

March 5, 2010

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

Attn: Mr. Adolf Everett, P.E.

Re: Contract N62470-07-D-0502
IQC for A/E Services for Multi-Media
Environmental Compliance Engineering Support
Delivery Order (DO) 0002
U.S. Naval Activity Puerto Rico (NAPR)
EPA I.D. No. PR2170027203
Draft Full RCRA Facility Investigation Report for SWMU 9 – Area B, Tank 214 Area
Response to Comments and Proposal for Additional Sampling

Dear Mr. Everett:

Michael Baker, Jr., Inc. (Baker), on behalf of the Navy, is pleased to present you with the response to EPA Comments dated September 17, 2009 on the Draft Full RCRA Facility Investigation (RFI) for SWMU 9 – Area B, Tank 214 Area (July 14, 2009). The response to comments made on the Full RFI and subsequent re-evaluation of the data collected during the Full RFI, as well as previous investigations, indicate that the extent of contamination in the subsurface soil, sediment, and groundwater has not been fully defined. It has been determined that additional sampling of these media is needed to complete the field work requirements for a Full RFI.

On November 4, 2009 a conference call was held between the Navy, Baker, and Mr. Tim Gordon of the Environmental Protection Agency (EPA) to discuss the path forward for SWMU 9. The following sequence of events was agreed upon by all parties:

1. The Navy will submit responses to EPA and Puerto Rico Environmental Quality Board (PREQB) comments along with the proposed plan for additional sampling. Revisions to the Draft Full RFI Report will be suspended until the additional delineation of contamination is completed.
2. Upon EPA approval, the Navy will conduct additional subsurface soil, sediment, and groundwater sampling. A discussion of proposed additional sampling is provided below. Initiation of the additional work will begin once the Navy approves a formal scope of work and secures the necessary funding for project implementation.
3. The additional sampling results as well as modifications outlined in the attached response to comments will be incorporated into the Draft Final Full RFI Report.

Additional Sampling

Additional sampling is proposed to further delineate contamination in the subsurface soil, estuarine wetland sediment, and groundwater at SWMU 9. The procedures given in the Final Full RCRA Facility Investigation Work Plan for SWMU 9 (February 29, 2008) will be followed to conduct this additional investigation. The following items outline the additional work proposed for SWMU 9. Please refer to Figures 1 and 2 for sample locations, and Tables 1 and 2 for the sample matrix (sample

Mr. Adolf Everett, P.E.
U.S. Environmental Protection Agency, Region II
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Page 2

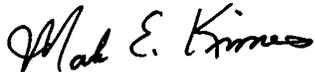
designations/media, sample depths, and laboratory analyses) and quality assurance/quality control (QA/QC) samples:

- A total of eight soil borings are proposed east and west of Tank 214, as shown on Figure 1 to further delineate subsurface soil contamination. Note that the location of the borings may be adjusted in the field, as needed to allow for better characterization of potential migration pathways (i.e. topographic low areas or swales, proximity to the estuarine wetland, etc.). The depth interval from which the sample will be collected will be established in the field. Each sample will be analyzed for Appendix IX volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH) diesel range organics (DRO)/gasoline range organics (GRO).
- Groundwater monitoring wells are proposed for installation in four of the eight borings, as shown on Figure 1. Groundwater samples will be collected from each of the four newly installed wells. Groundwater samples will be analyzed for Appendix IX VOCs and TPH DRO/GRO. Top of casing elevations will be determined for each newly installed well. Additionally, although not specified in the response to comments, groundwater samples will also be collected from existing wells, including five temporary wells installed during the Full RFI (9SB37, 9SB39, 9SB40, 9SB42, and 9SB48), and analyzed for the same parameters above to provide a comprehensive data set.
- A total of 75 sediment samples will be collected from the estuarine wetland area from a depth of 0 to 0.50 ft bgs (see Figure 2). The sediment samples will be analyzed for TPH DRO. Sediment samples 9SD129 through 9SD131 and 9SD136 through 9SD138 will be additionally analyzed for vanadium to address the lack of delineation data gap recommended in the Full RFI. In addition, sediment samples 9SD177 through 9SD183 will be analyzed for lead due to an elevated lead detection from the CMS investigation, while sediment samples 9SD09 through 9SD12 will be analyzed for lead due to contamination identified in the Full RFI Report. Finally, sediment samples 9SD124 and 9SD125 will be analyzed for PAHs to delineate contamination at Full RFI sample location 9SD92.

If you have questions regarding this submittal, please contact Mr. Mark Davidson at (843) 743-2124.

Sincerely,

MICHAEL BAKER JR.. INC.



