risk-based screening criteria, regardless of whether those chemicals are at or below background, are retained as COPCs and evaluated quantitatively as part of the total baseline HHRA. In addition, a refinement of total site (where the term "site" refers to the SWMU under evaluation) risk addressing the contribution of background to risk (i.e., risks from those chemicals at or below background levels [non-site related]) would be included as part of the uncertainty analysis and risk characterization. Those chemicals whose SWMU-specific concentrations and associated risk/hazard are attributable to background would then exit the risk assessment process, which is consistent with *U.S. Navy Human Health Risk Assessment Guidance*.

6. *Ensure that contract-required quantitation limits (QLs) are low enough to meet human health and ecological screening criteria. Revise the Work Plan to show that QLs will be low enough to meet data quality standards for risk assessment purposes. The requested revision can be easily addressed by updating tables to compare the QLs to applicable human health and ecological screening values.*

Navy Response to EPA General Comment 6: The human health screening values (Regional Screening Levels) and ecological screening values are provided in Tables 4-4 and 4-1 to 4-3, respectively. Quantitation limits are provided in Table 3-2. The information provided in the tables has been reviewed against project-specific screening levels and has been determined to generally meet these levels. In all cases, the quantitation limits are the lowest achievable by the laboratory for the specified analytical method. The project-specific screening values 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.

7. *MCLs are not solely risk-based. Groundwater exceedances of risk-based screening criteria warrant an HHRA unless land use controls and/or institutional controls are in place at SWMU 79 to prevent consumption of groundwater (e.g., restrictions on residential development). Further, if a HHRA is warranted and conducted as part of the CMS, groundwater COPCs should be selected based on comparison of analytical results to the applicable Tap Water Regional Screening Level (RSL) and not the MCL. Revise the Draft RFI Work Plan to update Section 4.6.2, Human Health Screening Values, and update Section 4.6.2.2, Federal Drinking Water MCLs, or provide adequate justification for not doing so.*

Navy Response to EPA General Comment 7: MCLs will be used only as one of the screening tools in the Phase I RFI. As indicated in Section 4.6.2, USEPA Regional Tap Water SLs and inorganic background levels also will be used for groundwater screening in the Phase I RFI for SWMU 79. It is acknowledged in Section 4.6.2.2 that MCLs are not solely risk-based. Note that it is not the objective of the Phase I RFI to evaluate the potential for human health risks. Further evaluation of the potential for human health risks will be conducted as part of a CMS. In HHRAs conducted for NAPR, only risk-based screening criteria are used in the COPC selection process. As such, MCLs are not used to identify groundwater COPCs. No revisions to the text of the Phase I RFI Work Plan for SWMU 79 are required.

8. *Subsurface soil samples collected below three feet should not be included in the Screening Level Ecological Risk Assessment (SLERA) for comparison to soil screening values. Subsurface soil deeper than three feet is not considered accessible to most terrestrial receptors, except in the presence of fossorial mammals or if subsurface soil may be excavated to become surface soil, neither of which appears to be the case at SWMU 79. The text needs to be modified accordingly to clearly state which soil samples will be retained for use in the SLERA.*

Navy Response to EPA General Comment 8: Subsurface soil deeper than three feet shall not be retained for use in the SLERA. Section 4.6.1.1 of the text has been modified accordingly.

9. *Section 4.6.1 of the report describes sources of ecological screening values for soil, surface water, and sediment. No mention is made of an ecological problem formulation (e.g., selecting assessment and measurement endpoints, identifying receptor groups of concern, describing a conceptual site model), calculating exposure point concentrations to compare against the screening benchmarks, the proposed approaches to perform the risk characterization, or an uncertainty analysis. It is recommended not to present or use the screening values in the future site investigation report. Instead, the report should simply describe the results of the sampling effort. A SLERA Work Plan (WP) needs to be prepared separately to explain how these analytical data will then be used to assess*

the potential for risk to terrestrial and aquatic receptors associated with SWMU 79. The SLERA WP needs approval by the Agencies before the risk evaluation can be performed.

Navy Response to EPA General Comment 9: A risk evaluation will not be performed as part of the Phase I RFI report. A risk evaluation will be performed during the CMS. If a SLERA work plan is deemed necessary prior to the CMS, it will be prepared and submitted to the EPA for review and approval. No revisions have been made to the Phase I RFI Work Plan.

10. *Appendix B discusses EPA Region 2's low-flow sampling procedures but does not indicate the type of pump to be used during groundwater sampling. Revise the Work Plan to specify the type of pump that will be used during groundwater sampling.*

Navy Response to EPA General Comment 10: Section 3.1.5 has been revised to include the following: "Low-flow sampling shall be achieved using a portable positive displacement bladder pump with an adjustable low-flow rate pump controller."

11. *Section 1.2, Site Description and History, and Section 2.1, Current Site Conditions and Use, reference Figure 1-3 for a site layout. The Work Plan does not include a Figure 1-3. Revise the Work Plan to provide Figure 1-3 so that the site layout can be reviewed in context with the proposed investigation.*

Navy Response to EPA General Comment 11: Figure 1-3 was added to the Work Plan. Site layout conditions can be reviewed on the figure in context with the proposed investigation.

12. *Section 2.2.1, [Environmental Condition of Property] ECP Study, indicates that PAHs were detected in surface soil during the ECP study in 2009. Twelve (12) soil borings are proposed for the current investigation, and samples will be collected for PAHs. However, the locations of these additional borings are contingent upon the results of the field screening for metals, not on previous locations of PAH detections. Therefore, it is unclear how the extent of PAH contamination will be determined if the sampling locations do not target areas where PAHs were previously detected, or where historical operations are likely to have impacted soil with PAHs. Revise the Work Plan to indicate how the extent of PAH contamination will be adequately delineated with the proposed activities, or propose additional sampling with the objective of delineating the extent of PAHs.*

Navy Response to EPA General Comment 12: Section 3.1.3 of the work plan has been revised to indicate that of the twelve proposed soil borings to be advanced at SWMU 79, only five (5) will be field determined based off the evaluation of the XRF analysis. Seven (7) of the proposed twelve soil borings are at predetermined locations, as shown on Figure 3-2. These seven predetermined locations shown in the Phase I RFI Work Plan are based on locations of previous detections of PAHs, as well as previous site reconnaissance.

SPECIFIC COMMENTS

1. **Section 1.3, Objectives, Page 1-2:** *The sixth bulleted item states than an objective of the Phase I RFI is to "[c]ollect chemical and available flight test data regarding the probable disposition and current location(s) of used JATO bottles." It appears that some information pertinent to this objective already has been included in Appendix A, JATO Bottle Study Results. The Work Plan, however, does not propose any activities to further investigate the used JATO bottles, or possible contaminants associated with the JATO Bottles. Appendix A states, "Navy tests indicate that at 4,403°F, all propellant material within [the] bottle is annihilated." However, it is unclear whether there is any possibility of malfunction, or cases in which the optimum temperature was not reached and some*

propellant material remains. Additionally, it is unclear whether the metal casings could begin to deteriorate after prolonged submergence under water, and could potentially impact sediment. Revise the Work Plan to indicate whether any additional investigation of the JATO bottles is proposed as part of the current investigation. Additionally, indicate whether the possibility exists for contamination associated with propellant, metals, or other constituents, or whether there are any risks to marine receptors from the casings themselves.

