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RESPONSE TO GEORGIA DEPARTMENT OF NATURAL RESOURCES COMMENTS ON
DRAFT UNIFORM FEDERAL POLICY SAMPLING AND ANALYSIS PLAN FOR SOLID WASTE
MANAGEMENT UNIT 27 (SWMU 27) DATED 24 JUNE 2014 NSB KINGS BAY GA
9/24/2014
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 (Subbase) Kings Bay, Georgia
dated 24 June 2014, and received 27 June 2014
24 September 2014

1. Comment: Title of the Cover Page

The title of the document on the front page reads as, "Draft Sampling and Analysis Plan Resource Conservation and Recovery Act Facility Investigation Solid Waste Management Unit 27, Naval Submarine Base Kings Bay" This title is different than the title listed in the enclosed transmittal letter [i.e., Draft Uniform Federal Policy-Sampling and Analysis Plan (UFP-SAP) for the Resource Conservation and Recovery Act Facility Investigation (RFI) Solid Waste Management Unit 27, Naval Submarine Base Kings Bay, Georgia]. Please correct this discrepancy.

Response: Document revised to match transmittal letter.

2. Comment: Table of Content I Missing Worksheets

There are several missing worksheets in this document (i.e., #s 2, 3, 4, 7, 8, 13, 16, and 21). In addition, several worksheets are arranged out of sequence. For example, worksheet# 15 (Reference Limit and Evaluation Tables) is placed after worksheet #21, or worksheet# 17 placed after worksheet 12. Please provide the missing worksheet or an explanation for not including the above worksheets, and rearrange all the worksheets in their numeric order.

Response: As approved via email correspondence with Ms. Amy Potter of Georgia Environmental Protection Division (GA EPD), dated 30 September 2013, the Navy's streamlined Tier II UFP-SAP outline was used in preparation of this document. The worksheet order as presented in the draft version is consistent with the Navy's most recent Tier II UFP-SAP template. Such clarification has been added to the Executive Summary.

3. Comment: SAP Worksheet # 10, Conceptual Site Model (CSM)

The report states, "The CSM describes potential contamination routes and possible exposure pathways to human receptors, and serves as the basis for the sampling and analysis program." However, in Section 10.1 the report states, "Based on observations made during the November 2013 site visit, storm water likely discharges to earthen drainage ditches along USS Casmir Pulaski Drive and USS Henry Clay Boulevard. Although dry during the site visit, the drainage ditches likely discharge to retention ponds approximately 2,000 feet to the southwest." Therefore, the preliminary CSM should also address the need to evaluate for potential ecological risk, or at a minimum, it should be stated that potential risk to ecological receptors will be addressed separately from this investigation.

Response: As described in the GA EPD approved Phase 1 Resource Conservation and Recovery Act (RCRA) Facility Investigation Work Plan SWMU-27 (Site 2010-2, dated September 2013), and the Draft UFP-SAP, activities to be performed during this initial phase of investigation are limited to soil sampling and analysis, with evaluation of risks limited to human receptors. SWMU 27 is in a paved, industrial setting, and currently no analytical data exist that indicate that a release has occurred. Analytical data to be obtained from planned soil sampling locations, as depicted on Figure 17-1, is intended to demonstrate presence/absence of contamination in the historical satellite accumulation area and maintained, grassy medians that accept surface runoff from the Site, prior to runoff entering earthen ditches along USS Casimir Pulaski Drive and USS Henry Clay Boulevard.

The last paragraph in Section 10.4.3 of Worksheet #10 has been revised as follows: "The Site is in a paved, industrial setting. Surrounding areas are also paved, with the exception of several grass-covered medians that are maintained. Based on current information, potential receptors at the Site are limited to humans. The need for additional sampling and analysis (i.e., additional delineation in the earthen ditches) or evaluation of potential risks to ecological receptors will be determined pending results of this initial phase of the investigation. Decision rules in Section 11.5 have been revised to clarify the following: "Details associated with any additional investigation/risk evaluation (if required) would be described in a forthcoming UFP-SAP addendum to be submitted for review and comment by GA EPD."

4. Comment: SAP Worksheet #10, Conceptual Site Model (CSM), Section 10.4.3 Fate and Transport Mechanisms

Section 10.4.3 states, "Surface water is not present in the immediate vicinity of SWMU 27; therefore, it is unlikely that sediment or surface water media would be impacted as a result of any accidental release from SWMU 27." While the report acknowledges that the drainage ditch was dry during the November 2013 site visit, this is not an indication that the ditch is intermittent or dry at all times throughout the year. Soil contamination can be spread by storm water runoff. Please provide photographic evidence and additional information (total acreage of the drainage ditch, ecological survey, etc.) to support the claim that the drainage ditch is dry most of the year and thus devoid of aquatic flora and fauna. Earthworms and other soil-dwelling invertebrates among other avian and vertebrates may occupy this habitat.

Response: Per the GA EPD-approved Phase 1 RCRA Facility Investigation Work Plan SWMU-27 (Site 2010-2, dated September 2013), and the Draft UFP-SAP, initial soil sampling efforts are intended to demonstrate presence/absence of contamination in the historical satellite accumulation area and maintained, grassy medians that accept runoff from the Site. The need for additional sampling and analysis and evaluation of potential risks to ecological receptors associated with the earthen drainage ditches along USS Camir Pulaski Drive and USS Henry Clay Boulevard will be determined subsequent to this initial investigation.

5. Comment: SAP Worksheet# 11, Page WSII-2

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.

Response: 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 to not be 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 his 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.

6. Comment: SAP Worksheet # 15: Reference Limits and Evaluation Table

For semi-volatile organic compounds (SVOCs) and Volatile organic compounds (VOCs), it was noted that PALs based on the U.S. EPA RSL were reported in mg/kg, and not ug/kg, as indicated in the table. For example, the RSL for benzo(a)pyrene is listed as 15 ug/kg; however, the PAL based on the RSL is reported as 0.015 ug/kg. It is recommended that the metric units for these values be kept consistent throughout the tables. Based on this update, some of the LOD/LOQs and detection limits now meet the PALs. Please revise the tables accordingly.

Response: Worksheet #15 revised accordingly.