Mark E. Kimes, P.E.
Activity Coordinator

MEK/lp
Attachments

cc: Ms. Debra Evans-Ripley, BRAC PMO SE (letter only)
Mr. David Criswell, BRAC PMO SE (letter only)
Mr. Mark E. Davidson, BRAC PMO SE (1 hard copy)
Mr. Pedro Ruiz, NAPR (1 hard copy)
Mr. Tim Gordon, USEPA Region II (1 hard copy)
Mr. Carl Soderberg, US EPA Caribbean Office (1 hard copy)
Mr. Felix Lopez, US F&WS (1 hard copy)
Mr. Jonathan Flewelling, TechLaw, Inc. (1 hard copy)
Ms. Willmarie Rivera, PREQB (1 hard copy)
Ms. Gloria Toro, PREQB (1 hard copy)

NAVY RESPONSES TO PREQB COMMENTS RECEIVED DECEMBER 23, 2009

**PREQB COMMENTS ON THE PROPOSAL FOR ADDITIONAL SAMPLING AND THE
NAVY RESPONSE TO PREQB COMMENTS DATED NOVEMBER 19, 2009
DRAFT FULL RCRA FACILITY INVESTIGATION REPORT FOR
SWMU 9 (AREA B, TANK 214 AREA)**

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

Additional Sampling:

- 1. Please analyze a subset of the new sediment samples for a full suite of metals and PAHs to fully document the spatial extent of previously documented exceedances of petroleum constituents and to provide data to evaluate risks to human health and the environment.*

Navy Response: The Navy offers the following points of clarification relative to this comment. A total of 42 sediment samples were collected during the 2009 Full RFI field investigation and analyzed for Appendix IX PAHS and metals. In addition, eleven sediment samples were collected during the 2007 Phase I RFI field investigation, and an additional fifteen sediment samples were collected during a 1999 Phase III RFI field investigation and 2000 CMS field investigation. These 26 sediment samples also were analyzed for Appendix IX PAHs and metals. With the exception of vanadium and lead, the extent of metal contamination in SWMU 9 (Area A, Tank 214) sediment has been defined and additional delineation is not deemed necessary (the proposal for additional sampling as well as the Navy's response to PREQB comment No. 2 below contain recommendations for further delineation of vanadium and lead). Additional evaluation of the available PAH data indicates that PAH contamination in sediment also has been defined except for one location located in the northern portion of the site (9SD92). Therefore, the proposal for additional sampling will be revised to indicate that sediment collected at two proposed locations north of 9SD92 (9SD124 and 9SD125) will include analyses for PAHs. Beyond these proposed analyses, the Navy does not believe additional analyses for metals and PAHs are necessary to define the spatial extent of previously documented petroleum constituents. Furthermore, the Navy believes that a satisfactory number of sediment samples have been collected to provide sufficient data to evaluate risks to human health and ecological receptors.

- 2. The last sentence in the third bullet on page 2 describes the proposed sediment sampling for lead to better understand findings from the CMS investigation. The text indicates samples 9SD177 through 9SD181 will be analyzed for lead. Please add two samples to analyze sample locations 9SD182 and 9SD183. Figure 6-8 of the RFI indicates the southeastern corner of the elevated lead extends into the location occupied by 9SD182, so lead analysis of 9SD182 is needed. Lead analysis of 9SD183 is also suggested to ensure that the lateral extent of lead contamination has been determined. Note that sample 9SD183 will already be collected for TPH DRO analysis, so the only cost is the additional single lead analysis.*

Navy Response: The Navy agrees with this comment. The text within the last bullet item on Page 2 will be revised to indicate that proposed sediment samples 9SD182 and 9SD183 will be analyzed for lead. In addition to these two sediment samples, the text will be revised to indicate that four proposed sediment samples located in the southwestern corner of the study area (i.e., 9SD109, 9SD110, 9SD111, and 9SD112) also will be analyzed for lead. Figure 6-8 of the Full RFI Report indicates that lead contamination may extend into the location occupied by 9SD109. Sediment collected at 9SD109, 9SD110, 9SD111, and 9SD112 will be analyzed for lead to ensure the lateral extent of lead contamination has been established.

Evaluation of Response to Comments:

The responses to PREQB's comments are acceptable with the exception of the following comment responses discussed below.

General Comments:

1. Evaluation of Response to PREQB General Comment 4 and Page-Specific Comment 22. The response is acceptable with as long as the bullet list of Eco-SSLs listed in the response are used for screening soil, rather than just considered, unless adequate justification is provided for not using one of the wildlife Eco-SSLs provided in this list.

Navy Response: The bullet list of Eco-SSLs referenced in General Comment No. 1 above (i.e., Eco-SSLs for avian herbivores, avian ground insectivores, avian carnivores, and mammalian herbivores), as well as Eco-SSLs for plants and soil invertebrates will be used to develop soil screening values. For a given chemical, the minimum Eco-SSL for these six receptor groups will be selected as the soil screening value.

