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NAS CECIL FIELD
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LETTER FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CONCURRING WITH RATIONALE FOR DETERMINING WHETHER SOIL TO BE
EXCAVATED AT POTENTIAL SOURCE OF CONTAMINATION 21 (PSC 21) CONTAINS
LISTED HAZARDOUS WASTE NAS CECIL FIELD FL

3/9/2001

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

March 9, 2001

Commanding Officer
Mr. Mark Davidson, Code 1879
SOUTHNAVFACENGCOM
Post Office Box 190010
North Charleston, SC 29419-9010

RE: Waste Characterization for PSC 21, Naval Air Station Cecil
Field, Florida

Dear Mr. Davidson:

I have completed the review of the Sampling and Analysis Plans for PSC 21, Naval Air Station Cecil Field. The Sampling and Analysis Plan outlines the methodology behind the collection of waste characterization samples at the site. PSC 21 was divided up into 12 excavation areas according to the contaminants of concern detected in those areas. Waste characterization samples were collected by compositing a minimum of five grab samples per excavation area. The samples were collected from random locations and random depths within each excavation area.

Results from the waste characterization work have been received. Only the composite sample from excavation area 11 had pesticide contaminant concentrations detected above industrial Soil Cleanup Target Levels (SCTLs). Based upon our discussions, soil excavated from that area will be managed as containing listed hazardous waste. Soil from the other excavated areas will be considered non-hazardous waste and will be sent to a lined landfill. The detection limits for toxaphene in the composite sample for excavation area 3 was above its SCTL and would thus ordinarily be considered as containing hazardous waste unless further characterization were conducted. However, excavation area 3 was to be addressed due to other contaminants. Toxaphene had not been detected in that area. Because of this, toxaphene is not expected to have been present in the sample and the excavated soil from area 3 may be reasonably expected not to contain toxaphene. Therefore, soil from area 3 may be handled as non-hazardous waste.

The Department's concurrence with the rationale for determining whether soil to be excavated contains listed hazardous waste is predicated on the information provided by the SOUTHNAVFACENGCOM. The methodology used is appropriate for this

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site. However, the methodology may not be appropriate for every site or every situation.

If you have any concerns regarding this letter, please contact me at (850) 488-3693.

Sincerely,



David P. Grabka
Remedial Project Manager

CC: Satish Kastury, FDEPA
Debbie Vaughn-Wright, USEP, Atlanta
John Flowe, City of Jacksonville
Scott Glass, SOUTHNAVFACENGCOM
Mark Speranza, TtNUS, Pittsburgh
Ashwin Patel, FDEP, Northeast District
Sam Ross, CH2M Hill Constructors - Atlanta

TJB B JJC JJC ESN ESN

1/17/91

Subject: Waste Classification of Soils at NAS Cecil Field Site 21

The Department of the Navy (DON) is currently remediating several sites at the former Naval Air Station (NAS) Cecil Field in Jacksonville, Florida. One of the sites is Site 21, the Golf Course Maintenance Area.

The golf course was opened in the 1950s and continues to be in operation. The site is located within the golf course. The Golf Course Maintenance area was used for golf course equipment maintenance and the storage and mixing of pesticides used at the golf course. Activities at the site also included the cleaning and rinsing of pesticide application equipment onto the ground and piling of empty containers.

Investigations of Site 21 have identified the presence of 4,4'-DDD, 4,4'-DDT, chlordane, diazinon, dieldrin, lindane, and other BHC isomers, pentachlorophenol, toxaphene, and arsenic in the soil greater than the FDEP soil cleanup target levels, (SCTLs) described in FAC 62-777. In addition to the above constituents, the contaminated soil also contains measurable concentrations of 2,4-D, Silvex, and 4-nitrophenol. In order to remediate the site, excavation and off site disposal of contaminated soil is proposed. Several of the compounds are listed as hazardous waste constituents. If these hazardous waste pesticide constituents are present as the result of the disposal of chemical which are listed wastes, the soils would be classified as hazardous waste soils due to the contained-in principle. If the hazardous waste pesticide constituents are present, as the result of normal use, the soils would not contain listed wastes and could be hazardous only if tested and found to be a characteristic hazardous waste.

