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LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
REVIEW FOR THE WORK PLAN ADDENDUM SOURCE REMOVAL ACTION SOIL  
EXCAVATION AND REMOVAL AT AREA C SOUTHWEST REVISION 1 NTC ORLANDO FL  
2/27/2014  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

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SECRETARY

February 27, 2014

Attn: Mr. Art Sanford  
Naval Facilities Engineering Command Southeast  
BRAC Program Management Office East  
203 S. Davis Drive, Bldg 247  
Joint Base Charleston, SC 29404

Subject: Work Plan Addendum, Source Removal Action, Soil Excavation and Removal at Area C Southwest, Revision 1, Former Naval Training Center Orlando, Orlando, Florida

Dear Mr. Sanford:

I have completed my review of the Work Plan Addendum, Source Removal Action, Soil Excavation and Removal at Area C Southwest, Revision 1, Former Naval Training Center Orlando, dated January 2014 (received by e-mail January 22, 2014), prepared by AGVIQ-CH2M HILL Constructors, Inc. Joint Venture III. I have the following comments on the Source Removal Work Plan:

- (1) The Work Plan proposes to excavate soils with benzo(a)pyrene equivalent (BaPeq) concentrations above the Department's residential cleanup criteria and backfill the excavations with clean fill. In order to accomplish this, a virtual cleanup is proposed whereby:
  - (a) Two (2) areas are to be completely excavated to a depth of six inches below land surface, these areas being comprised of the Building 148 footprint and an area located between Coy Drive, Seabee Street and north of exposure areas R4, R5 and R6 as depicted in Figure 2-3,
  - (b) Eighteen (18) exposure unit areas of a quarter acre or less are to be excavated to a depth of six inches below land surface, as depicted in Figure 2-3 of the Work Plan to attain 95% UCL on the mean concentration of BaPeq that is less than or equal to the Department's residential soil cleanup target level (SCTL) for benzo(a)pyrene,
  - (c) Fourteen (14) areas of a quarter acre or less are to be excavated from six inches to two feet below land surface, as depicted in Figure 2-4 of the Work Plan to attain 95% UCL on the mean concentration of BaPeq that is less than or equal to the Department's residential SCTL for benzo(a)pyrene,
  - (d) One (1) area of less than a quarter acre is to be excavated from two feet to three feet below land surface as depicted in Figure 2-6 of the Work Plan to attain 95% UCL on the mean concentration of BaPeq that is less than or equal to the Department's residential SCTL for benzo(a)pyrene,
  - (e) One (1) area of less than a quarter acre is to be excavated from three feet to five feet below land surface as depicted in Figure 2-7 of the Work Plan to attain 95% UCL on the mean concentration of BaPeq that is less than or equal to the Department's residential SCTL for benzo(a)pyrene,
  - (f) One (1) area is to be excavated from five feet to seven feet below land surface as depicted in Figure 2-8 of the Work Plan such that no BaPeq contamination above the Department's residential SCTL remains, and

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- (g) One (1) area is to be excavated from seven feet below land surface to the water table as depicted in Figure 2-9 of the Work Plan such that no BaP<sub>eq</sub> contamination above the Department's residential SCTL remains.
- (2) The Work Plan addresses two contaminants in soil, dieldrin and benzo(a)pyrene equivalents. Benzo(a)pyrene equivalents is a sum of individual carcinogenic polynuclear aromatic hydrocarbon concentrations multiplied by their respective toxicity equivalent factors. Both dieldrin and benzo(a)pyrene equivalents are considered carcinogenic. Because of this, and because the Navy has opted to derive 95% UCL of the mean concentrations for several quarter acre or less exposure areas, if any dieldrin remains above its residential SCTL within an exposure area after soil excavation activities have been completed, the carcinogenic risk from both benzo(a)pyrene and dieldrin must be considered additive and apportioned soil cleanup target levels for each contaminant must be derived and met. Apportionment would not be required if all dieldrin above its residential SCTL is removed from an exposure unit for a particular depth. While all the dieldrin above its residential SCTL may be slated for removal as part of the effort to remove all benzo(a)pyrene equivalent concentrations to meet the risk management option I (RMO I) criteria of Section 62-780.680(1)(b), Florida Administrative Code (F.A.C.), this is not explicitly specified in the text of the Work Plan or in its figures.
- (3) In Table A-4, Backfill Data Summary Table, laboratory analytical results are presented for two sample locations. The laboratory analysis of sample JM46-1-TS-120221 had detections of PAHs and pesticides with benzo(a)pyrene detected above the Department's residential SCTL and dieldrin above its leachability to groundwater SCTL. This sample is not discussed in the text. If this sample represents contaminant concentrations from soil collected from a borrow pit being evaluated as a source of fill, the Navy should consider looking elsewhere.

Please submit a final Work Plan that is signed and sealed by an appropriate registered professional pursuant to Section 62-780.400, F.A.C. If you have any concerns regarding this letter, please contact me at (850) 245-8997.

Sincerely,



David P. Grabka, P.G.  
Remedial Project Manager  
DoD and Brownfields Partnerships  
Waste Cleanup Program

cc: Marianne Sweeney, AECOM, Orlando  
Amy Twitty, CH2M Hill,



KAW