2. Evaluation of Response to General Comment 6 and Page-Specific Comments 23, 29 and 30. As organic lead is a constituent of leaded gasoline, please include an evaluation of tetraethyl lead in the baseline risk assessments (for both ecological and human health) where the fraction of lead considered to be organic is estimated and the potential risks evaluated initially using appropriate screening criteria and then in the baseline risk assessments if identified as a chemical of potential concern.

Navy Response: The Navy respectively disagrees with this comment. As discussed in the Navy responses dated November 19, 2009, The GC/MS technology available for speciation of TEL from other organic and inorganic lead compounds provides a method detection limit (MDL) of 3,200 µg/kg and a reporting limit (RL) of 20,000 µg/kg for solid samples. Noting that TEL's Regional Screening Levels (SLs) for residential and industrial soil are 0.61 µg/kg and 6.2 µg/kg, respectively, the detection limits provided by the method will not meet the human health screening criteria. The elevated detection limits for TEL also preclude the ability to differentiate between lead species for ecological purposes. While the available technology will not provide detection limits that meet screening criteria, the Navy does not believe it is appropriate to assume an organic lead concentration since there is no known information from the literature upon which to make an accurate estimation.

Page Specific Comments:

1. Evaluation of Response to PREQB Comment 2c, Page 4-2, Section 4.1. The procedure described in the response (i.e., shipping samples in a cooler packed with ice), is the procedure used for refrigerated samples, not frozen samples. Therefore, please clarify whether the samples were received at the laboratory in a frozen state.

Navy Response: It is not known if samples were received at the analytical laboratory in a frozen state as this information was not documented by the analytical laboratory.

2. Evaluation of Response to PREQB Comment 8, Page 4-5, Section 4.8, Paragraph 1. Please revise the text of the report to address the potential for both negative and positive bias introduced by the wrong type of tubing used. In addition, the usability of these data are highly questionable based on the use of incorrect tubing combined with the lack of flow rate measurements as discussed in PREQB Comment 31a. These data should only be used for

screening purposes and not as definitive measurements of contamination in groundwater samples at the site. Please revise the text to reflect the limited usability of these data. When resampling the wells, please ensure that the proper procedures are used in order to obtain definitive data for use in delineation and assessing risk at the site.

Navy Response: The Navy agrees with the PREQBs recommendations. The Draft Full RFI Report will be revised to address the bias introduced by the tubing and the usability of the groundwater VOC analytical data. As discussed in the Navy's response letter dated November 19, 2009, proposed and existing permanent monitoring wells will be re-sampled and analyzed for Appendix IX VOCs and TPH DRO and GRO. Temporary monitoring wells installed as part of the January 2009 Full RFI field investigation also will be re-sampled and analyzed for Appendix IX VOCs and TPH DRO and GRO. Only these data will be used for delineation and assessing risk at the SWMU. It is noted that temporary wells installed during the Phase I RFI have been abandoned.

- 3. Evaluation of Response to PREQB Comment 9, Page 4-8, Section 4.10.5. Clarification should be made that the comment was referring that the fact of Multi-site blank preparation is not clearly stated at the approved work plan, independent of procedure for its preparation. The intention of the comment is to be noted for future work plans, in order to clearly state that the rinsate blank collected for the subject investigation will be shared with other sampling activities being carried on the same date.*

Navy Response: It is the Navy's intention to collect SWMU-specific equipment rinsate blanks during future field investigations even if sampling activities are conducted concurrently at multiple SWMUs on the same day.

- 4. Evaluation of Response to PREQB Comment 12, Page 5-1, Section 5.1, last paragraph. Please include a reference to the nature and extent discussion in Section 6.4 and include a discussion in Section 6.4 of the nature and extent of contamination in the vicinity of this sample, as petroleum odors were detected at this location.*

Navy Response: Section 6.4 will be revised to include a discussion of the nature and extent of contamination in the vicinity of sediment sample 9SD78. The discussion will focus on all available analytical data for the 9SD79 sediment sample, as well as sediment samples collected contiguous to the 9SD78 sample location (i.e., 9SD77, 9SD79, and 9SD108). This section also will be revised to include a reference to the field log book notes prepared by Adam Gailey describing the 9SD78 sample location.

