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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
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Date: APR 20 1995

Ms. Brenda Norton, P.E.
Naval Facilities Engineering Command, Atlantic Division
Code: 1822
Building N 26, Room 54
1510 Gilbert Street
Norfolk, VA 23511-2699

Re: Naval Weapons Station, Yorktown, Va.
Sites 2, 8, 9, 11, 17, 18, and 19
Review of draft *Habitat Evaluation Report*

Dear Ms. Norton:

The U.S. Environmental Protection Agency (EPA) has reviewed the Navy's draft *Habitat Evaluation Report* for Sites 2, 8, 9, 11, 17, 18, and 19 located at the Naval Weapons Station-Yorktown (WPNSTA) NPL facility, and we have the following comments to offer:

GENERAL COMMENTS

1. Although the draft *Report* adequately presents the plant communities at the various sites, a comprehensive listing of animal species commonly found within these plant communities, in addition to the species observed during the study, would provide additional data necessary to evaluate the ecological risk to animal species posed by the sites under investigation.
2. The number of bird species and individuals observed during the study was low and justified in the report due to the inactivity of birds later in the day. In addition to this reason for the low numbers, however, is that the timing of the study (late September) was poor for observing a wide variety of species and should be noted in the report because many migrant birds have migrated through the region and left by late September.
3. The annual cycle of animal species activity within the region and at the site(s) is difficult to quantify by listing only the species observed because of naturally occurring variables such as migration and hibernation. Presenting a list of the animal species commonly associated with the different plant communities onsite would identify the variety of species that may use the site(s) for foraging or nesting throughout the year. The ecological risk assessment could then use the *Report* to identify groups of species to be evaluated.

SPECIFIC COMMENTS

1. Attached, please find comments submitted by the Fish and Wildlife Service. The EPA kindly requests that the Navy address these comments, discussing how the Navy intends to resolve the issues presented by the Fish and Wildlife Service, in letter form back to EPA.

2. Each of the site habitat evaluations, as described in Section 3.0, includes a dominance status of many of the plants; however, the Habitat Methodology, as described in Section 2.0, does not indicate how this dominance status was determined. Please expand the methodology description to include the technique(s) used to determine dominance status.
3. The purpose of the draft *Report*, as described in Section 1.0, was to provide information to design the technical approach and work plans for ecological risk assessments; however, the *Focused Biological Sampling and Preliminary Risk Evaluation of Lee Pond*, as described in Section 3.1 (page 3-1 through 3-2) discusses the human health risk from ingesting these fish, which is not relevant to the ecological receptors. Additionally, the conclusions drawn in the *Focused Biological Sampling and Preliminary Risk Evaluation of Lee Pond* may not be correct and have not been accepted by EPA. Recently, a study was conducted by Black & Veatch Waste Science, Inc. (BVWS) for the EPA which discusses, preliminarily, the ecological risk posed by Lee Pond. The findings of the BVWS study are more relevant to the habitat evaluation, and the BVWS study has been peer-reviewed and accepted by EPA. Therefore, EPA recommends incorporating the information contained in the BVWS study into the final *Habitat Evaluation Report*.
4. The representation of a genus of plants was printed incorrectly on pages 3-14 and 4-1. *Spartina* should be printed as *Spartina spp.*, to indicate the plants were identified to the genus level. Alternatively, *Spartina spp.* could be referred to as cordgrass (*Spartina spp.*).
5. The conclusions, Section 4.1 (page 4-1), do not coincide with the information provided in the report body. The beaver, a potential ecological receptor common to both the terrestrial and aquatic habitats, was not listed as present onsite in either of the summaries, but Section 3.1 (page 3-2) indicates that signs of beaver were observed at Lee Pond. The muskrat, described as present within the aquatic habitats, was not indicated as present in any of the site inventories. Only one box turtle, a potential reptilian ecological receptor, was reported as being identified during the habitat evaluation, but Section 4.1.2 indicates that box turtles were identified at multiple sites. The listing of Endangered or Threatened Species, Section 4.1.3 (page 4-2), indicates that three state-rare species are present onsite; however, Section 2.0 (page 2-1), indicates that only one state-rare species is located onsite, which is correct??
6. Within the recommendations, Section 4.2 (pages 4-3, and 4-4), the ecological risk assessment measurement endpoints should be for an ecologically significant community, which can be represented by an individual surrogate species. Using a surrogate species to model the risk to a community within a similar trophic level would allow the assessment to make conclusions regarding the risk posed by a site. For surrogates which have a home range larger than one of the sites, the home range and area of concern should be equated for a conservative assessment.

This concludes EPA's comments on the Navy's draft *Habitat Evaluation Report* for Sites 2, 8, 9, 11, 17, 18, and 19 located at the WPNSTA. If you have any questions or concerns regarding these review comments, please feel free to call me at (215) 597-1110,

Sincerely,



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

cc: Jeff Harlow (WPNSTA, Code 09E)
Susan Lingenfelter (FWS, White Marsh)