**NAVY RESPONSES TO EPA COMMENTS DATED JANUARY 28, 2010 ON THE DRAFT BASIS OF DESIGN REPORT FOR CORRECTIVE MEASURES IMPLEMENTATION – SWMU 68; THE TECHNICAL SPECIFICATION FOR CORRECTIVE MEASURES IMPLEMENTATION – SWMU 68; AND THE DRAFT CORRECTIVE MEASURES IMPLEMENATION WORK PLAN – SWMU 68 DATED NOVEMBER 19, 2009**

*(EPA and PREQB comments are provided in italics while Navy responses are provided in regular print.)*

**TechLaw Comments dated January 6, 2010**

*The following comments were generated based on a review of the Draft Basis of Design Report for Corrective Measures Implementation – SWMU 68, Naval Activity Puerto Rico (NAPR), Ceiba, Puerto Rico, dated November 19, 2009 (Draft Basis); the Technical Specifications for Corrective Measures Implementation – SWMU 68, NAPR, Ceiba, Puerto Rico, dated November 19, 2009 (Draft TS); and the Draft Corrective Measures Implementation Work Plan – SWMU 68, NAPR, Ceiba, Puerto Rico, dated November 19, 2009 (Draft CMI WP). All of the documents are part of the Draft Corrective Measures Implementation Design Package and Work Plan for SWMU 68, dated November 19, 2009 (Draft CMI Design Package).*

**GENERAL COMMENTS**

1. *It is unclear if any project planning meetings have taken place in preparation for this CMI. Clarify if meetings have occurred and revise the CMI Design Package to include pertinent information (i.e., action items and agreements) from any project planning meetings related to this CMI.*

**Navy Response to EPA General Comment 1:** No project planning meetings have taken place in the preparation of this CMI. However, corrective measures for SWMU 68 were discussed at the sixth BRAC Cleanup Team (BCT) meeting held at NAPR on September 9, 2008. This design package has been generated based on the results of the Final Corrective Measures Report dated June 12, 2009, approved by USEPA by letter on August 6, 2009. Further, a Statement of Basis that serves as a Public Notice has been prepared by the Navy pursuant to section XXVIII of the Consent Order and submitted to the EPA on September 30, 2009.

2. *It is unclear from the Draft Basis whether the corrective action objectives (CAOs) for surface soil at SWMU 68 were approved by the regulatory stakeholders. According to Section 2.4 (Remediation Levels) of the Draft Basis, the CAOs were developed in the Final Corrective Measures Study Report – SWMU 68, NAPR, Ceiba, Puerto Rico, dated March 2009 (CMS). However, it is unclear if the CMS and CAOs presented in the document were approved by the regulatory stakeholders. Revise the Draft Basis to clarify whether the CAO values presented in the CMS, were approved by the regulatory stakeholders. In addition, revise the Draft Basis to clarify how these CAOs are protective to risk receptors.*

**Navy Response to EPA General Comment 2:** The USEPA approved the Final Corrective Measures Study Final Report - SWMU 68 on August 6, 2009 which included the rationale and development of the CAOs for this action. Section 2.4 of the Basis of Design has been updated to reflect when regulatory stakeholders approved CAOs and a brief explanation of where the development of CAOs can be found.

3. *The number of confirmation samples to be collected in the drainage feature located southeast of sample location 14E-01 has not been provided in the Draft Basis. According to Section 4.3 (Ditch Confirmation Sampling and Wetlands Delineation) of the Draft CMI WP, a minimum of two samples will be taken from the ditch. As such, it is unclear if the extent of contamination will be sufficiently delineated by the proposed confirmation sampling. Revise the Draft Basis and Figure 2-2 (Conceptual Design Plan) of the Draft Basis to provide the locations of confirmation samples to be collected in the drainage feature located southeast of sample location 14E-01. In addition, revise the Draft Basis to clarify how these confirmation sampling locations are appropriate to sufficiently delineate the extent of contamination in the drainage feature.*

**Navy Response to EPA General Comment 3:** The Draft Basis of Design has been revised to include the rationale for the sampling within the historical drainage feature, a description of the ditch sampling, and the addition of a new figure (Figure 2-3) showing the historical drainage feature and the existing and proposed samples to be collected within the drainage feature in Section 2.5. Sample locations are also described in detail in the Draft Sampling and Analysis Plan. Section 3.2 of the Basis of Design has also been revised to reflect the soil sampling within the historical drainage feature.

4. *It is unclear if the frequency of confirmation sampling outside the outer edge of the excavation is appropriate to delineate the extent of contamination. According to Section 3.2 (Description of the Proposed Removal Actions) of the Draft Basis, confirmation sampling will be conducted outside the outer edge of the excavation, in undisturbed soil, every 25 feet at a depth of 0-2 feet below the ground surface (bgs). However, based on Figure 2-2 (Conceptual Design Plan) of the Draft Basis, no confirmation samples have been proposed outside the outer edge of the excavation at sample location 14E-01 (i.e., Area 1) or sample location 14E-03 (i.e., Area 2). Based on the dimensions of Area 1 (50 feet by 100 feet) and Area 2 (50 feet by 50 feet), 12 confirmation samples should be collected from Area 1 and eight confirmation samples should be collected from Area 2. It should be noted that Section 3.2.1 (SWMU 68) of the Draft CMI WP indicates that 12 confirmation samples are estimated to be collected from Area 1 and eight confirmation samples are estimated to be collected from Area 2. Revise the Draft Basis to clarify how the proposed frequency of confirmation sampling outside the outer edge of the excavation is appropriate to delineate the extent of contamination. In addition, revise the Draft Basis to present consistent information regarding the frequency of confirmation sampling.*

**Navy Response to EPA General Comment 4:** Additional bullets were added to Section 3.2 (Description of the Proposed Removal Action) to further clarify frequency of confirmation sampling within excavation areas and along historical drainage feature, if needed.

5. *Details regarding the delineation of the wetlands in the vicinity of the proposed excavations have not been provided in the Draft Basis. Delineation of the wetlands is only briefly referenced in Section 4.3 (Ditch Confirmation Sampling and Wetlands Delineation) of the Draft CMI WP. As such, it is unclear how the wetland areas will not be disturbed during construction activities, especially if wetlands are identified within the proposed limits of excavation. Revise the Draft Basis to provide details regarding the delineation of the wetlands in the vicinity of the proposed excavations. In addition, revise the Draft Basis and Draft CMI WP to provide specifications for how disturbing the wetlands during construction activities will be prevented.*

**Navy Response to EPA General Comment 5:** Wetlands are not anticipated to exist within the proposed excavation areas. However, Section 3.2 of the Draft Basis of Design has been revised to indicate that the wetlands will be marked in the field, and will be avoided during all construction activities including placement of the access roadway and soil stockpile areas. If it appears that wetlands will be impacted due to unforeseen conditions, the contractor will stop work and notify the NTR for instructions on how to

proceed at that time. Similar revisions have also been incorporated into the CMI Work Plan.

