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NAS WHITING FIELD
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LETTER REGARDING REMEDIAL INVESTIGATION FEASIBILITY STUDY WORK PLAN FOR
SITES 7, 29, 36, 38, 39, 40, AND PSC 1485C NAS WHITING FIELD FL
11/5/1999
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION A
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

03.01.07.0001

1D-00142

November 5, 1999

4WD-FFB

Ms. Linda Martin
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

SUBJECT: RI /FS WP for Sites 7, 29, 36, 38, 39, 40 and PSC 1485C

Dear Ms. Martin:

The United States Environmental Protection Agency (EPA) has received and reviewed the Remedial Investigation and Feasibility Study (RI/FS) Work Plan for Sites 7, 29, 36, 38, 39, 40, and PSC 1485C at NAS Whiting Field, dated April 1999. Enclosed are EPA's comments based on this review.

If you should have any questions, please contact me at (404) 562-8555.

Sincerely,

A handwritten signature in black ink that reads "Craig A. Benedikt".

Craig A. Benedikt
Remedial Project Manager
Federal Facilities Branch

Enclosure

cc: Jim Cason, FDEP

**EPA, Comments on
Remedial Investigation and Feasibility Study Work Plan for
Sites 7, 29, 36, 38, 39, 40, and PSC 1485C
April 1999**

GENERAL COMMENTS

1. Section 3.0, Technical Approach, contains numerous deficiencies and inadequacies in the monitoring well installations and sampling activities as indicated in the specific comments below. Section 3.0 should be carefully reviewed to ensure that EPA Region IV standard operating procedures are followed.

SPECIFIC COMMENTS

2. **Cover Spline, Outside Cover Page and Inside Cover Page.** The cover spline is titled, "Draft RI/FS Work Plan Sites 7, 29, 36, 38, 39, 40, and PSC 1485C, Naval Air Station, Whiting Field, Milton, Florida." The outside cover page and the inside cover page are titled, "Remedial Investigation and Feasibility Study Work Plan for Sites 7, 29, 36, 38, 39, 40, and PSC 1485C Naval Air Station Whiting Field Milton Florida." The cover spline title should be consistent with the titles for the outside and inside cover pages. This discrepancy in titles should be addressed.
3. **Page 3-8, Third Paragraph.** The text states, "If a liner is used, it is separated into 6-inch long sections (along perforations in the brass liners), and the exposed soil is screened with a flame ionization detector (FID). Samples selected for laboratory analyses will be immediately placed into laboratory-supplied containers. If liners were used, the open ends will be covered with clean Teflon™ tape, capped, and sealed with exterior tape." The preceding statements, concerning the use of liners for sample collection, are contradictory. Either the samples collected in liners will be separated into 6-inch sections and screened with an FID and placed in laboratory containers or the samples will remain in the liners and the open ends sealed with Teflon™ tape, capped and sealed with exterior tape and shipped to the laboratory. The text should clarify which method shall be used during soil sample collection.
4. **Page 3-9, Section 3.1.3.3.** The text states, "A fine sand seal at least 4 feet thick, will be installed on top of the 20/30 silica sand. The remainder of the annulus of the borehole will be grouted by pumping a cement/bentonite slurry through a tremie pipe up to 2 feet below land surface (bls). According to Region IV EPA standard operating procedures, a minimum two foot thick bentonite seal shall be placed on top of the filter pack. This seal shall consist of 30 % solids bentonite pellets which should be allowed to hydrate for a minimum of 8 hours or the manufacturer's recommended hydration time, whichever is

greater. This bentonite seal prevents grout from contaminating the sand packed screened interval of the monitoring well. The monitoring well installation procedure in the text should be changed to include the installation of a bentonite seal in all shallow, intermediate and deep wells installed at the facility.

5. **Page 3-11, Section 3.1.3.3.6.** The text states, "Wells will be developed until the following criteria are achieved:

- ☞ Stabilization of the following parameters occurs:
 - temperature plus or minus 1°C,
 - pH plus or minus 1 unit, and
 - electrical conductivity plus or minus 5 percent of scale; and
- ☞ Turbidity remains within a 10 Nephelometric Turbidity Unit (NTU) range for 2 consecutive readings;
- ☞ Accumulated sediment is removed from the well.

The Region IV EPA standard operating procedures recommend that, in addition to stabilization of these parameters, a minimum of 3 well volumes be removed from the monitoring well during development. The text should include these items as part of the well development procedure.

6. **Page 3-15, Section 3.1.3.6.** The text states, "All measurements will be collected within a 48-hour period of consistent weather conditions to minimize atmospheric/precipitation effects on groundwater conditions." However, groundwater levels should all be collected within a time frame as short as possible, such as within an 8-hour work day or less to allow for the accurate representation of the potentiometric surface. Since the site is in close proximity to the Gulf Coast, groundwater may be under tidal influence. Therefore, tidal influence may need to be taken into consideration when water levels are measured at the site. Section 3.1.3.6 should be amended to address the potential influence of these factors for water level measurements.
7. **Page 3-16, Section 3.1.3.9.** The text states, "Soil samples will be analyzed for their total hydrocarbon content using an organic vapor analyzer (OVA) equipped with an FID." However, according to the instrument description in this section, the FID measures response to general organic vapors in parts per million but is not capable of detecting total hydrocarbon content solely. The text should be changed to address this discrepancy.
8. **Page 3-32, Second and Third Paragraph.** The text states, "All of the samples from the excavation contained concentrations of chromium exceeding the TCLP regulatory limit and four of the five samples (excluding the south wall sample) contained lead at concentrations exceeding the TCLP criteria (Conrad, 1998). The soil sample from the abandoned heating-oil tank contained concentrations of benzene and toluene at concentrations exceeding Florida Soil Cleanup Target Levels (F.A.C. Chapter 62-777) and

detected concentrations of chromium and lead exceeded the TCLP regulatory limits (Conrad, 1998).” The text does not provide the concentrations of any of the preceding constituents exceeding the TCLP criteria or Florida Soil Cleanup Target Levels and does not identify the valence of the chromium detected (III or VI). The text and/or a table should provide the concentrations of the constituents, lead, chromium, benzene and toluene that exceed the TCLP regulatory limits and Florida Soil Cleanup Target Levels and specify the valence of the chromium.

9. **Page 3-46, Source Areas of Concern.** The text states, “The RI/FS investigation at site 1485C will consist of a historic document review and interviews with Base personnel, collection of surface and subsurface soil samples, and the installation and sampling of a monitoring well.” The text should provide the rationale for installing only one monitoring well at Site 1485C as opposed to a minimum of three monitoring wells required to determine groundwater flow direction.
10. **Page 3-50, Section 3.2.6.2.** The text states, “A detailed time line discussion of the Clear Creek Flood plain history is provided in Appendix C.” Appendix C is missing from the RI/FS WP and should be included.
11. **Page 3-65, QA/QC Sample Summary Table.** The summary table indicates that a trip blank will be included in each cooler shipped only if 10 or more samples are collected. If nine or fewer samples are collected, no trip blanks will be included in the cooler(s). A trip blank should be included in each cooler regardless of how many samples are collected. The text should be amended to include a trip blank per cooler when samples are shipped.
12. **Plate 1, Proposed Monitoring Wells, Monitoring Wells and Site Locations.** The legend in Plate 1 does not provide the symbol for the existing monitoring wells. This symbol should be included in the Plate 1 legend.