



N62269.AR.000220  
NAWC WARMINSTER  
5090.3a

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107-4431

SEP 30 1994

Mr. Orlando Monaco  
Northern Division, Code 0223  
Naval Facilities Engineering Command  
10 Industrial Highway, Mailstop #82  
Lester, Pennsylvania 19113

Re: Naval Air Warfare Center (NAWC), Warminster, PA

Dear Mr. Monaco:

The purpose of this letter is to supplement a previous EPA comment regarding the Remedial Design for OU-1 at the subject site.

In particular, a letter from EPA to the Navy dated July 6, 1994, requested that, as part of the Remedial Design for OU-1, the Navy should develop a Well Monitoring Plan which would help "ensure that the extraction system does not adversely affect nearby ...wetlands."

To supplement this comment, please find attached a memo dated August 17, 1994, prepared by Robert S. Davis, Coordinator of EPA Region III's Biological Technical Assistance Group. In the memo, concerns are expressed regarding the potential impact on wetlands from the subject pump and treat system.

To help assess the potential for wetlands impacts of concern, the Navy should consider monitoring of wetlands during pump tests conducted during the Remedial Investigation.

Should you have any questions or comments, please give me a call.

Sincerely,

Darius Ostrauskas  
Remedial Project Manager

Enclosure (1)

cc: Kathy Davies  
Robert Davis

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107

**SUBJECT:** NAWC Warminster: Wetlands Assessment      **DATE:** 8-17-94

**FROM:** Robert S. Davis, *RSD* Coordinator (3HW13)  
Biological Technical Assistance Group

**TO:** Darius Ostrausks, RPM (3HW72)  
General Federal Facilities Section

The Group has reviewed the Wetlands Assessment and offers the comments below on behalf of the FWS and EPA members.

In general, the Assessments adequately describes the wetlands associated with and downstream of the site. It also appears to have acceptably correlated the delineations with aerial photos. On the other hand, it has not provided any functional assessment of the wetlands nor any analyses regarding potentials for impacts from groundwater withdrawals. Since pump and treat is an imminent alternative under consideration, it would seem necessary that the investigator carry out an assessment of the potential for impacts.

Since it is not a determination beyond delineation, it is suggested that the investigator assume the worst case scenario. If for no other reason than economic and social well being, functional evaluation may be important. From the report it is obvious that homes are located along the creek in areas that have been developed. It is likely that these homes are within the flood plain and, further, children's toys were noted as lying very near the creek.

It is possible that functional losses of wetlands could result from dewatering of the aquifer that feeds the wetlands and stream. With these losses, it is possible that the flood-retaining capacity of the wetlands will also be lost. Such losses could, in turn, result in exacerbated flash floods that could damage homes and even endanger lives. At the very least, property values will be adversely affected as a result of unchecked floods.

Recommendation:

The Wetlands Assessment is only a representation of the wetlands delineated in the two stream systems associated with the site. These recommendations are offered for the purposes of establishing a baseline for both human health and ecological risk assessment.

- 1) The investigator should evaluate the ecological and phy-

sical functions of the wetlands found both in as well as outside the flood way that may be impacted by the proposed pump and treat alternative.

- 2) Hydrologic models of scenarios of the pump and treat alternative should be developed to evaluate social, economic, and ecological impacts.

For the first recommendation, a risk assessment using the conservative screening method attached to the prior memo on the RI Phase III Work Plan should be used. In this case, contamination should be replaced by stressors related to aquifer dewatering and the habitat changes that would be anticipated.

The second recommendation follows the first to show how impacts could be mitigated with several alternatives to show the relative impacts of each. For example, the habitat losses and changes among the scenarios could be based upon altered vegetative cover, density, diversity, abundance, etc. Ecological changes can be regarded as undesirable, especially as they relate to loss of integrity in landscape values. Alterations in landscape can be evaluated in light of both flora and fauna impacts. For example, 'weed' species may develop in place of ecologically valued wetlands species and such habitat impacts may result in diminution of bird life, etc.

Thanks for the opportunity to offer these comments and if you have any comments, please do not hesitate to contact me.