6. *According to Section 3.2 (Description of the Proposed Removal Actions) of the Draft Basis, "[c]onfirmation sampling of the bottom of the excavation in areas approximately 25 ft by 25 ft in extent, where possible. In addition, confirmation sampling will occur along the bottom of the excavation in areas of known uncertainty." It is unclear why sampling along the bottom of the excavation would not be possible. Furthermore, it is unclear how the areas of uncertainty will be known without prior confirmation sampling. Revise the Draft Basis to clarify why sampling along the bottom of the excavation would not be possible. Furthermore, revise the Draft Basis to include sufficient confirmation sampling to confirm all contaminated soils are removed from the excavations. Lastly, if known areas of "uncertainty" exist, they should be reflected on figures within the Draft Basis. Revise the construction drawings to indicate any known areas of "uncertainty."*

**Navy Response to EPA General Comment 6:** The sentence stating area of uncertainty has been removed from the Basis of Design. Sampling of the bottom of the excavation is possible and will be collected as indicated the Basis of Design. The text of the Basis of Design has been revised to state that sufficient confirmation samples will be collected along the excavation walls and along the bottom of the excavated areas.

7. *It is unclear if excavated soils will be stored in roll-off boxes, super-sacs or on tarps. Based on Section 3.2 (Description of the Proposed Removal Actions) of the Draft Basis, excavated soil will be transported to lined roll-off boxes or super-sacs. However, Section 3.3 (Preliminary Design Criteria and Rationale) of the Draft Basis states that contaminated surface soil will be placed on tarps while awaiting analysis of data identifying the ultimate disposal location. Similarly, Section 1.3 (Project Statement of Work) of the Draft CMI WP states that hazardous soils will be stored in appropriate Navy- and EPA-approved waste storage containers with adequate cover and drainage while non-hazardous soils will be stored on a lined and bermed soil staging area. As such, it is unclear how excavated soil will be temporarily stored while awaiting analysis of data identifying the ultimate disposal location. Revise the Draft Basis to clarify how excavated soil will be temporarily stored while awaiting analysis of data identifying the ultimate disposal location. In addition, clarify how soil will be stockpiled while awaiting disposal and whether confirmation samples will be collected at the staging areas to ensure recontamination of soil does not occur. Also, clarify the erosion control measures that will be implemented to prevent erosion of the stockpiles.*

**Navy Response to EPA General Comment 7:** The uncertainty arises from the need to characterize the excavated soil. All soils that will be excavated have been characterized by previous investigation and are acceptable for landfill disposal. As such, all documents have been changed to state that the soils will be excavated and placed into appropriate waste storage containers for subsequent landfill disposal. The Draft Basis of Design, Sections 3.2 and 3.3 and the Draft CMI WP Section 1.3 have been changed to state that excavated soil will be stored in appropriate waste storage containers with appropriate and adequate covers pending disposition. As such erosion control measures will not be required since the stockpiling of excavated soils will not be openly stockpiled on site. All references to roll-off boxes, super-sacs, or tarps have been replaced with appropriate waste storage containers.

8. *The depth to groundwater is identified as approximately 0.30 feet to 17.40 feet below pre-excavation ground surface in Part 1.5 (Description of Work) of Section 02 61 13 (Excavation and Handling of Contaminated Material) of the Draft TS. The depth to groundwater is not identified in the Draft Basis or Draft CMI WP. As such, it is unclear if the depth to groundwater is accurate. Thus, it is unclear if the potential exists for groundwater infiltration into the excavations, which would require dewatering. While Section 4.4 (Surface Water Collection and Control) of the Draft Basis discusses the evacuation of water from the excavation area, the Draft TS and Draft CMI WP do not. Revise all*

*three documents to include a discussion regarding the depth to groundwater and the potential for groundwater infiltration into the excavations. In addition, revise the Draft TS and Draft CMI WP to include technical specifications for excavation dewatering, liquid containerization, sampling, analysis and disposal.*

**Navy Response to EPA General Comment 8:** The depth to groundwater was incorrectly reported in the Draft TS. Records indicate that the depth to groundwater at SWMU 68 in fact ranges from 6.69 feet bgs to 14.65 feet bgs. Since soil contamination at SWMU 68 will not exceed 2 feet bgs and the removal action is for the protection of ecological receptors (avian), groundwater should not be encountered during excavation activities. This change has been made to the Draft TS. Should groundwater be encountered in the excavation, work will be stopped and specifications will be developed for dewatering, containerization, sampling, analysis, and disposal of the groundwater. Additionally, a brief discussion regarding groundwater depth, potential for encountering groundwater, and how to handle groundwater, if encountered, was added to all three documents.

9. *It is unclear if expanded excavation of contaminated soils will occur if bottom confirmation samples indicate contamination still exists. Based on Section 4.4 (Excavation Procedures) of the Draft CMI WP, no additional vertical excavation will be conducted beyond a depth of two feet bgs. As such, it is unclear how leaving the contamination in place will eliminate the future possibility of contaminants migrating to groundwater, surface water, and sediment. Revise the documents to clarify whether vertical excavation of contaminated soil will occur beyond a depth of two feet bgs. If appropriate, revise the documents to clarify what criteria must be met to excavate beyond a depth of two feet bgs.*

**Navy Response to EPA General Comment 9:** The CAOs from the EPA approved Final CMS identify potential risk to ecological (avian) receptors to surface soil. Since soil below depths greater than 2.0 feet bgs do not represent significant exposure points for ecological receptors no additional excavation beyond the 2.0 ft bgs is required if concentrations of the metals from the confirmation samples from the bottom of the excavation are identified above the CAOs for the surface soils. No human health risks were indentified for the surface or subsurface soils or groundwater for the site. No ecological risks were identified in the subsurface soils for the site.