Navy Response to EPA Specific Comment 1: No further investigations of the JATO bottles are proposed as part of the current Phase I RFI. The past investigations performed by the Navy are summarized in Section 2.2.2, as well as correspondences with Navy representatives from the facility where they are manufactured. The sixth bullet in Section 1.3 has been removed to eliminate confusion. As for the risks associated to marine receptors from the casing, Section 2.2.2 describes that the JATO study results indicated the bottles only exist in an inert state, and thus any potential hazardous constituents were disintegrated during propulsion. Additional information has been included in Section 2.2.2 and Appendix A.

2. Section 2.1, Current Site Conditions and Use, Page 2-1: *This section describes the current and/or historical use of buildings at SWMU 79, but it does not indicate the current or historical use of Building 104. Section 3.1.8, Surface Soil Sampling Program Near Buildings 104, 2004, and 2037, indicates that the soil surrounding Building 104 will be sampled only for lead due to the identification of deteriorating lead-based paint at this building. A discussion of current and/or historical use of Building 104, including chemical storage/usage, should be provided to demonstrate that the proposed analyses at this building should be limited to lead only. Revise Section 2.1 to include a description of the current and historical use of Building 104.*

Navy Response to EPA Specific Comment 2: A discussion of the historical use of Building 104 has been provided in Section 2.1. Building 104 was used for recreational purposes only, thus the proposed analyses is limited to lead only.

3. Section 2.1, Current Site Conditions and Use, Page 2-1: *This section indicates that an underground storage tank (UST), associated with Building 2037, is located within SWMU 79, but the Work Plan does not provide any specific details on this UST. The UST's age, construction, current status, and current or historical contents should be described in this section. Additionally, the location of this UST should be shown on a site plan. The Work Plan should also clarify whether any of the proposed sample locations will specifically address potential leaks from this UST. Revise the Work Plan to describe the UST's age, construction, dates of use, and current or historical contents, and identify the location of the UST on a site plan. Additionally, revise the Work Plan to indicate whether any samples will be collected to specifically investigate potential releases from this UST.*

Navy Response to EPA Specific Comment 3: Additional information is provided in Section 2.2.1 concerning the UST at Building 2037. The location of this UST is now shown on Figures 1-3 and 2-7.

4. Section 2.2.1, ECP Study, Page 2-1: *The ECP Study is described in this section, but the analyses that were conducted on the samples as part of the study are not described. Therefore, it cannot be determined whether the limited analyses proposed for the current investigation are appropriate in light of historical use of the site. Additionally, the last sentence of the second paragraph in this section states, "The results of the surface soil sampling investigation conducted as part of the ECP investigation are depicted on Figure 2-1." Figure 2-1, Phase I/II ECP Sample Locations, only shows the sample locations and not the results of the sampling. A summary table of results from the ECP investigation has not been provided. As such, the rationale for the currently proposed analyses and sampling locations cannot be verified. Revise the Work Plan to identify all of the analyses that were*

conducted on samples as part of the ECP Study and whether or not analytes were detected. Additionally, revise the Work Plan to either include detected analyte concentrations on Figure 2-1, or provide a summary table of the results.

Navy Response to EPA Specific Comment 4: The results of the ECP sampling are provided in Tables 2-2 through 2-6. Section 2.2.1's text has been revised to state, "The results of the ECP investigation are shown on Tables 2-2 to 2-6 and the location of the samples are depicted on Figure 2-7."

5. Section 2.2.2, JATO Bottle Study, Page 2-2: *This section indicates that JATO bottles are "composed primarily (49%) of nitrocellulose..." The other components of JATO bottles should also be described in this section. The Propellant Description Sheet included in Appendix A, JATO Bottle Study Results, also indicates that JATO Bottles are composed of 39% nitroglycerin as well as smaller percentages of triacetin, di-n-propyl-adipate, 2-nitrodiphenylamine, LC-12-15, candelilla wax, carbon black, and aluminum. For clarity, revise Section 2.2.2 to describe all components of JATO bottles.*

Navy Response to EPA Specific Comment 5: Section 2.2.2 has been revised to specify all components of JATO bottles.

6. Section 3.0, Scope of Investigation, Page 3-1: *This section describes field screening of metals in surface and subsurface soil at the site using an Innov-X Alpha XRF Analyzer; however, the Work Plan never describes the specific metals that will be screened by this method. Revise the Work Plan to clearly state the metals that will be screened using the XRF Analyzer.*

Navy Response to EPA Specific Comment 6: The samples will be screened for chromium, copper, lead and zinc as the indicator contaminants, as indicated in Section 3.1.2.1.

7. Section 3.0, Scope of Investigation, Page 3-1: *This section states, "Updated [SOPs] previously provided in the Final RFI Management Plans (Baker Environmental, Inc., 1995) will be followed for the proposed field work." However, updated SOPs have not been provided in the Work Plan. Revise the Work Plan to provide the updated SOPs as referenced in this section.*

Navy Response to EPA Specific Comment 7: Approved Standard Operating Procedures (SOPs) have been previously submitted in the Final RFI Management Plans (Baker Environmental, Inc., 1995) and are included in this work plan only by reference.. No revisions are proposed to the approved plans. However, specific XRF procedures are provided in Section 3.1.2 "XRF Testing of Soils" and further detail is given in the XRF user manual, Appendix E.

8. Section 3.0, Scope of Investigation, Page 3-1: *This section indicates that the investigation will include obtaining subsurface soil samples from beneath the concrete launch pads. It does not mention, however, sampling of the concrete itself. Section 1.3, Objectives, indicates that an objective of the investigation is to "[d]etermine the presence or absence of metals in the concrete launch pads..." Section 2.3, Area of Investigation at SWMU 79, also states that the scope of the investigation "includes soil, concrete, groundwater, and open water sediment sampling and analysis." Revise the Work Plan to address this discrepancy, and consistently state whether concrete sampling will or will not be conducted as part of the investigation.*

Navy Response to EPA Specific Comment 8: Sampling of the launch pad concrete is not proposed as part of this investigation. The work plan has been revised as necessary to remove confusion.

9. Section 3.0, Scope of Investigation, Page 3-1: *Under section 1.3, Objectives, the first bullet states: “Determine the presence or absence of contamination in the surface and shallow subsurface soil adjacent to Buildings 2004, 2037, and 2353...” The first bullet under section 3.0 does not include Building 2004 as a location to identify and mark sample locations for field screening of surface and subsurface soil. Include Building 2004 in these locations.*

Navy Response to EPA Specific Comment 9: Building 2004 is added to the list in Section 3.0 as a location to identify and mark sample locations for field screening of surface and subsurface soil.

10. Section 3.1.1, Surface and Subsurface Soil Grid Program for Field Screening, Page 3-1: *The title of this section implies that a grid program will be employed for the field screening investigation; however, Figure 3-1, Soil Sample Locations, does not appear to show that a grid program has been applied. It is noted that the sample locations shown on Figure 3-1 are approximate, and will be adjusted in the field based on the locations of drainage patterns observed in the field; however, the Work Plan needs to provide the rationale for the selection of each of the existing sample locations, if a grid pattern is not used. The Work Plan states that sampling locations will be selected based on “previous study results and drainage patterns as determined from site reconnaissance observations and aerial photography.” Previous study results and aerial photographs are available, and should be used as justification for the initial selection of sampling locations. Section 3.1.6.3, Open Water Sediment Sampling Program, also indicates that site reconnaissance visits have already been conducted. Revise the Work Plan to revise the title of Section 3.1.1 to remove reference to a grid program, as this does not appear to be the proposed approach. Additionally, revise the Work Plan to provide the rationale for selection of the initial sampling locations, based on previous study results, review of aerial photographs, and any previous site reconnaissance visits. It is acknowledged that these initial locations may be modified in the field based on observed site conditions.*

Navy Response to EPA Specific Comment 10: The biased-grid sampling approach that will be used for soil sample collection ensures that the areas of interest will be sufficiently sampled to meet the objectives of a Phase I RFI. A true grid sampling program was originally intended for this site, however to provide appropriate coverage of the entire site, sample locations were adjusted, refining the grid, based on previous study results, drainage patterns, previous site reconnaissance observations, aerial photography, and site structures (i.e. buildings, roadways, etc.). Since the placement of the sampling borings ensures that complete coverage across SWMU 79 is captured, a further detailed analysis of why the specific locations were chosen is not warranted.

