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RESPONSE TO GEORGIA DEPARTMENT OF NATURAL RESOURCES COMMENTS DRAFT
FINAL UNIFORM FEDERAL POLICY SAMPLING AND ANALYSIS PLAN FOR SOLID WASTE
MANAGEMENT UNIT 27 (SWMU 27) DATED 2 OCTOBER 2014 NSB KINGS BAY GA
11/18/2014
RESOLUTION CONSULTANTS

**RESOLUTION CONSULTANTS RESPONSE TO COMMENTS
Draft Uniform Federal Policy — Sampling and Analysis Plan for
Naval Submarine Base Kings Bay for Solid Waste Management Unit (SWMU) 27;
Naval Submarine Base Kings Bay, Georgia
dated 2 October 2014, and received 7 October 2014
18 November 2014**

Following receipt and review of Georgia Environmental Protection Division's (GA EPD) 20 October 2014 letter, associated with regulatory review of the pending Draft-Final Uniform Federal Policy Sampling and Analysis Plan for Naval Submarine Base Kings Bay Georgia for Solid Waste Management Unit (SWMU) 27, Naval Submarine Base Kings Bay Georgia (SUBASE) requests additional clarification concerning GA EPD Original Comment 5. Previous comments and our subsequent request for clarification are provided herein.

GA EPD Division Original Comment# 5 - SAP Worksheet# 11, Page WSII-2, dated 14 August 2014: The report states, "Worksheet #15 identifies the lowest project action level (PAL) currently identified based on applicable screening levels defined above. The laboratory selected for current work and any laboratories selected for future work are expected to achieve limits of quantitation (LOQs) that are low enough to measure constituent concentrations less than the Worksheet #15 PAL." However, the report does not state how this issue will be specifically addressed in those cases where LOQs exceed PALs. Currently in Worksheet # 15, there are a number of Limits of Detections (LODs)/LOQs and detection limits (DLs), which exceed the PALs. Under such conditions, all constituents with a DL reported above the PAL should be retained for further evaluation in the risk assessment. Please add text to clarify how constituents will be evaluated when the LOQ exceeds the PAL.

SUBASE Response, dated 24 September 2014: Sample preservation/preparation and analytical methods, as specified in the UFP-SAP, incorporate the most widely accepted and recent United States Environmental Protection Agency protocol. During project planning, Resolution Consultants obtained respective detection limits for each planned analysis from multiple National Environmental Laboratory Accreditation Program laboratories. Such information can be made available to GA EPD, upon request. ENCO was selected as the subcontract laboratory for this project based, in part, on their ability to provide comparably lower detection limits for the majority of desired analytes versus other similarly qualified laboratories. As indicated by shaded cells in Worksheet #15, it is not feasible to achieve detection limits below the most stringent screening levels (i.e., Risk Based Soil Screening Levels for the Protection of Groundwater) for certain analytes. Resulting uncertainties introduced by detection limits that are greater than screening levels will be documented in the forthcoming RCRA Facility Investigation Report. Analytes reported as non-detect, including non-detects that exceed a screening level, will be considered not present and dropped from the screening process, as indicated in footnotes associated with Worksheet#15. Further clarification has been added to the PALs discussion (Section 11.3) in Worksheet#11.



It should be noted that this approach has been successfully implemented during similar investigations at United States Naval Facilities in the southeast and nationwide. Furthermore, this approach is consistent with protocol detailed in Resolution Consultants' Uniform Federal Policy-Sampling and Analysis Plan for the RCRA Facility Investigation at Building 1039, Naval Submarine Base Kings Bay, which was approved via GA EPD's letter dated 26 September 2013.

GA EPD, dated 20 October 2014: The elimination of site-related chemicals with elevated detection limits above the applicable screening criteria (i.e., Project Action Limits or PALs) is not allowed as part of the screening process. If a chemical is reported as non-detect in all samples, but the analytical reporting limit exceeds a screening benchmark, the chemical should be assumed to be present at a concentration equivalent to its analytical reporting limit. If the maximum non-detect value exceeds the maximum detected value, the maximum non-detected value should be assumed to be the chemical's concentration.

Please note that most laboratories are capable of achieving detection limits low enough to encompass screening values if presented with this data requirement prior to lab analysis. In instances where this is done and the lowest obtainable laboratory detection limit (i.e., minimum detection limit) is still above the applicable screening benchmark after laboratory analytical adjustments have been made, it is recommended that it be indicated in the report that chemicals with "non-detect" values above the applicable screening criteria will be carried through to the site-specific risk assessment.

Elevated detection limits due to matrix interference will have to be addressed separately. Typically, unless sampling results are not intended for the development of site-specific remedial levels or for compliance monitoring (e.g., purpose of the site investigation is to locate contaminant hot spots in the source area in preparation for the design of an expanded treatment system), all elevated non-detects should be addressed as they may affect the conclusion of any Corrective Action Plan, if required.

SUBASE Response, dated 7 November 2014: The pending Draft-Final UFP-SAP will be revised to state that constituents with method detection limits reported above Project Action Levels will be retained as chemicals of potential concern to be further evaluated in a risk assessment.