- 5. Evaluation of Response to PREQB Comment 13, Figures 5-2 to 5-4. Please redraw these figures so that the elevation, stratigraphy, and thickness at a location are consistent and accurate between the figures. For example, the stratigraphy at location 9SB44 is different in Figure 5-3 and Figure 5-4, yet the stratigraphy is the same in the field. Additionally, it is confusing to indicate general elevation information that is inconsistent with precise elevation data. For example, point 9SB41, with an elevation of 108.93, should be drawn within the 110-ft contour.*

Navy Response: As discussed in the Navy responses dated November 19, 2009, the Navy acknowledges that there are differences in the elevation data presented on the site mapping. Topographic contours are from mapping provided by the Base most likely generated from aerial flyovers, while monitoring well locations and elevations have been determined with a survey-grade DGPS. Therefore, the different mapping sources likely accounts for the noted discrepancies. However, the Navy does not believe it is appropriate to redraw topographic lines based on a few

points. The site was not surveyed to generate a topographical map of the site. The best available information is being utilized. As indicated in the Navy responses dated November 19, 2009, the sapolite location illustrated on Figures 5-4 will be revised to be consistent with Figure 5-3.

6. Evaluation of Response to PREQB Comment 14, Page 5-3, Section 5.2.4, paragraph 2. Please include the reference for the porosity in this section of the report.

Navy Response: Section 5.2.4 will be revised to include the basis for the effective porosity value. As discussed in the Navy's November 19, 2009 response letter, the effective porosity value of 30 percent is based on professional judgment and information provided in Freeze and Cherry (1979).

7. Evaluation of Response to PREQB Comment 15, Page 6-1, Section 6.1. Please include a discussion of the potential for soil contamination to be a continuing source of contamination to groundwater, as this should be part of a discussion of nature and extent of contamination.

Navy Response: The Navy does not believe it is appropriate to compare subsurface soil analytical data to Protection of Groundwater SSLs since groundwater samples have been collected and additional groundwater samples will be collected from existing and new monitoring wells, thus allowing for a quantitative determination of groundwater quality. However, based on the soil and groundwater analytical data, soil contamination is likely a continuing source of contamination in groundwater. Section 6.1 will be revised to include a discussion of this link between soil and groundwater using actual analytical data (not Protection of Groundwater SSLs).

8. Evaluation of Response to PREQB Comment 17, Page 6-2, Section 6.1.2.1. Please see Evaluation of Response to PREQB General Comment 4.

Navy Response: As discussed in the Navy's response to PREQB General Comment No. 1 above, Eco-SSLs for avian herbivores, avian ground insectivores, avian carnivores, and mammalian herbivores), as well as Eco-SSLs for plants and soil invertebrates will be used to develop soil screening values. For a given chemical, the minimum Eco-SSL for these six receptor groups will be selected as the soil screening value.

9. Evaluation of Response to PREQB Comment 19, Page 6-3, Section 6.1.2.1. Please incorporate the response in the text of this section.

Navy Response: The November 19, 2009 Navy response will be incorporated into the text within Section 6.1.2.1.

10. Evaluation of Response to PREQB Comment 24, Page 6-7, Section 6.1.3 and Tables 6-1 to 6-6. Please include PREQB's cleanup levels for TPH-GRO and TPH-DRO in the tables. The tables currently show "NE", which is defined in the footnotes as "Not Established" for both TPH-GRO and TPH-DRO in the same column where the Total TPH value of 100 mg/kg is listed (Regional Screening Levels Residential). PREQB has established a cleanup level of 100 mg/kg for both TPH-GRO and TPH-DRO. Therefore, please list these values or state "NA" (Not Applicable) rather than stating that no value exists for these two TPH fractions.

Navy Response: Tables 6-1 through 6-6 will be revised to show the TPH-GRO and TPH-DRO clean-up level of 100 mg/kg.

11. Evaluation of Response to PREQB Comments 26 and 32a, Tables 6-1 to 6-7 and Appendices A and B. PREQB acknowledges that this issue is currently under discussion.

Navy Response: Comment noted.

12. Evaluation of Response to PREQB Comment 31a, Appendix A. Flow rate measurements are required in order to comply with EPA Region II low-flow sampling procedures. The usability of these data are therefore questionable based on the lack of flow rate measurements combined with the use of incorrect tubing, as discussed in PREQB Comment 8. These data should only be used for screening purposes and not as definitive measurements of contamination in groundwater samples at the site. Please revise the text to reflect the limited usability of these data. The text must also be revised to reflect the limited usability of these data. When resampling the wells, please ensure that the proper procedures are used in order to obtain definitive data for use in delineation and assessing risk at the site.

Navy Response: Please see the Navy Response to PREQB Page-Specific Comment No. 2.