10. *It is unclear why several tasks have not been included in Appendix A (Construction Schedule) of the Draft Basis. For example:*

    a. *Wetland delineation. Section 2.3 (Current Site Conditions) of the Draft Basis states that, "[t]he wetlands should be delineated in the field prior to excavation activities."*

    b. *Approval of field-stake locations. Figure T-1 (Corrective Measures Implementation Remedial Design for Soil Remediation) of the Draft Basis states that, "[f]ield-stake the location of all areas to be disturbed prior to actual work. These locations shall be reviewed by the ROICC prior to clearing, grubbing, and excavation activities."*

    *Revise Appendix A to include all tasks associated with the excavation of contaminated soils at SWMU 68.*

**Navy Response to EPA General Comment 10:** The schedule task "Survey" shall be replaced with two tasks "Wetland Delineation" and "Field Stake Locations". These two tasks shall be performed concurrently at the same duration as "Survey". A third task "ROICC/NTR Field Stake Location Review" shall be added to the Appendix A - Construction Schedule. .

11. *The Draft CMI Design Package is missing many quality assurance (QA) related components. For example:*

- *No project-specific data quality objectives (DQOs) were established for this CMI and no goals for data quality indicators (DQIs) were defined. For example, the purpose of the ditch confirmation sampling is unclear. Revise the Draft SAP to establish DQOs and goals for the DQIs precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). Explain if and how the results of the ditch confirmation sampling will be used to modify the extent of excavation.*

**Navy Response to EPA General Comment 11:** The ditch sampling will be conducted in the same method as sampling that was performed in the SWMU 68 CMS. If contamination exists in the area of the ditch, excavation will expand to that area. If it does not, the excavation will be limited to the area previously defined around Sample point 14E-01. In letter to EPA dated April 17, 2008, the Navy addressed the DQOs, SOPs, and QAPP requirements for EPA approval. Specifically, 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, 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 CMI. Additionally, a table was developed which provides a map between the DCQAP sections and the sections required by "EPA Requirements for Quality Assurance Project Plans" (QZ/R-5) (EPA 2001).

- *No discussion of quality control (QC) samples has been included (e.g., field duplicates, equipment blanks, matrix spikes, etc.). Revise the Draft sampling and analysis (SAP) to specify the QC samples to be analyzed and the frequency and acceptable control limits.*

**Navy Response to EPA General Comment 11:** Quality control samples will be taken at 10% intervals for duplicates and 5% for matrix spike and matrix spike duplicates as identified in the SAP. No field blank is required if analysis is for metals only. Equipment blanks will be collected and analyzed if field instrument is used to collect sample.

- *No laboratory-specific information has been included in the Draft SAP to allow for review and approval. Revise the Draft SAP to include the name of the laboratory that will be used to analyze samples for copper, lead, and zinc. Also include appropriate laboratory standard operating procedures (SOPs) or quality assurance (QA) plan that will document the analytical procedures, reporting limits (RLs), and QC limits.*

**Navy Response to EPA General Comment 11:** The name of the laboratory is not available at this time since the procurement for the laboratory will be conducted prior to initiating the field work. The EPA will be notified upon selection of the analytical laboratory for this project. The analytical methods and reporting limits for this project are provided on Table 3-2 of the SAP.

*The CMI Design Package should be revised to include the QA components listed above or references should be provided as to where this information can be found. If the referenced documents do not include current information applicable to this project, provide the updated information in the CMI Design Package.*

The technical specifications of the CMI Design package contain a section titled Chemical Data Quality Control for this project.

12. *The Draft SAP does not provide a specific method for sample collection. Also, it is unclear what tools will be used, what kind of samples will be collected for each area (e.g., grab or composite), and how the samples will be homogenized. Revise the Draft SAP to clarify the sample collection procedure or include applicable field SOPs in an appendix.*

**Navy Response to EPA General Comment 12:** Appendix A has been added to the SAP. Appendix A has environmental SOPs that include sampling. A reference to SOPs has been added to Section 3.0 of the SAP. Section 3.0 has been modified to identify soil samples as grab samples with stainless steel spoon, trowel, or bucket auger.

13. *It is unclear from information presented in the Draft SAP if any confirmation samples will be collected from the floor of the excavation area. Only sampling of the sidewalls is discussed. Further, the proposed sampling locations are not presented on any of the figures. Revise the Draft SAP to clarify if confirmation samples will be collected from the floor of the excavation area and include all proposed sampling locations on one figure. In addition, ensure that the information provided in the SAP is also consistent with the remaining components of the CMI Design Package.*

**Navy Response to EPA General Comment 13:** Sampling of the bottom of the excavation will be performed at a frequency of one sample for every 625 square feet (25 feet by 25 feet) of the bottom of the excavation. This will yield a total of 4 sample locations from the 50 feet by 50 feet excavation area and 8 sample locations from the 50 feet by 100 feet excavation area. However, this may change if sidewall samples indicate that the horizontal extent of contamination has not been achieved. It should be noted that the concentrations from the previous samples that were collected outside of the proposed excavation areas are below the CAOs for this site. If over excavation is required along any of the sides of the excavation then additional sidewall and floor grab samples will be collected per the frequency laid out in the documents. All confirmation sampling locations will be surveyed so an accurate sample location figure can be generated for the Final CMI Report. A figure depicting proposed sample locations is presented in the CMI Work Plan, Appendix A, Figure C-2 (Sheet 3 of 5).

14. *The source of backfill material has not been specified. Also, it is unclear why the backfill material will only be analyzed for copper, lead, and zinc. Revise the Draft CMI WP to clarify this point or include more comprehensive testing for the backfill material.*

**Navy Response to EPA General Comment 14:** The following text will be incorporated into CMI WP, Section 4.7 paragraph 3, "Backfill material shall be obtained from off-site sources, therefore it is required to be tested in accordance with Technical Specification 31 23 00.00 20, Part 1.6 Requirements for Off Site Soil. Material shall not be brought on site until test results have been approved by the NTR."

15. *It is unclear from the Construction Schedule presented in Appendix A of the Draft Basis and the Project Schedule in Appendix F of the Draft CMI WP which tasks have been completed and which are outstanding. Further, it is unclear when the project is expected to begin (i.e., there is no indication what month correlates to Month 1). Revise all schedules presented in the Draft CMI Design Package to indicate when the project is expected to begin and indicate which tasks if any have already been completed.*

**Navy Response to EPA General Comment 15:** The project schedule located in the Basis of Design and the CMI WP has been revised to include estimated actual dates of the tasks completed and estimated dates for future activities.