11. Section 3.1.1, Surface and Subsurface Soil Grid Program for Field Screening, Page 3-2: *The text states that one surface soil sample (0-1 ft below ground surface [bgs]) and one subsurface soil sample (1-3 ft bgs) will be collected from each boring location under the subheading “Subsurface soil samples will be designated as follows:” the first subsurface sample is labeled 1-3 feet and the second is labeled 3-5 feet bgs. This information implies that subsurface soil samples will be taken deeper than the 1-3 ft bgs; soil deeper than three ft is not considered environmentally available to potential terrestrial receptors. Note also that Table 3-1 only lists two samples, namely one surface sample (0.0-1.0) and one subsurface sample (1.0-3.0) ft bgs. This inconsistency must be corrected by clarifying at what depth the subsurface soil samples will be collected from.*

Navy Response to EPA Specific Comment 11: The correct surface and subsurface soil sampling intervals are 0 to 1 foot bgs and 1 to 3 feet bgs, respectively. The reference to 3 to 5 feet bgs in Section 3.1.1 has been deleted.

12. Section 3.1.2.1, XRF Testing, Page 3-3: *This section states that the soil samples for field screening will be mixed prior to analysis, but the Work Plan does not include the methodology for this task.*

Revise the Work Plan to state how the soil will be mixed; identify appropriate equipment, and reference an applicable SOP as appropriate. Revise the Work Plan to provide this information. Additionally, the Work Plan should also address homogenization of the soil samples that will be submitted for fix-based laboratory analysis.

Navy Response to EPA Specific Comment 12: The term “mixing” has been removed from Section 3.1.2.1 to eliminate confusion:

Place sample onto an aluminum pan. Remove any large stones or debris. Keep in mind that finer and more homogeneous material will yield more accurate results. Using a disposable stainless steel spoon homogenize the sample in the aluminum pan. After the sample is mixed, place the sample into a labeled, 16 oz clear glass, wide mouth jar.

Section 3.1.2.3 and Section 3.1.3 of the Work Plan have been revised to address homogenization of the soil samples, for fixed-based laboratory samples.

13. Section 3.1.2.1, XRF Testing, Page 3-3: *This section discusses the XRF analytical procedure but does not describe the number of XRF readings to be collected per bag. Additionally, if multiple readings will be collected per bag, it is unclear if the XRF will be moved or if all readings will be collected from one location. Revise this section to provide more detailed discussion regarding XRF analysis. Alternatively, if this information is located in an SOP, provide a specific reference to where it can be found.*

Navy Response to EPA Specific Comment 13: Section 3.1.2.1 describes the XRF readings to be collected. All readings, per sample location, will be read and recorded at the location where the sample was collected. Section 3.1.2.1 also provided a more detailed discussion regarding the XRF analysis / procedure. Detailed information on the operation of the XRF device can be found in Appendix E.

14. Section 3.1.2.2, Data Evaluation, Page 3-3: *The last sentence of the first paragraph states that additional samples may be collected and analyzed by XRF if the evaluation determines that additional samples are required. The Work Plan has not indicated what requirements must be met in order to collect additional samples (i.e., concentrations exceed applicable screening levels, etc.). If additional samples are required, the Work Plan should state what approach will be employed to locate these samples. For instance, the Work Plan should indicate whether a step-out approach will be utilized, collecting additional samples east, west, north, and south of a sample that exhibits a screening criterion exceedance, or whether some other approach will be used. Revise the Work Plan to state what requirements must be met in order to collect additional samples for XRF analysis, and describe the approach that will be employed for this additional sampling.*

Navy Response to EPA Specific Comment 14: The biased-grid sampling approach that will be used for soil sample collection ensures that the areas of interest will be sufficiently sampled to meet the objectives of a Phase I RFI. However, it may be desirable at some locations, based on a review of the field screening results, to collect additional screening samples to provide better resolution regarding the extent of contamination. When additional information / samples are desired (i.e. to delineate areas of high contamination) the step-out approach will be used at intervals determined practical in the field. The step-out approach will be in the four directions directly north, south, west and east of the sample point where additional information is desired. Additional samples will continue until it is deemed necessary (i.e. samples of low contamination are found).

15. Section 3.1.2.2, Data Evaluation, Page 3-3: *The Work Plan does not consistently state how the samples for fixed-base laboratory confirmation will be selected. In Section 3.1.2.2, the Work Plan*

states that the samples for fixed-base analysis will be based on an analysis of areas of high contamination, depositional areas, stressed vegetation, etc. It is further noted that 12 soil borings are anticipated to be installed and samples collected for fixed-base analysis. Section 3.1.2.3, Fixed-Base Laboratory Confirmation, however, states that “[t]wenty percent of the surface soil and subsurface soil samples analyzed by XRF will be sent to the fixed-base laboratory for confirmatory analysis. The confirmatory samples will include a range of low level, medium level, and high level detections for confirmatory analysis.” Revise the Work Plan to consistently state how samples for fixed-base analysis will be selected, and state the number or percentage of samples anticipated. If the installation of 12 soil borings/soil sampling for fixed-base analysis is a separate task from the XRF confirmation samples sent for fixed-base laboratory analysis, Section 3.1.2.2 should be revised to reflect this approach.

Navy Response to EPA Specific Comment 15: Section 3.1.2.2 of the Work Plan has been revised to state that the twelve soil borings for fixed-base analysis (covered in Section 3.1.3) is a separate task from the XRF confirmation samples sent for fixed-base analysis. No changes to Section 3.1.2.3 are necessary.

16. Section 3.1.3, Surface & Subsurface Soil Sampling Program for Fixed-Base Analysis, Page 3-4:

The first full paragraph on Page 3-4 discusses the approach for selecting soil samples for laboratory analysis. The Work Plan states, “One surface soil sample (0 to 1 foot bgs) and a minimum of two subsurface soil samples (one based on FID/ PID screening or visual/olfactory observations and the other just above the water table) will be collected from each boring location, if site topography and terrain allow.” The Work Plan does not state, however, what interval will be selected for analysis should there be no elevated FID/PID readings or no other visual or olfactory evidence of contamination. The Work Plan should propose a default sampling interval and provide the rationale for that sampling interval if no evidence of contamination is observed (i.e., no elevated FID/PID readings or no distinguishing visual/olfactory observations). The default sampling interval should be based on previous sampling results and/or be selected in consideration of the fate and transport characteristics of any potential contaminants, and the end use of the data. Revise the Work Plan to include this information.

Navy Response to EPA Specific Comment 16: The following has been added to Section 3.1.3:

If FID/PID screening and visual/olfactory observations do not indicate contamination at the surface soil sample, then the subsurface soil samples for laboratory analysis will be collected at the 2-foot interval immediately above the water table.