TABLE 1

**SUMMARY OF PROPOSED ADDITIONAL SAMPLING AND ANALYTICAL PROGRAM
SWMU 9 - AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO**

Media	Sample Depth (ft bgs)	Fixed Based Analytical Lab Analysis						Comment
		App IX VOCs	PAHs	TPH DRO	TPH GRO	Lead	Vanadium	
Subsurface Soil Samples⁽²⁾								
9SB56-XX ⁽¹⁾	TBD	X		X	X			
9SB57-XX ⁽¹⁾	TBD	X		X	X			
9SB58-XX ⁽¹⁾	TBD	X		X	X			
9SB59-XX ⁽¹⁾	TBD	X		X	X			
9SB60-XX ⁽¹⁾	TBD	X		X	X			
9SB61-XX ⁽¹⁾	TBD	X		X	X			
9SB62-XX ⁽¹⁾	TBD	X		X	X			
9SB63-XX ⁽¹⁾	TBD	X		X	X			
9SB63-XXD ⁽¹⁾	TBD	X		X	X			Duplicate
9SB63-XXMS/MSD ⁽¹⁾	TBD	X		X	X			Matrix Spike/Matrix Spike Duplicate
Sediment Samples								
9SD109	0-0.5			X		X		
9SD110	0-0.5			X		X		
9SD111	0-0.5			X		X		
9SD112	0-0.5			X		X		
9SD112D	0-0.5			X		X		Duplicate
9SD112MS/MSD	0-0.5			X		X		Matrix Spike/Matrix Spike Duplicate
9SD113	0-0.5			X				
9SD114	0-0.5			X				
9SD115	0-0.5			X				
9SD116	0-0.5			X				
9SD117	0-0.5			X				
9SD118	0-0.5			X				
9SD119	0-0.5			X				
9SD120	0-0.5			X				
9SD121	0-0.5			X				
9SD122	0-0.5			X				
9SD123	0-0.5			X				
9SD124	0-0.5		X	X				
9SD125	0-0.5		X	X				
9SD125D	0-0.5		X	X				Duplicate
9SD125MS/MSD	0-0.5		X	X				Matrix Spike/Matrix Spike Duplicate
9SD126	0-0.5			X				
9SD127	0-0.5			X				
9SD128	0-0.5			X				
9SD129	0-0.5			X			X	
9SD130	0-0.5			X			X	
9SD131	0-0.5			X			X	
9SD131D	0-0.5			X			X	Duplicate
9SD131MS/MSD	0-0.5			X			X	Matrix Spike/Matrix Spike Duplicate

TABLE 1

**SUMMARY OF PROPOSED ADDITIONAL SAMPLING AND ANALYTICAL PROGRAM
SWMU 9 - AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO**

Media	Sample Depth (ft bgs)	Fixed Based Analytical Lab Analysis						Comment
		App IX VOCs	PAHs	TPH DRO	TPH GRO	Lead	Vanadium	
Sediment Samples (continued)								
9SD132	0-0.5			X				
9SD133	0-0.5			X				
9SD134	0-0.5			X				
9SD135	0-0.5			X				
9SD136	0-0.5			X			X	
9SD137	0-0.5			X			X	
9SD138	0-0.5			X			X	
9SD139	0-0.5			X				
9SD140	0-0.5			X				
9SD141	0-0.5			X				
9SD142	0-0.5			X				
9SD143	0-0.5			X				
9SD144	0-0.5			X				
9SD144D	0-0.5			X				Duplicate
9SD145	0-0.5			X				
9SD146	0-0.5			X				
9SD147	0-0.5			X				
9SD148	0-0.5			X				
9SD149	0-0.5			X				
9SD150	0-0.5			X				
9SD151	0-0.5			X				
9SD152	0-0.5			X				
9SD153	0-0.5			X				
9SD153D	0-0.5			X				Duplicate
9SD154	0-0.5			X				
9SD155	0-0.5			X				
9SD156	0-0.5			X				
9SD157	0-0.5			X				
9SD158	0-0.5			X				
9SD159	0-0.5			X				
9SD160	0-0.5			X				
9SD161	0-0.5			X				
9SD162	0-0.5			X				
9SD162D	0-0.5			X				Duplicate
9SD163	0-0.5			X				
9SD164	0-0.5			X				
9SD165	0-0.5			X				
9SD166	0-0.5			X				
9SD167	0-0.5			X				
9SD168	0-0.5			X				
9SD169	0-0.5			X				
9SD170	0-0.5			X				
9SD171	0-0.5			X				

TABLE 1

**SUMMARY OF PROPOSED ADDITIONAL SAMPLING AND ANALYTICAL PROGRAM
SWMU 9 - AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO**