16. *Several inconsistencies exist between information presented in the Draft Basis, Draft TS, and Draft CMI WP. For example:*

    a. *Part 1.5 (Description of Work) of Section 02 61 13 (Excavation and Handling of Contaminated Material) of the Draft TS states that the work shall consist of excavation and temporary storage of approximately 3,000 cubic yards of contaminated material. However, calculations in Appendix B (Supporting Calculations) of the Draft Basis imply that the total volume to be removed is 555 cubic yards. Similarly, Section 4.4 (Excavation Procedures) of the Draft CMI WP states that 555 cubic yards will be excavated from SWMU 68.*

**Navy Response to EPA General Comment 16a:** The Technical Specifications has been revised to indicate that 555 cubic yards will be excavated from SWMU 68.

    b. *Part 2.1 (Backfill) of Section 02 61 13 of the Draft TS states that, "[b]ackfill material shall be tested for the parameters listed below at a frequency of once per 3000 cubic yards." However, Section 4.2.2 (Soil Sampling) of the Draft Basis states that, "[a]s outlined in the project specifications, any off-site borrow material to be used as backfill will be sampled (by the contractor) at a frequency of one sample for every 500 cy of potentially clean/borrow material."*

**Navy Response to EPA General Comment 16b:** The Draft Basis of Design has been revised to indicate that backfill will be sampled at a frequency of one sample for every 3000 CY.

    c. *Part 3.4 (Confirmation Sampling and Analysis) of Section 02 61 13 of the Draft TS states that, "[s]amples shall be collected at a frequency of one sample every 25 lineal feet from the bottom and each of the side walls or as directed by the Contracting Officer. A minimum of one sample shall be collected from the bottom and each side wall of the excavation." However, Section 3.2 (Description of the Proposed Removal Actions) of the Draft Basis states that, "[c]onfirmation sampling of the bottom of the excavation in areas approximately 25 ft by 25 ft in extent, where possible. In addition, confirmation sampling will occur along the bottom of the excavation in areas of known uncertainty." In addition, Section 3.2.1 (SWMU 68) of the Draft CMI WP states that, "[Right Way Environmental Contractors, Inc.] RWEC will collect confirmation samples from the sidewall at a frequency of one sample per 25 lineal ft of sidewall to confirm removal of copper, lead, and zinc impacted soil to levels below the CAOs."*

**Navy Response to EPA General Comment 16c.:** All documents have been changed to reflect the CMI WP Section 3.2.1 regarding side wall confirmation sampling frequency; "…collect confirmation samples from the sidewall at a frequency of one sample per 25 lineal ft of sidewall."

*Revise the CMI Design Package to ensure the technical specifications are applicable to SWMU 68 and are consistent throughout the three documents.*

**Navy Response to EPA General Comment 9:** The CMI Design Package has been revised to ensure that the documents are consistent.

**SPECIFIC COMMENTS**

**DRAFT BASIS**

1. ***Section 3.2, Description of the Proposed Removal Actions, Page 3-2:*** *Details regarding the collection, analysis and disposal of water from roll-off boxes has not been provided in the Draft Basis. As such, it is unclear if the water will be appropriately handled. Revise the Draft Basis to provide details regarding the collection, analysis and disposal of water from roll-off boxes.*

**Navy Response to EPA Specific Comment 1:** In general, the Basis of Design outlines the remedy to be implemented for the site and does not contain a detailed description of each remedial activity. Specific details regarding collection, analysis and disposal of liquid from waste storage containers and decontamination is presented in Section 3.5 of the CMI Work Plan. However, Section 3.2 and 4.2.1 of the Basis of Design has been revised to include collection and analysis of liquid accumulated in appropriate waste storage containers.

2. ***Section 3.4, General Operations and Maintenance Requirements, Page 3-3:*** *The text states that, "[p]eriodic visual inspections should be conducted to verify that the top soil cover is not eroding and the vegetation is growing." Revise the Draft Basis to ensure periodic visual inspections are conducted during the initial weeks following seeding to verify that seeds have germinated and are becoming established.*

**Navy Response to EPA Specific Comment 2:** The following text has been incorporated in Section 3.4; "Periodic visual inspections will be conducted during the initial weeks following seeding to verify that seeds have germinated and vegetation is established. Subsequently, periodic inspections will be conducted to verify that the top soil cover is not eroding and the vegetation is growing."

3. ***Section 4.1, Preparatory Work, Page 4-1:*** *It is unclear whether the pre-construction submittals listed in Section 4.1 will be submitted to EPA for review and approval. Revise the Draft Basis to ensure the pre-construction submittals listed in Section 4.1 are submitted to EPA for review and approval.*

**Navy Response to EPA Specific Comment 3:** Under ideal conditions, the Basis of Design (BOD) and Technical Specifications would have been sent out as part of a request for proposal. Subsequently, the contractor awarded the project would have prepared preconstruction submittals for approval. The submittals would have been included in the contractor's CMI Work Plan. However, due to compressed schedule, the BOD, Technical Specifications, and CMI Work Plan were submitted simultaneously for this remedial activity. So, the EPA has had a chance to review preconstruction submittals (e.g. HASP, Work Plan, SAP, etc.). Therefore, no additional approval of submittals by BRAC PMO or EPA is required.

4. ***Section 4.2, Monitoring, Sampling, Testing, and Analysis, Page 4-1:*** *The text states that, "[t]he Contractor will be required to submit to [Base Realignment and Closure] BRAC [Program Management Office] PMO [Southeast] SE, for approval, a Sampling and Analysis Plan (SAP) describing the Contractor's sampling, analytical, and quality control procedures for the chemical data collected during the performance of work required by the specifications." It is unclear if the SAP will be submitted to EPA for review and approval. Revise the Draft Basis to clarify that a copy of the Contractor's SAP will be submitted to EPA for review and approval*

**Navy Response to EPA Specific Comment 4:** The text has been revised to include EPA as a reviewer of the SAP.

5. ***Section 4.2.2, Soil Sampling, Page 4-2:*** *It is unclear if one or two confirmation samples will be collected from the off-site borrow material to be used as backfill. In addition, it is unclear if one or two samples will be representative and sufficiently certify that the soil is clean. Section 4.2.2 states that one sample will be collected for every 500 cubic yards of potentially clean/borrow material. Based on calculations in Appendix B (Supporting Calculations) of the Draft Basis and Section 4.4 (Excavation Procedures) of the Draft CMI WP, 555 cubic yards will be excavated from SWMU 68. As such, it is unclear if one or two confirmation samples will be collected. Revise the documents to clarify whether one or two confirmation samples will be collected. In addition, revise the document to discuss how one or two confirmation samples will be representative and sufficiently certify that the soil is clean.*

**Navy Response to EPA Specific Comment 5:** The Technical Specifications calls for sampling every 3000 cubic yards (Section 02 61 13 Part 2 Products 2.1 Backfill). Therefore, the Draft Basis of Design and Draft CMI WP will be changed to reflect the one sample every 3000 cubic yards.

