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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REGARDING CORRECTIVE MEASURES STUDY FOR SOLID WASTE MANAGEMENT UNITS 14 AND 15 NS MAYPORT FL
2/19/2001
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

February 19, 2001

Ms. Adrienne Wilson
Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, PO Box 190010
North Charleston, SC 29419-9010

file14&15cms1.doc

RE: Corrective Measures Study for Solid Waste Management Units 14 and 15, Naval Station, Mayport, Florida

Dear Ms. Wilson:

Mr. Jorge Caspary has reviewed the above document dated December 2000 (received January 2, 2001). We have also discussed the CMS and agree that additional consideration is necessary for the document. Please adequately address Mr. Caspary's comments (attached) before the document can be considered as final.

If you need further clarification or any additional information, please feel free to contact me at 850-921-4230.

Sincerely,

James H. Cason, P.G.
Remedial Project Manager

Attachment (1)

CC: Randy Bishop, NAVSTA Mayport
Craig Benedikt, EPA Region IV, Atlanta
Terry Hansen, Tetra Tech, Tallahassee

TJB JJC ESN

Florida Department of
Environmental Protection

Memorandum

TO: James Cason, RPM
Technical Review Section

FROM: Jorge R. Caspary J.R.C.
Technical Review Section

DATE: February 8, 2001

SUBJECT: Corrective Measures Study for SWMUs 14 and 15.
Naval Air Station Mayport

I have reviewed the subject document dated November 2000 (received December 4, 2000). The document is not signed and sealed. However, it appears Mr. Michael F. Albert, P.E. of TTNUS is the responsible engineer. In accordance with Florida Statutes, the Final version of this document must be signed and sealed. I have the following comments.

General Comment

In spite of the age of the data presented in the FS, the document provides the reviewer with a good overview of the SWMU's. It also presents to the reviewer a set of alternatives that balances performance vs. cost. However, a key detail missing is that monitored natural attenuation (MNA) is presented without supporting evidence or computations leading to estimate the amount of time it will take before both SWMUs achieve groundwater standards or Corrective Action Objectives (CAOS), particularly SWMU 15. As discussed with you, MNA, once source reduction is implemented, is a sensible alternative; however, reasonable estimates of decay rates and projected compliance with groundwater standards or CAOS must be part of this document in order to make the selected alternative a defensible choice.

Specific Comments

SWMU 14

Page ES-3, Groundwater Alternative, First Paragraph: need to indicate what is a "reasonable amount of time".

Page ES-4, Groundwater Alternative, Second Paragraph: please discuss or provide a reference of where in the Station has natural attenuation for pesticides been implemented.

Page 2-52, Figure 2-4: I recommend a comprehensive round of groundwater sampling and analysis be performed before initiation of the monitoring program.

Page 2-88, Attain Media Cleanup Standards: provide computations that show 10 years as the amount of time needed to achieve compliance with standards.

SWMU 15

Page 3-10, Interim Measures-Capping: please add to one of the figures the aerial extent of the geotextile and fabric cap.

Figure 3-5: recommend the Mayport team discusses the implications of the new federal MCL for Arsenic and how does it affect the plume shown in the figure.

Page 3-40, Volume Of Contaminated Media: variable Vz (vertical seepage velocity) in the equation to estimate mixing depth is assumed to have a Kz/Kx ratio dependent on a "silty clay layer at 10 bgs". Is the clay layer continuous over the area? Further, I could not find the references cited in the equation. Recommend insertion of complete references right after the Vz computations.

Table 3-15, Screening of Technologies for Groundwater: subsurface barriers are eliminated due to "lack of a confining layer at a reasonable depth". This appears to be inconsistent with the above comment where a "silty clay layer" is considered a confining unit for computations. Further, the presence of a confining unit appears to be borne by the lack of arsenic and pesticide detection in intermediate and deep wells. Please resolve this inconsistency.

Page 3-63, Attain Media Cleanup Standards: please show computations leading to attaining groundwater standards in "10-15 years".

Page 3-79, Soil Alternative 3: LUCS, Monitoring and Asphalt Cover: please cite references where full scale operations have demonstrated that an asphalt cover does "reduce leachability potential" I was under the impression that asphalt caps, if improperly designed and mixed with their binding aggregates, will leach PAHs. Recommend exploring the possibility of a concrete cover as opposed to asphalt. If concurred by the team, please revise Present Worth costs accordingly.

Page 3-79, Soil Alternative 3: the Navy should be aware that in order to comply with RCRA and CERCLA guidance and regulations, Natural Attenuation of Arsenic and Pesticides in groundwater must be demonstrated before incorporating the remedy into the Statement of Basis and closure/post-closure permit. This document fails to do so. Likewise, I know of no studies where anaerobic conditions created by a cap are conductive to pesticide reduction/degradation in soil. Statements leading to the Department accepting the Natural Attenuation remedial alternative for soils and groundwater must be substantiated.

Page 3-92, Table 3-22: the Total present Worth Costs for Alternative 2 may need to be reviewed and adjusted if natural attenuation computations show that MCLs will not be achieved in 30 years.

Page 3-93, Long-term monitoring requirements: provide a reason for monitoring for four years when RCRA HWSA regulations call for monitoring groundwater for substantially longer periods of time (30-yrs. in most cases). Alternatively, has the 4-year time frame for monitoring been previously agreed by the FDEP's RCRA Section?

Please call me at (850) 921-9986 if you have any questions.