Media	Sample Depth (ft bgs)	Fixed Based Analytical Lab Analysis						Comment
		App IX VOCs	PAHs	TPH DRO	TPH GRO	Lead	Vanadium	
Sediment Samples (continued)								
9SD171D	0-0.5			X				Duplicate
9SD171MS/MSD	0-0.5			X				Matrix Spike/Matrix Spike Duplicate
9SD172	0-0.5			X				
9SD173	0-0.5			X				
9SD174	0-0.5			X				
9SD175	0-0.5			X				
9SD176	0-0.5			X				
9SD177	0-0.5			X		X		
9SD178	0-0.5			X		X		
9SD179	0-0.5			X		X		
9SD180	0-0.5			X		X		
9SD180D	0-0.5			X		X		Duplicate
9SD180MS/MSD	0-0.5			X		X		Matrix Spike/Matrix Spike Duplicate
9SD181	0-0.5			X		X		
9SD182	0-0.5			X		X		
9SD183	0-0.5			X		X		
Groundwater Samples								
9GW56	NA	X		X	X			
9GW57	NA	X		X	X			
9GW58	NA	X		X	X			
9GW59	NA	X		X	X			
9GW59D	NA	X		X	X			Duplicate
9GW59MS/MSD	NA	X		X	X			Matrix Spike/Matrix Spike Duplicate
9GW41	NA	X		X	X			
9GW44	NA	X		X	X			
9GW47	NA	X		X	X			
9GW52	NA	X		X	X			
9GW53	NA	X		X	X			
9GW54	NA	X		X	X			
13GW05	NA	X		X	X			
13GW05D	NA	X		X	X			Duplicate
9SB37	NA	X		X	X			
9SB39	NA	X		X	X			
9SB40	NA	X		X	X			
9SB42	NA	X		X	X			
9SB48	NA	X		X	X			

Notes:

(1) XX - The designator for the depth interval from which the sample will be collected (i.e., 01 = 1-3 ft bgs, 02 = 3-5 ft bgs, etc.). This will be established in the field.

(2) - Although two subsurface soil samples are proposed per boring, additional subsurface soil will be collected if areas of staining or other indicators of contamination are encountered at multiple depths. In this event, the number of QA/QC samples will be adjusted.

ft bgs - feet below ground surface.

TBD - To be determined in the field

NA - Not Applicable.

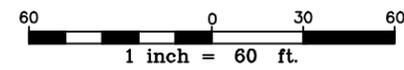
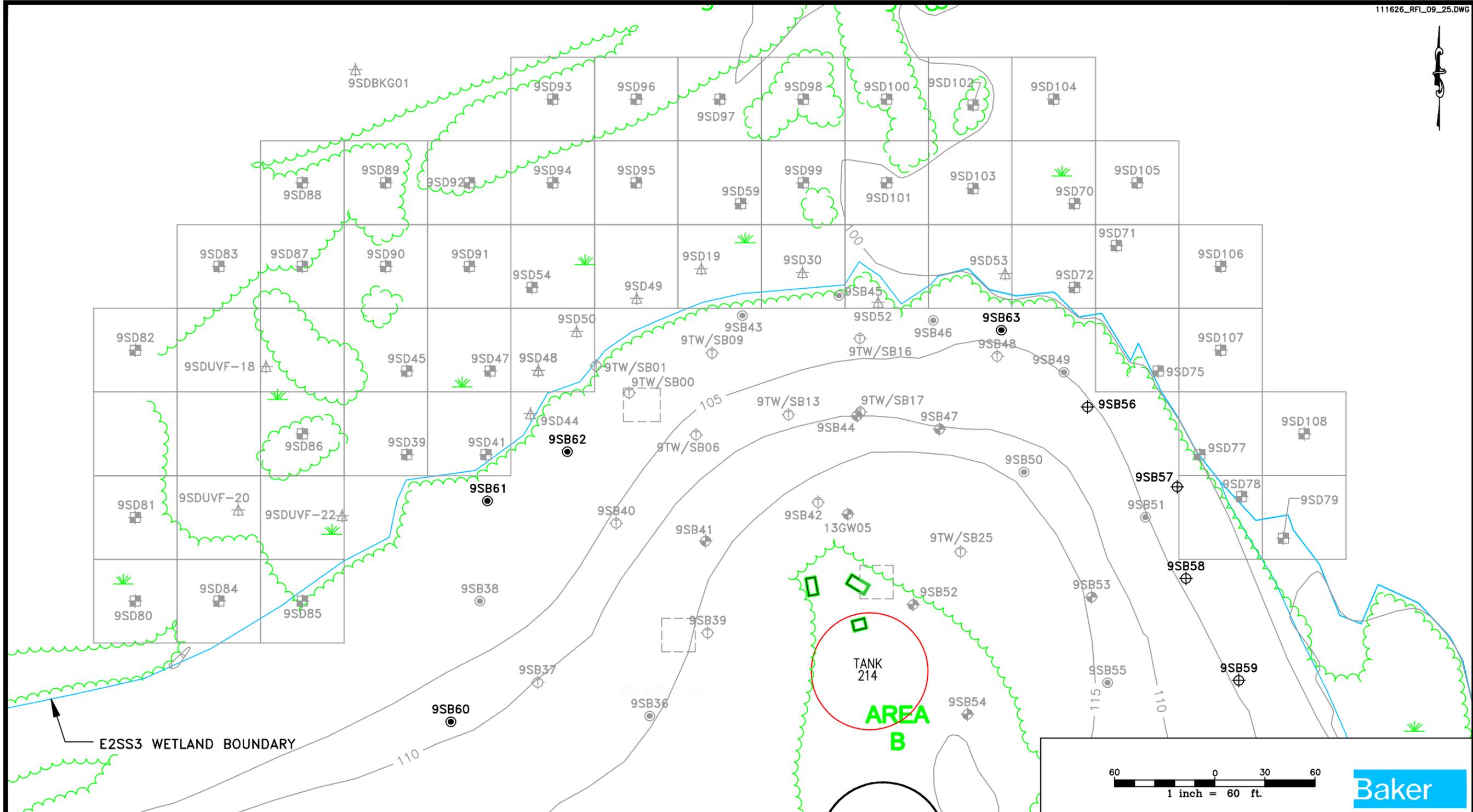
TABLE 2