6. ***Section 4.4, Surface Water Collection and Control, Page 4-3:*** *It is unclear what devices and facilities will be utilized to prevent surface water from contacting contaminated materials during construction/excavation activities. Section 4.4 states, "[t]he Contractor will be required to provide devices and facilities as necessary to prevent surface water from contacting contaminated materials (e.g., contaminated equipment, excavated soils, exposed debris/contaminated soils within the excavation) throughout the course of all construction activities." Revise the Draft Basis to clarify what devices and facilities will be utilized to prevent surface water from contacting contaminated materials during construction/excavation activities.*

**Navy Response to EPA Specific Comment 6:** The following has been incorporated into Section 4.4; "To avoid surface water contact with contaminated materials, the Contractor may employ devises such as water proof barriers or covers (plastic sheeting) or construct earthen berms to divert surface water away from construction areas. Excavated soil shall be deposited directly into appropriate waste storage containers with appropriate and adequate covers which will not be susceptible to collection of surface water."

Additionally, the following sentence was added to clarify testing parameters for any collected water; "The collected water will be tested for the parameters listed in Table 4-1."

***DRAFT TS***

7. ***Section 01 57 19.00 20 (Temporary Environmental Controls), Part 1.3 (Submittals), Page 6:*** *It is unclear why the dirt and dust control plan will not be submitted for government approval. Based on Part 1.2 (Submittals) of Section 01 33 00 (Submittal Procedures), submittals with a 'G' designation in Part 1.3 of Section 01 57 19.00 20 will be reviewed by the government for approval. Revise the Draft TS to clarify why government approval is not required for the dirt and dust control plan.*

**Navy Response to EPA Specific Comment 7:** A "G" has been added next to the dirt and dust control plan listed in section 01 57 19.00 20, identifying government review of this document.

8. ***Section 01 35 45.00 10 (Chemical Data Quality Control), Pages 1 through 8:*** *This specification references the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (1999, EPA 540/R 94-008). However, the Corrective Action Objectives (CAOs) for this project are for copper, lead, and zinc. Revise this section to reference the most recent version of USEPA Contract Laboratory Program National Functional guidelines for Inorganic Data Review (2004).*

**Navy Response to EPA Specific Comment 8:** The text has been changed to include the most recent version of the USEPA Contract Laboratory Program National Functional guidelines for Inorganic Data Review (2004).

9. ***Section 02 61 13.00 (Excavation and Handling of Contaminated Material), Part 2.1 (Backfill), Page 3:*** *The text states that, "[b]ackfill material shall be tested for the parameters listed below at a frequency of once per 3000 cubic yards." However, the testing parameters are not listed. As such, it is unclear what parameters the backfill material will be analyzed for. Revise this section to specify the parameters the backfill material will be analyzed for.*

**Navy Response to EPA Specific Comment 9:** The reference to "…listed below…" refers to the physical ASTM materials testing standards, which are identified in the very next sentence in the paragraph. The reference is to a physical testing requirement, not an analytical (chemical) testing requirement.

***DRAFT CMI WP***

10. ***Section 1.3, Project Statement of Work, Page 1-4:*** *Revegetation of SWMU 68 has not been included in list of activities to be performed at SWMU 68. Revise Section 1.3 to provide a complete listing of activities associated with the work at SWMU 68.*

**Navy Response to EPA Specific Comment 10:** Section 1.3 has been revised to include bullet items; "Collect representative sample from borrow pit for analysis to confirm soil is clean," and "Revegetate site."

11. ***Section 1.3, Project Statement of Work, Page 1-4:*** *The sixth bullet on Page 1-4 indicates that the contractor will "[c]ollect and analyze pre-characterization samples of soil from the excavation areas and submit profile information to appropriate waste disposal facilities." It is unclear what information these characterization samples will provide. In addition, this activity is not discussed in the other section of the Draft CMI Design Package. Revise the CMI Design Package to clarify the purpose of the pre-characterization samples to be collected from the excavation areas. In addition, ensure that information is consistently discussed in the CMI Design Package.*

**Navy Response to EPA Specific Comment 11:** As stated in Navy Response to EPA General Comment 7, no pre-characterization sampling/analysis will be done on soils identified for excavation. Therefore, the sixth bullet has been revised as stated; "Analytical data from CMS sampling will be submitted as Waste profile information to appropriate waste disposal facility."

12. ***Section 6.4, Change and Control Procedures, Page 6-3:*** *This section does not indicate that regulators will receive Field Variance Reports describing potential changes. Revise this section to indicate that EPA will be notified of significant changes and provide the timing for notifying EPA.*

**Navy Response to EPA Specific Comment 12:** A note has been added to the end of Section 6.4 stating that EPA will be notified within 48 hours of the need to make a significant field change.

13. ***Section 6.5.4, Solid (Soil) Excavation and Staging, Page 6-5:*** *The proposed multiplier of 1.7 tons per cubic yard of soil appears too high. Consider using a multiplier in the range of 1.2-1.4 tons per cubic yard.*

**Navy Response to EPA Specific Comment 13:** A multiplier of 1.3 tons per cubic yard has replaced the 1.7 tons per cubic yard.

14. ***Section 6.7, Nonconformance and Corrective Action, Pages 6-8 through 6-9:*** *The last bullet point states that a distribution list for discrepancy reports will be determined at the initial project planning meeting and will include, at a minimum, the NTR, PM, Site Superintendent, and QCSM. However, the EPA should also be notified of any significant corrective action. Revise this section to indicate that EPA will be included on the distribution list for discrepancy reports and provide the timing for notifying EPA.*

**Navy Response to EPA Specific Comment 14:** The text has been changed indicating that EPA will be included on the distribution list for discrepancy reports. The EPA will be notified within 48 hours of the occurrence of the discrepancy.

***DRAFT SAP***

15. ***Section 3.4, Data Validation, Page 3-2:*** *The information provided in this section is insufficient. For example, there is no discussion of how PARCCS will be incorporated into the usability report or if an evaluation of significant trends and biases will be included as part of the data quality assessment. Please revise the Draft SAP to provide this level of detail or reference where it can be found.*

**Navy Response to EPA Specific Comment 15:** In letter to EPA dated April 17, 2008, the Navy addressed the DQOs, SOPs, and QAPP requirements for EPA approval. Specifically, 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 CMI. Additionally, a table was developed which provides a map between the DCQAP sections and the sections required by "EPA Requirements for Quality Assurance Project Plans" (QZ/R-5) (EPA 2001). This is a removal action and no data validation will be performed. Text in Section 3.4, Data Validation, page 3-2 has been change to reflect comment.