If FID/PID screening and visual/olfactory observations do indicate contamination at the surface soil sample, then the subsurface soil samples for laboratory analysis will be collected at the 1 to 3 foot interval and at the 2-foot interval immediately above the water table.

17. Section 3.1.3, Surface & Subsurface Soil Sampling Program for Fixed-Base Analysis, Page 3-4:

This section indicates that surface and subsurface samples will be analyzed for Appendix IX SVOCs and metals, TPH (GRO and DRO), and perchlorate. The rationale for selection of these limited analyses has not been provided. Revise the Work Plan to include this information. This comment also applies to the analysis proposed for groundwater samples in Section 3.1.5, Groundwater Sampling and Analysis Program, and the analysis proposed for soil sampling beneath concrete in Section 3.1.7, Subsurface Soil Sampling Program at Launch Pads. As previously noted, data from prior investigations may be used to support the selection of the proposed analyses.

Navy Response to EPA Specific Comment 17: The proposed analyses selection is based on the results of the detected laboratory results from the Phase II ECP Report. The results of the Phase II ECP Report

can be found in tables 2-2 to 2-6. Specifically, surface soil sampling results from the ECP study can be found on Table 2-2 and subsurface soil sampling results from the ECP study can be found on Table 2-3. Clarification has been added to Section 3.1.3 and Section 3.1.7.

18. Section 3.1.3, Surface & Subsurface Soil Sampling Program for Fixed-Base Analysis, Page 3-3:

The text does not state at what depth the subsurface samples will be collected from. Below the sub heading Subsurface soil samples will be designated as follows: the first sample will be labeled 1-3 feet bgs and the second will be 3-5 bgs and the actual sample depth will be determined in the field. Table 3-1 only lists two samples, namely 0.0-1.0 and 1.0-3.0 ft bgs. Clearly state at what depth the subsurface soil samples will be collected from and specify that the ranges presented are only “target” depths subject to change depending on field conditions.

Navy Response to EPA Specific Comment 18: Section 3.1.3 has been revised to indicate at what depth subsurface samples will be collected from. Also, refer to Navy Response to EPA Specific Comment 16.

19. Section 3.1.4, Monitoring Well Installation, Page 3-6: *Paragraph two of the text states, “The wells will be developed until the discharged water runs relatively clear of fine-grained materials.” The text further indicates that typical limits placed on well development may include, “Clarity of water based on visual determination.” Since the clarity of the water is a qualitative measure that could be subjective based on the person making observations, it is recommended that three to five borehole volumes be removed to ensure proper development, at a minimum. Additionally, it is recommended that all of the bulleted items in this section be performed to ensure proper well development. If a criteria cannot be achieved, an explanation should be provided in the well development records. Revise the Work Plan to indicate that all of the bulleted items will be performed during well development.*

Navy Response to EPA Specific Comment 19: Section 3.1.4 has been revised as requested, with modifications to the remaining bullets:

To ensure proper well development, the bulleted items listed in this Monitoring Well Installation section will be performed during well development:

- A maximum borehole volume (typically three to five borehole volumes plus the amount of any water added during the drilling or installation process)
- A maximum time period (typically two hours for shallow wells)
- A record of the well development will be completed to document the development process.
- Based on knowledge of the site geology a minimum of 24 hours is required between well development and sampling.

20. Section 3.1.4, Monitoring Well Installation, Page 3-5: *This section states that six permanent wells will be installed at SWMU 79. This is inconsistent with the number of wells presented in Section 3.0, Scope of Investigation, in which it is noted that five monitoring wells will be installed. Revise the Work Plan to consistently state the number of wells to be installed. Additionally, it does not appear that the Work Plan has proposed to prepare well construction reports for the new monitoring wells. Revise the Work Plan to state that well construction reports will be prepared for any new wells, or at a minimum, the well construction details should be added to the appropriate boring log.*

Navy Response to EPA Specific Comment 20: Approximately six (6) monitoring wells are proposed for SWMU 79, based on field conditions. The Work Plan has been revised as necessary to remove inconsistencies. Section 3.1.4 of the Work Plan has been revised to state that well construction records will be prepared for any new wells, or at a minimum, the well construction details should be added to the appropriate boring log.

21. Section 3.1.5, Groundwater Sampling and Analysis Program, Page 3-6: *Groundwater samples will be analyzed for Appendix IX SVOCs with low level PAHs, metals (total and dissolved), salinity, and perchlorate. It is unclear why TPH GRO and DRO have not been proposed for the groundwater samples when they have been proposed for soil samples as well as the open water sediment samples. Revise the Work Plan to indicate why TPH GRO and DRO have not been proposed for groundwater samples.*

Navy Response to EPA Specific Comment 21: Proposed sampling for TPH GRO and DRO in groundwater has been removed from the work plan because there have been no indications of a release at the subject SWMU. Also, proposed sampling for TPH GRO and DRO in open water sediment has been removed for the same reason. Sampling for TPH GRO and DRO is only proposed for the “Surface & Subsurface Soil Sampling Program for Fixed-Base Analysis” samples 79SB90, 79SB91 and 79SB92. TPH GRO and DRO are proposed at these three samples locations due to the close proximity to the UST at the site.

Clarification has been added to Section 3.1.3 and 3.1.5 of the Work Plan.

22. Section 3.1.6.3, Open Water Sediment Sampling Program, Page 3-8: *The Work Plan proposes to collect 10 sediment samples, the approximate locations of which are shown on Figure 3-2, Open Water Sediment Sample Locations. It is unclear why two sediment samples are proposed at each of five locations, rather than spreading the samples out to obtain greater coverage of the water front. It is acknowledged that sediment sample locations are trying to target depositional areas, but the rationale for two samples at each of these areas has not been provided. Revise the Work Plan to provide the rationale for the sampling program. Additionally, please note that this section also references a Figure 3-6, but the Work Plan does not include Figure 3-6. Revise the Work Plan to provide the appropriate Figure or figure reference.*

Navy Response to EPA Specific Comment 22: The open water sediment sampling locations are based on the onsite drainage patterns. Based on these drainage patterns the Navy is proposing an open water sediment sample at either side of the drainage outlet. The open water sediment samples are 40 to 60 feet apart at the five drainage outlets, which will indicate if containments of concern could be present beyond those locations. Within Section 3.1.6.3 additional rationale for open water sampling has been provided and the reference to Figure 3-6 has been corrected to Figure 3-3.

23. Section 3.1.6.3, Open Water Sediment Sampling Program, Page 3-8: *The 2nd paragraph states that samples will be collected from 0-6 inches bgs using disposable stainless steel spoons. Collecting sediment samples with stainless steel spoons will only be sufficient if samples are collected at low tide with no overlying water. An enclosed sampling device (e.g., petite ponar) would need to be used if water covers the sediment to avoid sediment loss. Sample collection methods should be revised to include enclosed samplers for use in areas with overlying water.*

Navy Response to EPA Specific Comment 23: Section 3.1.6.3 of the Work Plan has been revised to clarify that samples will be collected using an enclosed sampling device (such as a petite ponar), sediment core liner or a stainless steel spoon. .

