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NS MAYPORT  
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LETTER AND COMMENTS FROM U S EPA REGION IV REGARDING DRAFT RESOURCE  
CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION TECHNICAL  
MEMORANDUM BACKGROUND CHARACTERIZATION ACTIVITIES NS MAYPORT FL  
2/11/1994  
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

NAVSTA Mayport Administrative Record  
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CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Commanding Officer  
c/o Michael Davenport  
U.S. Naval Station Mayport  
P.O. Box 265  
Mayport, Florida 32228

SUBJ: Technical Review Comments for the Draft RCRA Facility  
Investigation Technical Memorandum - Background  
Characterization Activities, at U.S. Naval Station  
Mayport, Florida  
EPA ID.: FL9 190 024 260

Dear Mr. Davenport:

The U.S. Environmental Protection Agency (EPA), has received and reviewed the Draft Resource Conversation and Recovery Act (RCRA) Facility Investigation (RFI) Technical Memorandum - Background Characterization Activities at Naval Station Mayport (Mayport). EPA's comments are enclosed. The enclosed comments have been divided into specific and general comments. EPA will accept errata sheets to be substituted for pages requiring the necessary new information. Please include an index with the errata sheets which pages are to be substituted. These errata pages are due to EPA by March 15, 1994.

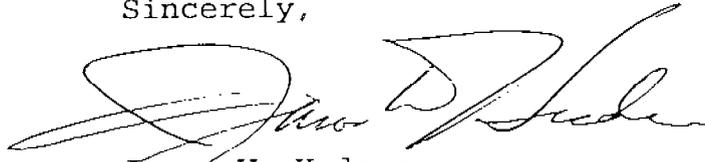
Please note that this letter should be deemed as an unofficial Notice of Technical Inadequacy (NOTI) and that EPA is using this approach in order to expedite approval of documents and to limit the number of official NOTI's your facility receives from EPA.

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To PEGGY LAYNE	From CHEYL
Co. ABB	Co.
Dept.	Phone #
Fax # 904-877-0742	Fax #

Should you have any questions regarding these comments,  
please contact me at the above address or call me at (404) 347-  
3016.

Sincerely,



James W. Hudson  
Remedial Project Manager

cc: Eric Nuzie, FDER  
David Driggers, SOUTHDIVNAVFACENGCOM  
Art Linton, OPM/FFC

TECHNICAL REVIEW COMMENTS  
DRAFT RCRA FACILITY INVESTIGATION  
TECHNICAL MEMORANDUM BACKGROUND CHARACTERIZATION ACTIVITIES,  
U.S. NAVAL AIR STATION MAYPORT, FLORIDA

GENERAL COMMENTS

The Draft Tech Memo presents the methodologies used to collect numerous soil, surface water, sediment and groundwater samples and the analytical results of a chemical characterization of these samples to define existing background concentrations of chemicals in various environmental media at NS Mayport. Additionally, geologic and hydrogeologic studies were conducted to characterize the spatial variability of subsurface conditions due to the extensive dredging and dredge spoils deposition that has occurred at NAS Mayport. The Draft Tech Memo proposes comparing the background analytical data for all media to SWMU-specific analytical data to determine if releases of chemicals above computed "background screening values" have occurred at any of the SWMUs.

The background location analytical data were used to compute "background screening values," which will be used to define if a chemical concentration at a SWMU requires a Health and Endangerment Assessment, as defined in the RFI Guidance Document. This process has resulted in numerous, very conservative screening values and several screening values that exceed promulgated standards. It should be apparent that a "background screening value" that is greater than a promulgated, risk-based standard (e.g., maximum contaminant levels for chemicals in groundwater media) is not a justifiable screening value.

The background characterization study at NS Mayport has adequately defined the ambient conditions, with the exception of the following two data gaps:

- No subsurface soil samples were collected for chemical analysis. Subsurface soil samples should be collected and analyzed for full scan parameters to define background chemical concentrations at locations that have not been impacted by past waste management activities for comparison to analytical results from subsurface soil samples collected at the SWMUs.
- Insufficient information exists on the groundwater flow direction, gradient and velocity in the deeper portions of the surficial aquifer at NS Mayport. Additional monitor wells should be installed, hydrologically tested and sampled for analysis of full scan parameters to define background chemical concentrations at locations that have not been impacted by past waste management activities for comparison to analytical

results from groundwater samples collected from deep monitor wells adjacent to the SWMUs.

An alternative approach to defining screening values is the use of the "action levels" listed in the Proposed Rule: Corrective Action. These action levels are defined as health- and environmental-based levels determined by EPA to be indicators for protection of human health and the environment. Contamination that exceeds the action levels indicates a potential threat to human health or the environment which may require further study. Conversely, contamination at levels less than the action levels is unlikely to require active remediation. The action levels are designed to be used for the same purpose as the "background screening values," but the action levels provide the additional evaluation step of defining risk-based concentrations of chemicals that indicate if additional studies are required.

#### SPECIFIC COMMENTS

1. Page 2-9, Paragraph 3: Please specify in the text if the cement grout was tremied in placed or poured in from ground surface during the construction of the "intermediate zone" depth monitor wells.
2. Page 2-11, Paragraph 3: Please specify in the text if the cement grout was tremied in placed or was poured in from ground surface during the construction of the "deep zone" depth monitor wells.
3. Page 2-18, Paragraph 3 and Figure 2-17: The sample location descriptions for the surface water/sediment samples do not appear to agree with the locations shown on Figure 2-17. Please correct this discrepancy.
4. Page 2-36, Table 2-6: Provide a justification for not collecting and analyzing any duplicate samples from the groundwater medium, as shown on this table.
5. Page 3-70, Paragraph 2: The proposed background screening value for iron in surface water exceeds the Florida Surface Water Classification Standards (FSWCS) of 300 micrograms per liter (ug/l). The background screening value should not exceed a promulgated standard.
6. Page 3-71, Paragraph 2: The proposed background screening value for manganese in surface water exceeds the Federal Drinking Water Regulation (FDWR) of 50 ug/l. The background screening value should not exceed a promulgated standard.
7. Page 3-72, Paragraph 2: The proposed background screening value for thallium in surface water exceeds the FDWR of 2 ug/l. The background screening value should not exceed a promulgated standard.

8. Page 3-72, Paragraph 5: The proposed background screening value for cyanide in surface water exceeds the FSWCS of 5 ug/l. The background screening value should not exceed a promulgated standard.
9. Page 3-88, Paragraph 5: The proposed background screening value for benzo(a)anthracene in groundwater exceeds the proposed FDWR of 0.1 ug/l. The background screening value should not exceed a promulgated standard.
10. Page 3-94, Paragraph 5: The proposed background screening value for manganese in groundwater exceeds the FDWR of 50 ug/l. The background screening value should not exceed a promulgated standard.
11. Page 4-6, Paragraph 3: As discussed in the General Comments section of these comments, a background screening value that exceeds a promulgated standard is not a rational screening mechanism to determine if chemical concentrations require additional study and/or remediation. Promulgated standards, where applicable, should replace the calculated background screening value unless sufficient justification to the contrary can be provided.