**PREQB Comments dated January 22, 2010**

**Draft CMI Work Plan**

**General Comments:**

1. *The text of the document must be revised in order to specifically address sampling and soil removal activities, since the document creates the impression to be a construction work plan.*

**Navy Response to PREQB General Comment 1:** Text has been added to the Work Plan stating that the intent of the Work Plan is to address sampling and soil removal activities.

**SPECIFIC COMMENTS**

1. *Page 1-2, Section 1.2.1, last paragraph, first sentence: Please revise the sentence to clearly specify that the following subsections provide brief discussion of the background of one site instead of various sites.*

**Navy Response to PREQB Specific Comment 1:** The sentence has been revised to clearly specify that each of the following subsections discuss just SWMU 68.

2. *Page 1-3, Section 1.2.2: In order to support the rationale for actual sampling and analysis activities, please include in this section information on which analyses the previously-collected soil samples were subjected to that resulted in the identification of the presence of the select metals and delineation of the area to be subject to soil removal activities.*

**Navy Response to PREQB Specific Comment 2:** The following text has been added to Section 1.2.2; "Three soil borings were advanced at SWMU 68 during the Phase II ECP investigation to profile surface and subsurface conditions (see Figure 2-4). Three surface soil and three subsurface soil samples were collected and analyzed for Appendix IX volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and total petroleum hydrocarbon (TPH) gasoline range organics (GRO) and diesel range organics (DRO). Groundwater samples were not collected at SWMU 68 during the ECP investigation based on the photoionization detector (PID)/flame ionization detector (FID) levels in soil; the levels did not indicate potential impact to groundwater (NAVFAC Atlantic, 2005)."

3. *Page 1-5, Section 1.3, Bullets: Please identify the areas to be excavated in order to locate each one at the drawings and figures included at the document.*

**Navy Response to PREQB Specific Comment 3:** Section 1.3 has been revised as follows; "A brief overview of the primary corrective measures and objectives for SWMU 68 as presented in Design Drawing C-2, Removal Action Plan is provided as follows:

Excavation of one 5,000 square foot area of surface soil contamination surrounding sample point 14E-01 to a depth of two feet below the ground surface. The Contaminants of Concern (COCs) for this area are lead and zinc.

Excavation of one 2,500 square foot area of surface soil contamination surrounding sample point

14E-03 to a depth of two feet below the ground surface. The COCs for this area are copper and lead."

4. *<u>Page 2-3, Section 2.5.3:</u> According with the text the Quality Control System Manager's (QCSM) duties implementation will be delegated to the Quality Control Officer. The individual responsible to act as Quality Control System Manager is the same individual responsible for being the Site Superintendent (Section 2.5.5). Also, according to the responsibilities of the Quality Control System Manager, it needs to be someone who works independent of the project and has overall authority on quality control and therefore cannot be the same person who works day-to-day with the project manager in the field. Please update accordingly and clarify.*

**Navy Response to PREQB Specific Comment 4:** Mr. Carlos Brown is the QCSM for this project. As identified in the organization chart, Mr. Brown does not directly report to anyone on the project. He has the authority to oversee and execute QC activities and as such has delegated the implementation of the QC field activities to the QC Officer, Mr. Alejandro Rodriquez. Mr. Brown has delegated his "QC duties" to the QC Officer in the field, Mr. Rodriquez. To clarify Mr. Brown's responsibilities, all reference to interface with the PM will be removed from Section 2.5.3.

5. *<u>Page 2-3, Section 2.5.3:</u> Please include copy of the Contractor Quality Control Plan and made it available to all personnel working on the corrective measures activities.*

**Navy Response to PREQB Specific Comment 5:** Section 2.5.6 Site Personnel has been revised to include the following text; "A copy of the CQC Plan will be made available to all personnel working on the corrective measures activity in the field."

6. *<u>Page 2-3, Section 2.5.3 and Page 2-4, Section 2.5.5:</u> It is the reviewer impression that the document identified the Site Superintendent to be responsible to manage, among others, quality aspects of the project implementation. Please clarify.*

**Navy Response to PREQB Specific Comment 6:** Section 2.5.5 Quality Control Officer has the primary responsibility for implementing the CQC Plan. Section 2.5.4 Site Superintendent is primary responsibility for managing project implementation in the field. So, the QC Officer implements the CQC Plan while the Site Superintendent manages the implementation of field activities to include quality. Additionally, if QC Officer has a CQC Plan Deficiency issue with field activities, it will be the responsibility of the Site Superintendent to improve quality to the satisfaction of the QC Officer.

7. *<u>Page 3-1, Section 3.5 and Page 3-2, Section 3.5.1:</u> Please include steps to contain the dry decontamination process, such carrying out the process on plastic sheeting to ensure that potentially impacted soil will not be allowed to contact the surface below the equipment. It is also inferred that only heavy equipment is suitable to dry decontamination procedures, please clarify and clearly state in the text.*

**Navy Response to PREQB Specific Comment 7:** Section 3.5.1 first bullet has been revised to the following; "As a first measure in decontamination, using shovels and brooms, remove large dirt clods and debris. If possible, lift and spin tracks to loosen material;"

Section 3.5.1 has been revised to include the following bullet; "To collect and control any removed debris during the dry decontamination, it will be performed over the wet decontamination pad or the approved waste storage container to ensure that potentially impacted soils will not contaminate the ground surface."

Section 3.5 has been revised by removing reference to heavy equipment and replacing with equipment.

8. *<u>Pages 3-2 and 3-3, Section 3.5.2:</u>*

a. *Please clarify or provide examples of the equipment on which the decontamination procedure on page 3-2 would be used versus the equipment on which the decontamination procedure on page 3-3 would be used. The procedure on page 3-2 should be used for reusable sampling equipment as well such as hand augers, stainless steel spoons, etc.*

**Navy Response to PREQB Specific Comment 8a:** Section 3.5.2, last paragraph has been modified to reflect which equipment will require decontamination; "…to include non-disposable hand augers, stainless steel sampling spoons, etc.:"

b. *It is unclear what the following statement means: "To the greatest extent possible, sampling equipment will not be field decontaminated." Please clarify which equipment will be decontaminated and provide the procedure planned for use.*

**Navy Response to PREQB Specific Comment 8b:** To clarify sentence, the word "not" has been deleted and first two sentences have been moved to the last paragraph in Section 3.5.2.