24. Section 3.1.6.3, Open Water Sediment Sampling Program, Page 3-8: *This section states, “Samples for SVOC analysis will be containerized, and the remaining sediment will be thoroughly homogenized following removal of debris...” However, it is unclear why the sediment will not be homogenized prior to collecting SVOC samples. Further, homogenization of aliquots for GRO analysis may bias those results low. Revise the Work Plan to indicate that sediment will be homogenized prior to collection of SVOC samples, and that GRO aliquots will be collected prior to homogenization.*

Navy Response to EPA Specific Comment 24: Section 3.1.6.3 of the Work Plan has been revised to indicate that sediment will be homogenized prior to being submitted to the laboratory for fix-based analysis. GRO is not being analyzed for in the open water sediment samples.

25. Section 3.1.7, Subsurface Soil Sampling Program at Launch Pads, Page 3-9: *The second paragraph states, “Subsurface soil samples will be collected below each of the three launch pads to evaluate for the presence of metals in the soil below the concrete pads.” As the proposed analyses also include Appendix IX SVOCs and perchlorate, the above sentence should be revised to reflect these additional analyses. This same section also references Figure 3-4 for the proposed boring locations. However, the correct reference appears to be Figure 3-3, Launch Pad Subsurface Soil Sample Locations. Revise the Work Plan to address both of these concerns.*

Navy Response to EPA Specific Comment 25: The second paragraph was updated to include low-level SVOCs and perchloate. The incorrect figure reference for the Launch Pad sample locations has been corrected.

26. Section 3.1.7 Subsurface Soil Sampling Program at Launch Pads, Page 3-9: *The only Fixed Based Analytical Lab Analysis listed in Table 3-1 for subsurface Soil Samples Below Launch Pads is Appendix IX Metals. The three bullets in Section 3.1.7 list Appendix IX low-level SVOCs with low-level PAHs, Appendix IX metals, and perchlorate for the intended analysis of samples obtained from below the concrete slab. The text or Table 3-1 must be corrected to indicate the appropriate analysis for samples taken below the launch pad slab.*

Navy Response to EPA Specific Comment 26: Table 3-1 has been corrected to indicate that subsurface soil samples below the launch pad will be analyzed for Appendix IX low-level SVOCs, Appendix IX metals, and perchlorate.

27. Section 3.1.8, Surface Soil Sampling Program Near Buildings 104, 2004, and 2037, Page 3-9: *This section indicates the surface soil samples will be collected for fixed-base laboratory analysis. No reference to analyzing surface soil with the XRF is made in this section. However, the note at the bottom of Figure 3-4, Surface Soil Lead Sample Locations, states that sample locations will be tested “using XREF” and the samples to be submitted to the laboratory will be based on “elevated XREF readings.” A second discrepancy is noted between the number of samples proposed in Section 3.1.8 and those shown on Figure 3-4. Section 3.1.8 states that the samples taken for fixed-base laboratory analysis will be identified as 79SS01 through 79SS25, which implies that 25 samples will be collected. However, Figure 3-4 shows only 13 samples. Revise the Work Plan and/or Figure 3-4 to address these discrepancies, and to consistently state the approach for the surface soil sampling program near Buildings 104, 2004, and 2037 and the total number of samples to be collected.*

Navy Response to EPA Specific Comment 27: A total of 13 surface soil samples will be collected for lead analysis: four samples will be collected around Building 104, six samples around Building 2004 and three samples around Building 2037. These 13 surface soil samples will be submitted to a fixed-base laboratory for lead analysis; these samples will not be prescreened/analyzed using the XRF. Section 3.1.8

will be revised to reflect this sampling approach. Additionally, the note on the figure indicating that samples will be tested using XRF prior to submittal to the laboratory will be deleted.

28. Section 3.2.2, Equipment Rinsates, Page 3-10: *This section indicates that the equipment rinsate samples will be collected from macro core liners for soils and from the Teflon-lined polyethylene tubing for groundwater. The liners and tubing are usually not decontaminated in the field; therefore, it is recommended that the equipment rinsates be collected from equipment that has been decontaminated (e.g., groundwater pump) to ensure no cross-contamination has occurred. In addition, this section does not identify hand augers as a potential piece of equipment that may require a rinsate sample. Revise the Work Plan to indicate that equipment rinsates will be collected from equipment requiring decontamination and identify all potential equipment.*

Navy Response to EPA Specific Comment 28: Section 3.2.2 Equipment Rinsates and Table 3-3 have been revised to include that an equipment rinsate will be collected from the bladder pump used for groundwater sampling.

29. Section 3.4.3, Investigation Derived Waste Management, Page 3-12: *The investigation derived waste (IDW) sampling procedures are insufficiently detailed. For example:*

- *It is unclear if IDW will be combined from multiple borings into one 55-gallon drum or if each boring will have its own drum.*
- *The section states that soil cuttings from subsurface soils will be placed back into the boring from which they came, unless contamination is present. As much as possible, soils last out of the hole will be returned first, thereby, approximating original stratigraphy. However, it is unclear how soils will be returned to the correct boring and in the correct order if soil cuttings are collected and stored temporarily in 55-gallon drums. In addition, it is unclear how it will be known if soil is contaminated at the time of boring installation.*
- *This section does not discuss management of used personal protective equipment (PPE) or disposable boring installation and sampling equipment.*
- *The section does not indicate how each aliquot of IDW will be collected, and how these aliquots will be combined for the composite sample.*
- *Finally, since volatiles will be analyzed, the Work Plan does not specify how composite samples are collected to reduce the analyte loss.*

Revise the Work Plan to provide a more detailed IDW management plan.

Navy Response to EPA Specific Comment 29: The soil cuttings associated with subsurface soil sampling will be placed back into the location where the cuttings were collected immediately after the subsurface soil samples are collected unless contamination is indicated, as determined by the field geologist. If contamination is indicated, the soil cuttings associated with that soil boring will be stored temporarily in a 55-gallon drum. All soil cuttings for soil borings that show evidence of contamination will be placed in the same drum with proper label on the drums exterior. There will not be one drum for each soil boring and a composite sample will be collected and submitted for analysis. The text in Section 3.4.3 has been edited to clarify the IDW procedures.

Section 3.4.3 will be revised to include the following information:

A composite soil sample will be compiled from individual discrete (grab) samples of equal volume collected from each of the 55-gallon drums of containerized IDW soil. Each individual discrete soil sample will be placed into a disposable aluminum pie pan (or other appropriate container) and thoroughly homogenized prior to filling the appropriate laboratory provided sample containers. The solids sample

will be analyzed for toxicity characteristic leaching procedure (TCLP) metals, TCLP volatiles, and reactivity, corrosivity, and ignitability (RCI) as shown on Table 3-3, using methods presented in Table 3-2.

The IDW composite aqueous sample will be collected similar to the soil composite sample with the exception that the individual discrete (grab) samples of equal volume collected from each of the 55-gallon drums of containerized IDW water will be placed directly into the appropriate laboratory provided sample containers. The water samples will be analyzed for VOS, metals, and RCI as shown in Table 3-3, using methods presented in Table 3-2.

30. Section 3.4.5, Surveying, Page 3-12: *The first sentence in this section states, “All sampling locations are pre-determined and presented on a figure prior to entering the field.” This statement is not consistent with the sampling approaches previously described in Sections 3.1.1 through 3.1.6. In many cases, sampling locations will be determined in the field based on current conditions, and other sampling locations will be selected based on the results of the XRF survey. Revise the Work Plan to remove the first sentence of Section 3.4.5 as it does not apply to all of the proposed samples.*

Navy Response to EPA Specific Comment 30: The first sentence in this section was removed.