In the case of environmental media US EPA guidance provides individual states with flexibility in regards to the classification of environmental media (soil, groundwater, sediment, etc.) as hazardous wastes. Environmental media by itself cannot be a hazardous waste and can only be a hazardous waste if it is mixed with a characteristic waste and fails a characteristic test or if mixed with a listed hazardous waste. As long as the media "contains" the hazardous waste it must be managed as a hazardous waste including compliance with land disposal restrictions prior to disposal. EPA's October 1998 guidance titled Management of Remediation Waste Under RCRA (EPA 530-F-98-026), discusses determinations of when contamination is caused by listed hazardous waste. According to this guidance, once a good faith effort is made to determine if a material is a listed hazardous waste when it is determined documentation is unavailable or inconclusive regarding the source, one may assume the source, contaminant, or waste is not a listed hazardous waste. However, soils could still be hazardous as the result of failing a characteristic test.

Environmental media classified as hazardous wastes under the "contained-in" principle can be determined by states to not contain hazardous wastes if the concentrations are below risk based levels. These determinations can be made by states authorized by US EPA to implement the base RCRA program. Florida is authorized for the base RCRA program. Therefore, Florida can make "contained-in" determinations for environmental media.

Three general options exist in regards to classification of Site 21 soils excavated during remediation. These are discussed as follows.

Option 1 - Non-Hazardous for Listed Wastes

Information is available for Site 21 regarding the use of the site for cleaning and rinsing of chemical-dispensing equipment and the preparation of chemical solutions. It is known that cleaning and rinsing of chemical-dispensing equipment occurred and that the rinsings went onto the ground. Chemicals on dispensing equipment would be considered used and therefore not a waste. It is not known whether unused chemicals were disposed. Therefore, under existing RCRA policy, it may be assumed that the source is not a listed waste and that the soil does not contain hazardous wastes as long as it does not possess a RCRA hazardous waste characteristic. Soils excavated from various Site 21 excavation areas would be evaluated independently to determine if they were characteristic. Figure E-1 shows the excavation areas.

Excavation Area 1 would be evaluated for arsenic. The highest level of arsenic found in Area 1 is 96.6 mg/kg. At least 100 mg/kg would have to be present for the soil to fail the toxicity characteristic (TC) for arsenic. In Excavation Area 2 both arsenic and organic hazardous constituents are present. The highest value of arsenic is 10.3 mg/kg. The soils could not fail the TC for arsenic. The chemicals dieldrin, 4,4'-DDD, 4,4'-DDT, and toxaphene are also present. Toxaphene is the only TC constituent. The maximum concentration of toxaphene (168 mg/kg) is above the concentration of 10 mg/kg at which soils could fail the TC for toxaphene. Therefore, it would be necessary to test the soil to determine if it is TC for toxaphene. Similar evaluations would be conducted for soils from each of the other Site 21 excavation areas.

Option 2 - Non-Hazardous – Hazardous Constituents of Listed Waste below Levels of Concern

The interpretation could be made that the hazardous constituents are present in Site 25 soil as the result of disposal of listed wastes. Therefore, the soils would be classified as hazardous wastes once excavated. In this case the FDEP has the authority to make a determination that the

hazardous constituents are below risk based levels for one or more of the excavation areas. Determinations of risk could be made based on removal and disposal in a solid waste landfill. US EPA published a proposed methodology for making such determinations on April 29, 1996. (See FR Vol. 61 Page 18851). Soils excavated from each Site 21 excavation area would be evaluated separately. Excavated soils meeting the risk criteria would be managed as non-hazardous wastes. Excavated soils not meeting the criteria would be classified as hazardous and be managed as described in Option 3.

Option 3 - Hazardous – Soils Contain Listed Hazardous Wastes.

FDEP could determine that the soils contain listed wastes and must be disposed of as hazardous wastes. Any soils not meeting the concentration requirements in 40 CFR 268.49 for soils would require treatment prior to land disposal as a hazardous waste. In several cases treatment would be required. All soils would be disposed in a RCRA Subtitle C landfill.

The Navy wishes to discuss these options with FDEP.