**SUMMARY OF PROPOSED ADDITIONAL SAMPLING AND ANALYTICAL PROGRAM
QA/QC and IDW SAMPLES
SWMU 9 - AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO**

Media	Aqueous Samples Analysis Requested						Solid Samples Analysis Requested		Comment
	App IX VOCs	TPH DRO/GRO	Lead	Vanadium	Benzene	RCRA Metals	Benzene	RCRA Metals	
Trip Blank Samples									
9TB01	X ⁽¹⁾	X ⁽¹⁾							GRO only
9TB02	X ⁽¹⁾	X ⁽¹⁾							GRO only
9TB03	X ⁽¹⁾	X ⁽¹⁾							GRO only
Equipment Rinsate Samples									
9ER01	X	X							Stainless Steel Spoon or Macro Core Liner
9ER02	X	X							Split Spoon Sampler or Macro Core Liner
9ER03	X	X	X	X					Petite Ponar Dredge, Acetate Sediment Liner, Stainless Steel Spoon, or Aluminum Pie Pan
9ER04	X	X							Tefloned lined polyethylene tubing
Field Blank Samples									
9FB01	X								Lab Grade Deionized Water
9FB02	X								Store Bought Distilled Water
IDW Samples									
9IDW01					X	X			Aqueous
9IDW02							X	X	Solid

Note:

⁽¹⁾ - The analysis required for this sample will be dependent on which samples are being accompanied in the cooler.