31. Section 3.4.5, Surveying, Page 3-12: *This section indicates that a global positioning system (GPS) will be used to locate samples. However, it is unclear what accuracy will be used. Revise the Work Plan to indicate the accuracy of the field grade GPS.*

Navy Response to EPA Specific Comment 31: Samples are to be determined in the field based on current site conditions. After sample locations are determined in the field and flagged, traditional survey equipment or survey grade GPS equipment will be used to locate the sampling points. Section 3.4.5 has been revised.

32. Section 3.4.7, Chain-of-Custody, Page 3-12: *This section states that chain-of-custody procedures will be followed. However, these procedures have not been provided in the Work Plan. Revise this section to provide the chain-of-custody procedures to be followed, or provide reference to an applicable SOP.*

Navy Response to EPA Specific Comment 32: Chain-of-Custody procedures are provided in the approved Standard Operating Procedures (SOPs) which have been previously submitted in the Final RFI Management Plans (Baker Environmental, Inc., 1995) as referenced in Section 3.4.7 of this work plan.

33. Section 4.0, Reporting, Pages 4-1 through 4-8: *This section does not indicate that a data quality assessment will be included in the final report. Revise this section to specify that a data quality assessment will be part of the final report, and specify what will be included in the data quality assessment (e.g., an evaluation of PARCCS, significant trends and biases, comparing data to DQOs to ensure questions were addressed, etc.).*

Navy Response to EPA Specific Comment 33: The following statement will be added to Section 4.7.

All data from the laboratory will be certified by a Puerto Rican Chemist and laboratory data will be validated to ensure data usability. Only usable data will be included in the evaluation and the conclusions and recommendations sections of the report. Data validation reports will be included as an appendix to the Full RFI report and will discuss:

- Overall Evaluation of the Data

- Potential Usability Issues
- Data Completeness
- Technical Holding Times
- Initial and Continuing Calibrations
- Method and QC Blanks
- Laboratory Control Samples
- Matrix Spikes
- Quantitation and Data Qualifications

34. Section 4.6.2, Human Health Screening Values, Pages 4-7 and 4-8: *Human health screening values (i.e., Regional Screening Levels [RSLs], federal drinking water maximum contaminant levels [MCLs]) and background screening values are discussed in this section; however, these screening values have not been presented in the Work Plan. Verification that the laboratory RLs will be able to meet screening values cannot be performed without a presentation of all screening values to be used. Revise the Work Plan to provide all screening criteria to allow for comparison to analytical results.*

Navy Response to EPA Specific Comment 34: The human health screening values (Regional Screening Levels) and ecological screening values are provided in Tables 4-4 and 4-1 to 4-3, respectively. Quantitation limits are provided in Tables 3-2. The information provided in these tables has been reviewed against project-specific screening levels and has been determined to generally meet these levels. The quantitation limits have also been reviewed by an 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.

35. Section 4.7, Conclusions and Recommendations, Page 4-8: *This section states that information from the nature and extent of contamination will be synthesized into conclusions regarding site conditions; however, this section does not describe how data usability, as documented in the data quality assessment, will impact the conclusions and recommendations. Revise Section 4.7 to ensure that the information provided in the data quality assessment will be considered when developing conclusions and recommendations.*

Navy Response to EPA Specific Comment 35: Section 4.7 will be revised to indicate that only useable data as determined by the 3rd party data validator will be used in developing the evaluation, conclusions and recommendations sections of the report.

36. Section 6.1, Project Team Responsibilities, Page 6-1: *This section does not provide the responsibilities of all the project team members (e.g., laboratory chemist, data validator, etc.). Revise the section to provide a list of all the members of the project team as well as their responsibilities.*

Navy Response to EPA Specific Comment 36: The project team personnel primarily responsible for the project are listed in Section 6.1. The Work Plan was prepared with the understanding that an as yet undetermined third party would be responsible for laboratory analysis, data validation, etc. Since these are variable depending on the bidding process, the Navy disagrees with adding this information into the work plan since it is undetermined until the project bidding is completed.

37. Table 3-1, Summary of Sampling and Analytical Program – Environmental Samples: *Section 3.1.7, Subsurface Soil Sampling Program at Launch Pads, proposed to analyze soil samples beneath the launch pads for Appendix IX metals, Appendix IX SVOCs, and perchlorate; however, Table 3-1 only indicates that the samples will be analyzed for Appendix IX metals. Revise Table 3-1 to include all proposed analyses for the samples beneath the concrete launch pads.*

Navy Response to EPA Specific Comment 37: Table 3-1 will be updated to include all proposed analyses (Appendix IX Metals, Appendix IX SVOCs, and perchlorate) for soil samples collected from underneath the launch pads.

38. Table 4-1 Ecological Soil Screening Values: *The surface soil screening value for zinc (4.6 mg/kg), obtained from USEPA 2007d, is incorrect. The correct value from this source is 46 mg/kg. The zinc screening value needs to be corrected in this table.*

Navy Response to EPA Specific Comment 38: The surface soil screening value for zinc has been corrected accordingly.

39. Table 4-1 Soil Screening Values and Table 4-2 Groundwater Screening Values and Table 4-3 Sediment Screening Values: *These three tables include screening values for VOCs, even though VOCs are not proposed for analysis. Remove all VOC screening values from these tables to avoid confusion.*

Navy Response to EPA Specific Comment 39: All references to VOC screening values were removed from the Work Plan and Tables 4-1, 4-2, and 4-3.

40. Table 4-3 Sediment Screening Values: *Several sediment screening values, mainly SVOCs, were found to exceed their QL presented in Table 3-2. The QL for these analytes must be brought down below the screening values to allow detected analytes to be compared to their sediment screening values. The QLs for these analytes must be adjusted accordingly.*

Navy Response to EPA Specific Comment 40: The ecological sediment screening values provided in the work plan as Table 4-3. The quantitation limits are provided in Table 3-2. The Navy is aware that some of the reporting limits exceed the ecological sediment screening levels. The analytical laboratory chosen for analyzing the samples will provide the lowest reporting limits possible. For this Phase I RFI, all compounds exceeding screening values will be identified and discussed in the data evaluation section of the report. For future ecological risk assessments (ERA) that may be conducted as part of a CMS, the risks for non-detected chemicals will be quantified. If necessary, non-detected chemicals with maximum reporting limits greater than ecological screening values will be identified as ecological chemicals of potential concern (COPCs) in Step 2 of a screening-level ERA (SERA) and undergo additional evaluation in Step 3a of a baseline ecological risk assessment (BERA).

PREQB COMMENTS DATED OCTOBER 21, 2010

GENERAL COMMENTS

1. *It is unclear why a project-specific Sampling and Analysis Plan (SAP) was not prepared in accordance with the Uniform Federal Policy for Quality Assurance Project Plans (March 2005). Submittal of a SAP in this format will allow the reviewers to ensure that all laboratory and field requirements necessary to achieve data quality objectives for this site will be met.*

Navy Response to PREQB General Comment 1: Refer to the Navy Response to EPA General Comment 1.

SPECIFIC COMMENTS

1. *Page 1-2, Section 1.3, Bullet 2: Please clarify what is meant by screening the surface soil within 12 feet of Buildings 104, 2004 and 2037. Is this a reference to performing some type of field screening or physical screening of the soils?*

Navy Response to PREQB Specific Comment 1: The reference to screening has been removed from this bullet. The surface soil adjacent to Buildings 104, 2004 and 2037 will be collected and submitted to the fixed-base laboratory for lead analysis. Section 1.3, Bullet 2 has been revised for clarification.