9. *<u>Page 3-2, Section 3.5.2, Bullet 4</u>*

a. *Sub-bullets 1 and 3: Please indicate, in addition to noting that the potable water rinses will be changed frequently, that it will be containerized appropriately for subsequent sampling and determination of the appropriate means of disposal. This comment also applies to the subsequent discussion of the field decontamination of reusable equipment and personal protective equipment.*

**Navy Response to PREQB Specific Comment 9a:** Section 3.5.2, Bullet 4, Sub-bullet 1 and 3 has been revised with the following; "Change the water frequently and containerize used fluids appropriately."

A sub-bullet will be added; "All containerized fluids will be sampled and analyzed for disposal purposes."

b. *Sub-bullet 5: It is unlikely that evidence of high metals concentrations will be visible. Therefore, please incorporate the nitric acid rinse into the decontamination procedure to account for this.*

**Navy Response to PREQB Specific Comment 9b:** The text has been modified to incorporate a nitric acid rinse into the decontamination procedure.

10. *<u>Page 3-3, Section 3.6, Last Sentence:</u> The project schedule presented at Appendix D does not considered a time frame for permit to be obtained from the Puerto Rico Environmental Quality Board (PREQB). It is likely that a General Permit will be required by PREQB for Erosion Control and Non Hazardous Waste Generation Activity.*

**Navy Response to PREQB Specific Comment 10:** Because the General Permit is issued the same day it is applied for, the time that it takes to obtaining a permit has not been added to the timeline.

11. *<u>Page 4-1, Section 4.1, First Sentence:</u> This sentence creates the impression that the Site Superintendent, the Quality Control Officer and the Site Safety and Health Officer are the same person. Please revise accordingly.*

**Navy Response to PREQB Specific Comment 11:** Section 2.5 identified by name the RWEC personnel performing the duties of Site Superintendent, QC Officer and HSM. Since each position was assigned a different name, it should be evident that the same person will not hold each position. However, a brief revision to the first sentence of Section 4.1 should clarify that these are separate individuals.

12. *<u>Page 4-1, Section 4.2, Paragraph 1:</u> This section indicates in general terms that a surveyor will be subcontracted as necessary. Please indicate specifically that the proposed sampling locations and soil removal areas will be surveyed. Also, please clarify if the surveyors will return to the site to re-survey any sampling locations that may have had to be moved due to refusal or other obstructions and if the soil removal areas expand beyond their initial proposed limits.*

**Navy Response to PREQB Specific Comment 12:** Text has been added stating that the surveyors will be requested to return to the site to re-survey any sampling locations that may have been moved due to refusal or other obstructions and if the soil removal areas expand beyond their initial proposed limits.

13. *<u>Page 4-1, Section 4.3:</u> Please specify which contractor or subcontractor will be responsible of sampling at the southeast of sampling location 14E-01 and to perform the wetland delineation. Although the Sampling and Analysis Plan (SAP) presented in Appendix C identify RWEC as the responsible for sampling collection, the Sheet C-2 at Appendix A, number 7 states that the Navy On-Site representative will conduct confirmatory sampling. Clarification should be made through the document on who will be responsible for sampling collection. Moreover, the Technical Specifications for CMI – SWMU 68 on Section 01 35 45. 00 10, Page 6 Part 3.1.1 stated that confirmatory samples should be taken by a Navy's Representative (nor the contractor). Please clarify.*

**Navy Response to PREQB Specific Comment 13:** Section 4.3 has been revised to include the following text; "RWEC or their subcontractor as the designated Navy representative shall obtain all confirmatory samples. RWEC or their subcontractor will be responsible for wetland delineation which shall be performed by a certified wetlands expert."

The SAP, Sheet C-2, Appendix A, Number 7 reference to Navy On-Site representative and Technical Specification Section 01 35 45.00 10, Part 3.1.1 reference to Navy's designated representative for the purposed of this corrective action is the contractor RWEC. The statement "(not the contractor)" from Technical Specification Section 01 35 45.00 10, Part 3.1.1 has been deleted.

14. *<u>Page 4-1, Section 4.3, First Paragraph:</u> Action to be taken if concentrations above corrective action objectives are detected should be included.*

**Navy Response to PREQB Specific Comment 14:** Section 4.3 text has been added; "If the results of the ditch sampling indicates the presence of copper, lead, and/or zinc above corrective action objectives, the removal action will be extended to include this area."

15. *<u>Page 4-3, Section 4.6, Paragraph 1:</u> Although direct inclusion at the CMI Work Plan of soil sampling collection procedures is recommended, the text refers to a Sampling and Analysis Plan (SAP) that does not include Standard Operating Procedures for doing so. As the procedures for the collection of the soil samples are not provided herein please reference to an appropriate document (see comment 22) and provide a copy to field personnel for review prior to the initiation of field operations to ensure that the appropriate procedures are followed.*

**Navy Response to PREQB Specific Comment 15:** Appendix A has been added to the SAP. Appendix A has environmental SOPs that include sampling. A reference to SOPs has been added to Section 3.0 of the SAP. Section 3.0 has been modified to identify soil samples as grab samples with stainless steel spoon, trowel, or bucket auger.

16. *Page 5-2, Section 5.4.1: Please include in this section (or in the Site Specific Safety and Health Plan) the reportable quantities of the possible substance that can cause a spill on site for personnel reference.*

**Navy Response to PREQB Specific Comment 16:** It is expected that the any substances brought on site will be below the reportable quantities. However, the following sentence has been added to Section 5.4.2; "The reportable quantities of a release can be found in 40 CFR 302.5 (Table 302.4 – List of Hazardous Substances and Reportable Quantities)."

17. *Page 6-1, Section 6.0 Last Sentence: Please revise the acronym and correct to SOW.*

**Navy Response to PREQB Specific Comment 17:** Correction made.

18. *Page 6-3, Section 6.3, Second Paragraph: The text specified that "The QC Officer will closely monitor the actual field testing, verifying proper procedure technique, sample handling, chain of custody, if required." It is not clear what is mean by this statement. Please revise to clearly stated what should or could be required from the QC Officer since proper procedures, sampling handling and chain of custody use is in fact required as part of the activities.*

**Navy Response to PREQB Specific Comment 18:** The word "if" has been changed to "as".

19. *Page 6-3, Section 6.4: Please include within this section the procedures for changes that could affect the work plan. If they are to be pre-authorized by or discussed with the Quality Officer.*

**Navy Response to PREQB Specific Comment 19:** The following sentence has been added to second paragraph of Section 6.4; "In summary, the NTR will determine if the Field Variance Report (FVR) represents a significant change to the work plan. Procedure for resolution of FVR requires agreement between RWEC personnel (Project Manager, Site Superintendent, or QC Officer) and NTR.

