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Date: October 11, 1994

Ms. Brenda Norton, PE
Atlantic Division, Naval Facilities Engineering Command
Environmental Quality Division
Code: 1822
Building N 26, Room 54
1510 Gilbert Street
Norfolk, Va 23511-2699

Re: Naval Weapons Station, Yorktown, Va.
Review of draft final *Site Management Plan FY 95 and 96*

Dear Ms. Norton:

The U.S. Environmental Protection Agency (EPA) has reviewed the Navy's draft final *Site Management Plan FY 95 and 96* for the Naval Weapons Station-Yorktown NPL site (WPNSTA), and we offer the following comments and concerns:

GENERAL COMMENT

1. Please explain why Region IX Preliminary Remediation Goal (PRG) values are used in the Site Ranking process for the Naval Weapons Station. Why not use Region III Contaminant of Concern (COC) table values for soil contact and groundwater ingestion (tap water) for quantitative screening analysis?

SPECIFIC COMMENTS

1. Section 5.2.3, Page 5-9

In previous discussions between EPA and the Navy, EPA recommended that the multiple treatability studies, being simultaneously performed on explosive-contaminated soils at the Naval Weapons Station, be conducted for a two year period. Bench-scale treatability studies are usually scheduled to occur over a six-month period, however EPA-Cincinnati believes that a two year treatability study will allow for a thorough performance review of the different treatability technologies under consideration for use at the Weapons Station. Additional discussions between the Navy and EPA have resulted in the proposal to evaluate the performance status of each treatability technology every six months during the two year study. EPA requests that the requirement to conduct six month performance reviews be included in the Site Management Plan schedule for the treatability study.

Additionally, EPA-Cincinnati has recommended that site-specific pilot-scale studies also be performed on the bioremediation technology chosen for implementation at each explosive-contaminated soil/sediment site present at the Weapons Station. The reasoning behind Cincinnati's recommendation is that bioremediation technologies for soils/sediments are very sensitive to site-specific conditions, and that while a certain technology might prove effective overall during the treatability study, certain field parameters may limit its effectiveness at an individual location. With this in mind, EPA-Region

III is making the following suggestion for implementing the restoration of explosive-contaminated soil sites at the Weapons Station:

At the Weapons Station, there are currently 9 identified explosive-contaminated soil sites. During the first six-month treatability study review, it is probable that one or more bioremediation technologies will prove effective for remediating one or more explosive compounds found in the soil at the Weapons Station. EPA recommends that at the end of the first six-month treatability study review period, a feasibility study be developed to implement one of the treatability technologies under consideration. The Feasibility Study would match one of the nine explosive-contaminated soil sites with the treatability technology that is determined, from the six-month performance review, to be the most effective in remediating the individual explosive compound(s) detected in the soil/sediment at that particular site. If no particular treatability technology appears to be implementable during the first six-month review period, a deferral until the second six-month treatability review period can be made if all the Parties involved agree. Likewise, at every successive six-month treatability study review period, EPA recommends that a Feasibility Study be prepared as outlined above for the first six-month review period. Thus, during every six-month treatability review, a Feasibility Study should be initiated resulting in the development of a ROD for one or more of the current 9 explosive-contaminated soil sites.

The six-month treatability study review ultimately resulting in the issuance of a ROD(s) for the implementation of soil bioremediation also allows for the early initiation of a pilot-scale study at an individual site(s) during the design phase. Thus, the Navy can be gathering real-time data on the actual implementation of certain bioremediation technologies in the field, while the treatability (bench-scale) study continues.

EPA requests that the process for initiating Feasibility Studies, as outlined above, be incorporated into the Site Management Plan. EPA realizes that a schedule for remedial implementation at the nine individual sites may not be easily determined at this time, since it is not known which of the nine sites will "match" with a treatability technology. Additionally, at this time it is unclear as to whether all the explosive-contaminated soil sites are fully characterized or not. One suggested alternative for scheduling is to group the 9 explosive-contaminated soil sites together, and establish a requirement to submit a Feasibility Study(ies), Proposed Plan(s), and Record(s) of Decision for one or more of the nine sites based upon the timing of the six-month treatability review. Thus, essentially the Navy would have a draft Feasibility Study(ies) due so many days after each six-month treatability review. Any of the nine sites not RODed by the end of the two-year treatability study should be scheduled for a ROD in the Site Management Plan.

EPA wishes to build some rationale into the scheduling of Feasibility Studies and issuance of RODs for the possible bioremediation sites at the Weapons Station, and we are open to discussing further the possible scenarios for scheduling bioremediation RODs at the Weapons Station, if need be.

2. Table 5-5

EPA recommends that the Navy consider proposing interim action RODs for the capping of landfills present at the Naval Weapons Station, if it so desires. Landfills can be capped and groundwater monitoring wells installed, and/or surface water monitored, under an Interim Action ROD. The subsequent final ROD for such landfills will address the issue of groundwater/surface water contamination and will consider any quarterly groundwater/surface water monitoring results obtained as a result of the implementation of the Interim Action ROD. Enclosed, please find EPA Guidance on the *Presumptive Remedy for CERCLA Municipal Landfill Sites*. Please be aware of some difficulties surrounding the capping of landfills located in high water table areas adjacent to wetlands. Capping such landfills may result in releases to wetlands, i.e. the compaction of the landfill cover essentially squeezes contaminants out into the wetlands. Please consult a hydrogeologist before proposing caps on such landfills.

This concludes EPA's comments on the review of the Navy's draft final *Site Management Plan FY 95 and 96* for the WPNSTA. If you have any questions, please feel free to call me at (215) 597-1110,

Sincerely,

A handwritten signature in cursive script that reads "Robert Thomson".

Robert Thomson, PE
VA/WV Superfund Federal Facilities (3HW71)

cc: Stephen Mihalko (VDEQ, Richmond)
Valerie Walker (WPNSTA, Code 09E37)
Paul Leonard (USEPA, 3HW71)