2. *Page 1-2, Section 1.3, Bullet 2: This is the first mention of Building 104 and in looking at the supporting figures in this work plan it appears that Building 104 is located in excess of 500 feet from the SWMU 79 boundary as presented in Figure 1-3. Nevertheless it is within the Cabras Island boundary with other buildings. Please provide additional information with respect to this building.*

Navy Response to PREQB Specific Comment 2: Additional information has been added to Section 1.2 to introduce Building 104 and others in this area of Cabras Island. Section 2.2.1 of the Phase I RFI Work Plan describes, "Building 104 (Officer's Beach House) was included in a damaged lead containing paint (LCP) assessment performed as part of the Navy's Phase II ECP investigation for Cabras Island (Baker, 2009)". Section 2.3, Paragraph 2 also provides additional information with respect to Building 104. Collection of soil samples adjacent to Building 104 for lead analysis is included in this Phase I RFI Work Plan for SWMU 79 at the request of the U.S. Coast Guard.

3. *Page 2-1, Section 2.1, Paragraph 1: Please change the reference to Figure 1-3 in the second to last sentence to Figure 2-1.*

Navy Response to PREQB Specific Comment 3: Figure 1-3, SWMU 79 Site Layout provides the locations of the site features and buildings of Cabras Island. Section 2.1 discusses the current conditions of the site and appropriately refers back to Figure 1-3. Figure 2-1 presents the same features shown on Figure 1-3 with the addition of the sampling locations from the Phase I/II ECP Investigations. The reference to Figure 1-3 is accurate and no changes are necessary.

4. *Page 2-1, Section 2.2.1, Paragraph 2: The text of this section indicates that the results of the surface soil sampling conducted as part of the ECP are shown on Figure 2-1. Please either shows the results on this (or another) figure. Since, they are not presented in any of the figures.*

Navy Response to PREQB Specific Comment 4: The referenced section has been revised to indicate that the results of the ECP investigation are shown on Tables 2-2 to 2-6 and the locations of the samples are depicted on Figure 2-7.

5. *Page 3-3, Section 3.1.2.1: This section which discusses XRF testing does not mention which metals will be included in the screening analysis. Please add this information.*

Navy Response to PREQB Specific Comment 5: Section 3.1.2.1 has been revised to discuss the samples will be screened for chromium, copper, lead and zinc as the indicator contaminants.

6. *Page 3-3, Section 3.1.2.3: Please revise this section to include comparability criteria for the XRF and fixed-base laboratory analyses as well as the corrective action and the effect on the data evaluation when these criteria are not achieved.*

Navy Response to PREQB Specific Comment 6: Clarification has been added to Section 3.1.2.3 to

include the procedure on comparing the XRF results to the fixed based laboratory analysis.

7. Page 3-4, Section 3.1.3:

- a. *Please include details on how sediment samples for GRO will be collected and clarify whether samples will be collected in a coring device (i.e., TerraCores) or whether field preservation will be used.*

Navy Response to PREQB Specific Comment 7(a): The open water sediment sampling program is discussed in Section 3.1.6. The work plan has been corrected in removing the reference for analyzing the sediment sample for TPH DRO / GRO.

- b. *The text states that the SOPs used by the analytical laboratory will be requested from the laboratory after selection. If the laboratory has not yet been selected, please clarify the source for the quantitation limits in Table 3-2.*

Navy Response to PREQB Specific Comment 7(b): Refer to the Navy Response to EPA General Comment 1.

8. Page 3-6, Section 3.1.4: *Please include the time period between well development and groundwater sampling. As per the Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers, Office of Solid Waste and Emergency Response, EPA 542-S-02-001, May 2002, the time for a well to re-stabilize after development is dependent on site-specific geology and should be specified in the site sampling plan.*

Navy Response to PREQB Specific Comment 8: Section 3.1.4 provides a minimum of 24 hours is required between well development and sampling. Section 3.1.4 has been revised to delete the word “typically”.

9. Page 3-6, Section 3.1.5, Paragraph 2: *As per the EPA Region 2 low-flow groundwater sampling procedure provided in Appendix B, please add dissolved oxygen to the list of parameters to be measured during sampling.*

Navy Response to PREQB Specific Comment 9: Dissolved oxygen has been added to the list of field parameters to be measured during sampling.

10. Page 3-8, Section 3.1.6.3:

- a. *Please explain why sediment samples for SVOCs are collected prior to homogenization. Typically, samples for this parameter are homogenized prior to filling the sample containers.*

Navy Response to PREQB Specific Comment 10(a): This was an error in the text. Section 3.1.6.3 has been revised to indicate that all samples must be homogenized prior to being submitted to the laboratory for fix-based analysis.

- b. *Please include details on how sediment samples for GRO will be collected and clarify whether samples will be collected in a coring device (i.e., TerraCores) or whether field preservation will be used.*

Navy Response to PREQB Specific Comment 10(b): Please see the Navy Response to PREQB Specific Comment 7(a).

- c. *Please change the reference to Figure 3-6 to Figure 3-2.*

Navy Response to PREQB Specific Comment 10(c): The reference to the figure has been corrected.

11. *Page 3-9, Section 3.1.7, Paragraph 2: Please change the reference in this paragraph from Figure 3-4 to Figure 3-3.*

Navy Response to PREQB Specific Comment 11: The reference to the figure has been corrected.

12. *Page 3-9, Section 3.1.8: Please provide the rationale for selecting the 12-foot perimeter as the extent of the investigation around the buildings for lead impacts.*

Navy Response to PREQB Specific Comment 12: The 12-foot perimeter was requested by the U.S. Coast Guard to evaluate for the presence of lead in the surface soil. The work plan has been modified to read that the surface soils will be collected from the drip line along the buildings as per HUD requirements.

13. *Page 3-12, Section 3.4.4, Paragraph 1: Please provide details regarding the equipment decontamination procedures to be used during this project.*

Navy Response to PREQB Specific Comment 13: Section 3.4.4 has been revised to clarify that decontamination should follow the procedures presented in the Final RCRA Facility Investigation Management Plans (Baker, 1995).

14. *Page 4-3, Section 4.6.1.2: Surface water screening values are proposed for evaluating constituents detected in ground water samples at the site. Please include the aquatic life criteria presented in the Puerto Rico Water Quality Standards (March 2010) as the preferential screening benchmark source. This would include the following metals (expressed as total recoverable concentrations): arsenic, cadmium, chromium (hexavalent), copper, lead, nickel, selenium, silver and zinc as well as for pentachlorophenol. The 2010 Puerto Rico Water Quality Standards for each of these constituents is based of protection of aquatic life. It should be noted that the 2010 Puerto Rico Water Quality Standards are essentially equal to the total recoverable concentrations presented in Table 4-2. Although the text states that the 1999 NAWQC have been updated three times since this publication (2002, 2006 and 2009), it should be noted that the values for each of the constituents listed above has not changed with the exception of cadmium (revised NAWQC value is now the same as Puerto Rico Water Quality Standard). Please revise Table 4-2 accordingly, citing this source.*

Navy Response to PREQB Specific Comment 14: Section 4.6.1.2 and Table 4-2 have been revised as requested.

15. *Page 4-7, Section 4.6.2:*
 - a. *Please clarify under what circumstances (or at what depths?) residential regional screening levels (RSLs) are applicable to soil and under what circumstances industrial RSLs are applicable to soil.*

Navy Response to PREQB Specific Comment 15(a): For this Phase I RFI, all soil data collected from the fixed base analytical laboratory from 10 bgs or shallower will be compared to both industrial and residential regional screening levels.