20. *Page 6-7, Section 6.6.4: Please discuss what Data Quality Objectives (DQO) objectives that will define unacceptable work.*

**Navy Response to PREQB Specific Comment 20:** Section 6.6.4 has been revised as follows; "Additional preparatory and initial phase inspections will be conducted of the same DFWs if the quality of ongoing work is unacceptable (i.e. work not executed in accordance with this Work Plan or the Design Drawings (Appendix A)), if there are changes in the CQC staff or work crew, if work on a DFW is resumed after a substantial period of inactivity or if other problems develop."

21. *Appendix B, Organizational Chart:*

i. *The personnel listed in the project organization chart do not agree with Section 2 of the Work Plan as follows.*
i. *Quality Control System Manager is listed in Section 2 but not included in the Chart.*
ii. *The chart lists Alejandro Rodríguez as Quality Control Manager and Felix Gonzalez as Safety and Health Manager. Meanwhile, Section 2.5.5 appoints Luiz Ríos as responsible of managing all aspects of project implementation including quality and safety, among others.*

**Navy Response to PREQB Specific Comment 21:** The names of the individuals representing RWEC identified in the Appendix B Organization Chart are correct. The names of the RWEC personnel in CMI WP Section 2.5 have been corrected to correspond to the Organization Chart. The Quality Control System Manager is not identified in the organization chart because he does not work directly on the project. His role is at the contract level. As for Mr. Luiz Rios, he is responsible for managing all aspects

of project implementation including quality and safety, among others. Mr. Rios is responsible for implementation of quality, not managing the CQC Plan. Mr. Rodriquez is responsible for managing the CQC Plan.

22. *Appendix C, General:* *Please provide a reference in the text to the Quality Assurance Project Plan (QAPP) that provides the quality assurance (QA) and quality control (QC) for this program. Specifically, the required analytical methods, reporting limits versus cleanup criteria, field QC sample frequency and acceptance criteria, laboratory QC sample frequency and acceptance criteria, the name of the laboratory performing the work, etc. were not provided. It appears that previous work plans for this SWMU will be referenced for sampling methods, if so; please perform appropriate reference in the text.*

**Navy Response to PREQB Specific Comment 22:** In letter to EPA dated April 17, 2008, the Navy addressed the DQOs, SOPs, and QAPP requirements for EPA approval. Specifically, 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 CMI. Additionally, a table was developed which provides a map between the DCQAP sections and the sections required by "EPA Requirements for Quality Assurance Project Plans" (QZ/R-5) (EPA 2001).

23. *Appendix C, General:* *The Sampling and Analysis Plan (SAP) lack of the following:*

i. *Procedures to collect representative samples.*

**Navy Response to PREQB Specific Comment 23i:** See response to Comment 22 above. Additionally, the following statement has been added to SAP, Section 3.0; "Standard Operating Procedures (SOPs) for environmental sampling can be found in Appendix A."

ii. *Data Quality Objectives – Reference could be made to the Technical Specifications for CMI – SWMU 68 (RWEC, 2009) as part of the design package. If so, the documents should be available to the personnel as a whole.*

**Navy Response to PREQB Specific Comment 23ii:** Design documents will be made available to all field personnel assigned to the SWMU 68 removal action.

iii. *Wash water sample collection*

**Navy Response to PREQB Specific Comment 23iii:** Handling and disposal of wash water is discussed in SAP, Section 3.5 Decontamination of Sampling Tools and Section 3.6 Decontamination Fluids.

iv. *Quality Control Samples collection:*
   i. *Duplicate Sample at a frequency of one per ten samples*
   ii. *Field Blank at a frequency of one per day of sampling*
   iii. *Trip Blank at a frequency of one per cooler shipped to the fixed base laboratory*

**Navy Response to PREQB Specific Comment 23iv:** Section 3.8 has been changed to reflect quality control sample frequency.

v. *A Figure depicting proposed confirmatory sampling at the excavation area.*

**Navy Response to PREQB Specific Comment 23v:** Exact sample collection points will be determined in the field based upon final configuration of excavation. Sample collection procedures are outlined in SAP, Section 3.2.1. Proposed confirmation sample locations can be found in CMI Work Plan Appendix A, Design Drawings, Sheet C-2, page 3 of 5. The final sampling locations will be surveyed and included in the Final CMI Report figures.

24. *Appendix C, Page 3-1, Section 3.2.1: Please propose collection of samples at the bottom of the excavation pit. It is recommended to collect three samples from the bottom of each excavation. That will lead to three additional samples for area 68A and three samples at area 68B.*

**Navy Response to PREQB Specific Comment 24:** The only risk is within the top one foot of soil. By removing the top two feet, the CAO is satisfied. Confirmation sampling of the pit bottoms are not necessary. However, bottom soil samples will be collected at 625 square feet intervals (25' x 25'). Section 3.2.1 identifies eight samples for 68A and 12 samples for 68B.

25. *Appendix C, Page 3-2, Section 3.2.2: Sample collection protocol to obtain representative samples for waste characterization should be included in the SAP. Separate considerations should be taken to characterize the waste generated during the CMI activities from the removed soil.*

**Navy Response to PREQB Specific Comment 25:** The areas being excavated have been thoroughly characterized during the CMS. The data collected is sufficient for characterization of waste for subsequent disposal at an approved landfill. No additional characterization of waste is necessary.

26. *Appendix C, Page 3-2, Section 3.2.3: Section 4.7 detailed in four bullets the characteristics of the backfill soil. The tests to assure that the backfill accomplish the mentioned characteristics should be discussed at the section.*

**Navy Response to PREQB Specific Comment 26:** The following text has been added to SAP, Section 3.2.3 and CMI WP Section 4.7; "The required chemical and physical characteristics and testing methods for backfill and topsoil are provided in the Technical Specifications Section 02 61 13 Part 2.1; 31 23 00.00 20 Parts 1.6, 2.1.1, 2.1.4, 2.1.5, and 2.1.6; and 32 92 19 Part 2.2.2."

27. *Appendix C, Page 3-2, Section 3.5: It is recommended to include the decontamination procedures in this section using the same format as in Section 3.5 of the document.*

**Navy Response to PREQB Specific Comment 27:** The dry and wet decontamination procedures from CMI WP Section 3.5.1 and 3.5.2 have been included in SAP Section 3.5.

28. *Appendix C, Table 3-2: Please include the Method Performance Limits and Methods for analysis of the composite waste sample for the hazardous wastes characteristics requirements (TCLP and IRC).*

    *The asterisks quote at the foot of the table is not complete. Please revise.*

**Navy Response to PREQB Specific Comment 28:** The Method Performance Limits for TCLP and IRC have been included in Table 3-2. The asterisk quote has been revised.