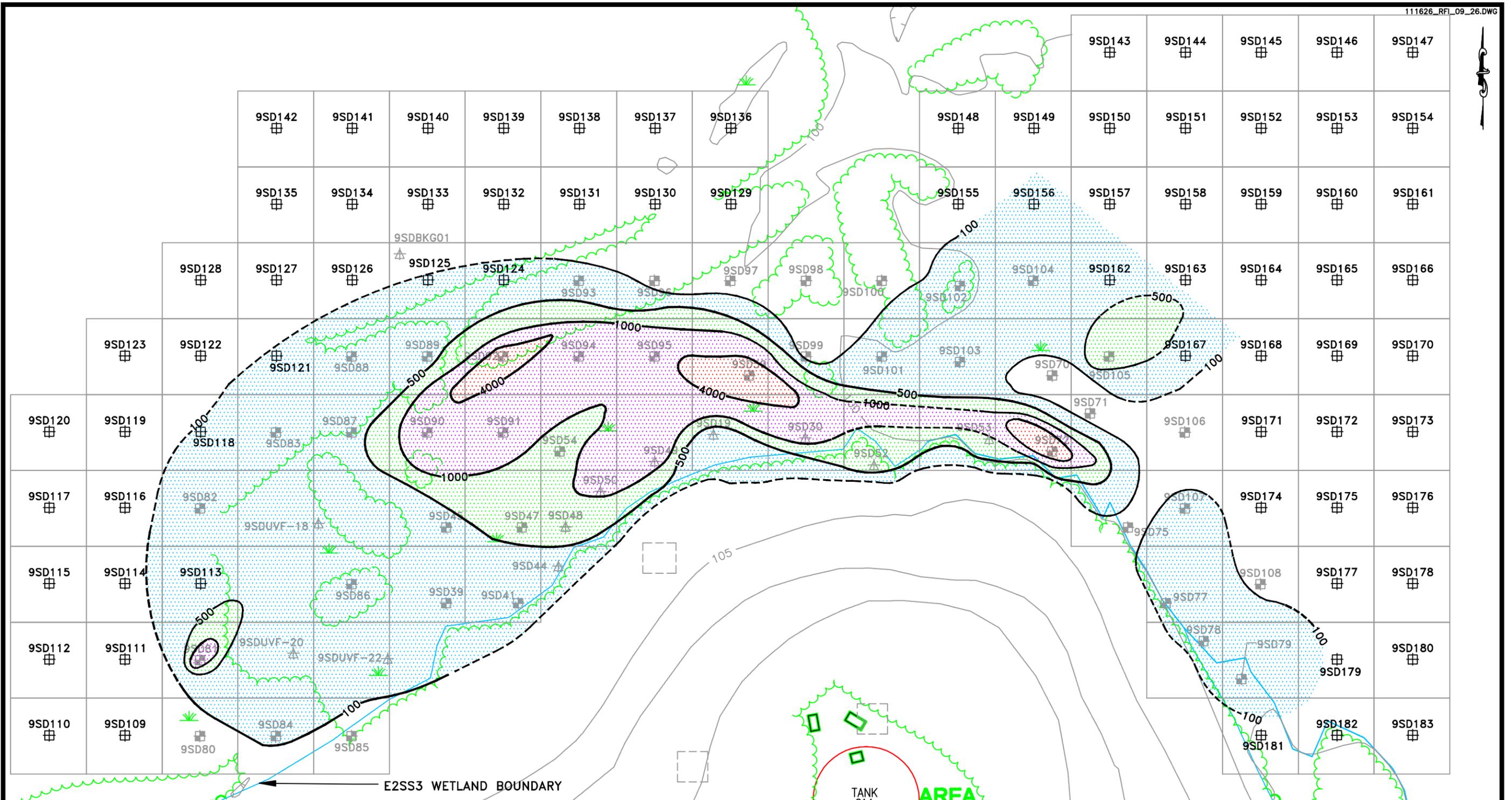


LEGEND

●	-SURFACE SOIL SAMPLE	□	-EXISTING MAY 2006 EXCAVATION (INTERIM CORRECTIVE MEASURE)
⊙	-SUBSURFACE SOIL SAMPLE	🌿	-MANGROVE
⊗	-SURFACE SOIL AND SUBSURFACE SOIL SAMPLE (JANUARY 2009)	🌳	-TREES
⊕	-PROPOSED SUBSURFACE SOIL SAMPLE	—	-GROUND SURFACE ELEVATION CONTOUR
⚠	-EXISTING SEDIMENT SAMPLE		
⊞	-SEDIMENT SAMPLE (JANUARY 2009)		
⊕	-EXISTING GROUNDWATER SAMPLE		
⊕	-SURFACE SOIL, SUBSURFACE SOIL AND GROUNDWATER SAMPLE (JANUARY 2009)		
⊕	-PROPOSED MONITORING WELL AND SUBSURFACE SOIL SAMPLE LOCATION		
⊕	-SURFACE SOIL, SUBSURFACE SOIL AND GROUNDWATER (TEMPORARY) SAMPLE (JANUARY 2009)		
⊕	-TEMPORARY GROUNDWATER SAMPLE LOCATION (PHASE I RFI-2007)		
E2SS3	-ESTUARINE INTERTIDAL SCRUB-SHRUB BROAD-LEAVED EVERGREEN		

NOTE:
TOPOGRAPHIC CONTOURS HAVE NOT BEEN FIELD VERIFIED AND MAY NOT BE ACCURATE.

FIGURE 1
PROPOSED AND PREVIOUS GROUNDWATER AND SUBSURFACE SOIL SAMPLE LOCATION MAP
SWMU 9-AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO



65 0 32.5 65
1 inch = 65 ft.



NOTE:
TOPOGRAPHIC CONTOURS HAVE NOT
BEEN FIELD VERIFIED AND MAY
NOT BE ACCURATE.

- LEGEND**
- ▲ -EXISTING SEDIMENT SAMPLE (PHASE I RFI-2007)
 - -SEDIMENT SAMPLE LOCATION (JANUARY 2009)
 - ⊞ -PROPOSED SEDIMENT SAMPLE LOCATION
 - -EXISTING MAY 2006 EXCAVATION (INTERIM CORRECTIVE MEASURE)
 - 🌿 -MANGROVE
 - 🌳 -TREES
 - 115 -GROUND SURFACE ELEVATION CONTOUR
 - E2SS3 -ESTUARINE INTERTIDAL SCRUB-SHRUB BROAD-LEAVED EVERGREEN

- TPH DRO SCALE**
- >4,000 mg/kg
 - 1,000-3,999 mg/kg
 - 500-999 mg/kg
 - 100-499 mg/kg
 - <100 mg/kg

FIGURE 2
PROPOSED AND PREVIOUS SEDIMENT SAMPLE
LOCATION MAP
SWMU 9-AREA B, TANK 214 AREA
FULL RFI REPORT
NAVAL ACTIVITY PUERTO RICO