- b. *Please clarify under what circumstances residential regional screening criteria are applicable to sediment and under what circumstances industrial RSLs are applicable to sediment.*

Navy Response to PREQB Specific Comment 15(b): Similar to the response to Specific Comment 15(a), for this Phase I RFI all sediment data collected from the fixed base analytical laboratory will be compared to both industrial and residential RSLs.

16. Table 3-1:

a. *Please clarify the references to “79SS99” and “79SB99” in Note 1 associated with this table.*

Navy Response to PREQB Specific Comment 16(a): Note 1 in Table 3-1 has been revised to show the correct sample identifications: 79SB01-00 through 79SB87-00 designated for surface soil and 79SB01-01 through 79SB87-01 designated for subsurface soil.

b. *For the surface and subsurface soil grid samples, please clarify in the table that 12 locations will be sampled for SVOCs, metals, DRO/GRO, and perchlorate at the surface and two subsurface locations, as per Section 3.1.3.*

Navy Response to PREQB Specific Comment 16(b): The 87 XRF surface and subsurface soil grid screening samples are independent from the additional 12 surface and subsurface samples to advance after the XRF screening are complete. These twelve samples are now broken down separately in Table 3-1 under “Surface and Subsurface Soil Boring to minimize confusion.

The 12 soil borings to be advanced at SWMU 79 will be analyzed for Appendix IX SVOCs and metals, and perchlorate. Three of the 12 soil boring locations will also be tested for Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO) and Diesel Range Organics (DRO), as shown in Table 3-1.

c. *As per Section 3.1.5, please revise the table to include six groundwater samples instead of five.*

Navy Response to PREQB Specific Comment 16(c): Table 3-1 has been revised to include six groundwater samples.

d. *As per Section 3.1.8, please revise the table to show samples 79SS01 through 79SS25 (instead of 79SS13) for the surface soil samples collected for lead screening at Buildings 104, 2004, and 2037.*

Navy Response to PREQB Specific Comment 16(d): Table 3-1 was correct; however the error was in the text. Section 3.1.8 has been revised to show samples 79SS01 through 79SS13.

e. *As per Section 3.1.7, add the analyses of SVOCs and perchlorate to the subsurface soil samples collected below the launch pads.*

Navy Response to PREQB Specific Comment 16(e): Table 3-1 has been updated to include the analyses of SVOCs and perchlorate to the subsurface soil samples collected below the launch pads.

f. *Please clarify footnote #1 as this footnote contains sample identifications that do not exist in this table.*

Navy Response to PREQB Specific Comment 16(f): Footnote #1 has been revised with the correct sample identifications.

17. Table 3-2:

a. *Please revise the method description for the SVOC analysis to GC/MS instead of GS/MS.*

Navy Response to PREQB Specific Comment 17(a): The analysis method for SVOCs has been revised to read GC/MS on Table 3-2.

b. *Please include the preparation methods being used for DRO and GRO in soil and water and reverse the references for 5030B to GRO and 3550B to DRO under the method number column.*

Navy Response to PREQB Specific Comment 17(b): The preparation methods in Table 3-2 for DRO and GRO have been revised, as well as the Method Numbers.

c. *Please revise the preparation method for TCLP VOC analysis to 1311/5030A instead of 1311/3010A.*

Navy Response to PREQB Specific Comment 17(c): After further review, the preparation method for TCLP VOC has been revised to 1311/5030B.

d. *Please revise the method description for TCLP VOC analysis to GC/MS instead of ICP.*

Navy Response to PREQB Specific Comment 17(d): The method description has been corrected as indicated.

e. *Please revise the method description for TCLP mercury analysis to CVAA instead of ICP.*

Navy Response to PREQB Specific Comment 17(e): The analytical method for TCLP mercury has been revised to CVAA.

f. *The quantitation limits provided for TCLP VOCs and TCLP metals are in units of mg/kg. Please revise to reflect mg/L.*

Navy Response to PREQB Specific Comment 17(f): The units for TCLP VOC and TCLP metals quantitation limits have been revised to mg/L.

g. *The preparation method listed for TOC analysis is 1000. Please clarify to what method this is referring.*

Navy Response to PREQB Specific Comment 17(g): Table 3-2 has been revised to indicate that it has been determined that there is no preparation method for TOC analysis method 9060.

h. *The QLs listed for metals in aqueous samples appear very high and more appropriate for analysis via 6010C instead of 6020A. Please verify these QLs with the laboratory and/or procure a laboratory that is capable of reporting lower QLs. Most of the listed QLs appear to be high by about one order of magnitude compared to QLs typically reported by method 6020A. It is important to note that many of the aqueous metals QLs exceed the risk screening levels (ecological groundwater screening levels presented in Table 4-2 as well as the May 2010 EPA RSLs) and therefore lower QLs are really needed in order to achieve project objectives. Specific exceedance of risk screening levels are as follows:*

- i. *Antimony QL (20) > EPA Tap water RSL (1.5)*
- ii. *Arsenic QL (10) > EPA Tap water RSL (0.045)*
- iii. *Cadmium QL (5) > EPA Tap Water RSL (1.8)*
- iv. *Chromium QL (10) > EPA Tap Water RSL (0.043)*

- v. Cobalt QL (10) > EPA Tap Water RSL (1.1)
- vi. Vanadium QL (10) > EPA Tap Water RSL (0.26)
- vii. Copper QL (20) > ecological groundwater screening levels (3.73)
- viii. Nickel QL (40) > ecological groundwater screening levels (8.28)
- ix. Silver QL (10) > ecological groundwater screening levels (0.23)

Navy Response to PREQB Specific Comment 17(h): The Navy conducted a comparison of quantitation limits from different laboratories and found that the quantitation limits for Method 6020A provide lower reporting limits than Method 6010C. The Navy is aware that many of the reporting limits exceed the ecological groundwater screening levels presented in Table 4-2 as well as the May 2010 Regional Screening Levels.

18. *Table 3-3: Please add dissolved metals analysis to the equipment blank sample 79RFI-ER03 in order to determine if there is any potential contamination arising from the filtering process.*

Navy Response to PREQB Specific Comment 18: Dissolved metals analysis has been added to equipment blank sample 79RFI-ER03 on Table 3-3.

19. *Table 4-2: This table presents groundwater screening values. As indicated in a previous comment, please incorporate the Puerto Rico Water Quality Standards (March 2010) into this table.*

Navy Response to PREQB Specific Comment 19: Table 4-2 has been updated, as discussed in Navy Response to PREQB Specific Comment 14.

20. *Figure 2-1: Please indicate the locations of the features to which the text in Section 2.1 refers. Specifically, a UST and septic tank were mentioned, however, these features are not shown on the figure.*

Navy Response to PREQB Specific Comment 20: Figure 2-7 (originally Figure 2-1) has been revised to show the approximate locations of the tanks mentioned in Section 2.1.

21. *Figure 3-1: Please change the note on this figure to reflect that samples exhibiting a range in concentrations will be chosen for fixed laboratory analysis, as this is what is referenced in Section 3 of the work plan.*

Navy Response to PREQB Specific Comment 21: For clarification the note on Figure 3-1 has been changed to:

The fixed-based laboratory confirmatory samples will include a range of low level, medium level, and high level detections for confirmatory analysis. This range will assist to determine the accuracy of the XRF analysis compared to the fixed-base results.