N00109.AR.001403
NWS YORKTOWN
5090.3a

COMMENTS ON DRAFT RECORD OF DECISION FOR SITE 6 EXPLOSIVE CONTAMINATED WASTEWATER NWS YORKTOWN VA
6/11/1998
NOAA

6/11/98 -01403

June 11, 1998

Ms. Barbara Okorn (3HS41)
BTAG Coordinator
EPA - Region III
841 Chestnut Street
Philadelphia, PA 19107

RE: NWS Yorktown

Dear Ms. Okorn:

Thank you for the opportunity to provide comments on the draft Record of Decision, Operable Unit Nos. XII, XIII, XIV, and XV, Site 6 Explosives-Contaminated Wastewater Impoundment and Site 7 - Plant 3 Explosives- Contaminated Wastewater Discharge Area, Naval Weapons Station Yorktown, Yorktown, Virginia. The following comments are made on behalf of the National Oceanic and Atmospheric Administration (NOAA).

The selected remedies for Ous XIII, XIV, and XV at Site 6 should reduce or eliminate exposure of ecological receptors to potentially toxic concentrations of contaminants of concern, and thus should be protective of NOAA trust resources that use Felgates Creek.

Based on review of the ROD, as well as the review of the Interim Final Round Two Remedial Investigation Report for Sites 6 and 7, surficial sediment and surface water data collected in Felgates Creek downstream of Site 6 did not indicate that contaminants occurred at concentrations that would pose substantial risk to NOAA trust resources. Contaminants in the wetland sediments do not appear to be transported to any substantial degree to Felgates Creek, and so probably pose little risk to NOAA trust resources. However, it is possible that contamination in the wetland could pose a risk to other biota that use the wetland. Of particular concern are the PAHs that occur at elevated concentrations in the surficial sediments. Additionally, there is the possibility that burrowing organisms could come in contact with extremely high concentrations of a number of nitramine compounds. Due to the fact that this wetland is primarily dominated by Phragmites sp., the use of this wetland by other biota may be less than other tidal marshes in Felgates Creek area.

The areas in the wetland above the impoundment area dam had the highest concentrations of total PAHs and nitramine compounds and the highest frequency of detection of these compounds. From NOAA's standpoint, it does not appear that the wetland poses any substantial risk to its trust resources, so that wetland remediation will probably have little, if any, noticeable impact on habitats used by NOAA resources. However, the selected remedies should reduce or eliminate any further transport of contaminants from Site 6 to Felgates Creek.

The selected Final Remediation Goals (FRGs) were the ERM values, for those compounds and substances for which ERMs were available (see Table 1 attached). No ERMs were available for the VOCs trichloroethene and 1,2-dichloroethene or for the ordnance compounds HMX and 1,3,5-TNB. Considering that the VOCs generally are of low toxicity and are not environmentally persistent, the FRGs for these compounds should be protective of potential receptors.

Relatively little is known about the environmental fate and toxicity of HMX and 1,3,5-TNB. HMX is unreactive and degrades slowly in environmental media. It is persistent in aquatic and terrestrial environments. No information was found that discussed the bioavailability or food chain bioaccumulation of HMX, but data for RDX, another nitramine compound, seem to indicate that food chain bioaccumulation is unlikely. No information was found on the environmental fate and toxicity of 1,3,5-TNB. The protectiveness of the FRGs for the ordnance compounds is difficult to assess, but the fact that the selected remedy includes long-term monitoring of sediment, surface water, and groundwater for nitramines and nitroaromatics in the impoundment area should help to track trends in concentrations of these compounds following remediation.

If you have any questions, please contact me at (215) 566-3321.

Sincerely,

Peter T. Knight
NOAA - Coastal Resource Coordinator

Attachment: as stated

Table 1. Summary of Final Remediation Goals for contaminants of concern in Site 6 sediments compared to their ERM concentrations (Long et al. 1995).

Chemical	Final Remedial Goal (mg/kg)	ERM (mg/kg)
Trichloroethene	1.6	NA
1,2-Dichloroethene	3.5	NA
Total PAHs	44	44.8
HMX	5.7	NA
1,3,5-TNB	1.6	NA
Cadmium	9.6	9.6
Mercury	0.7	0.7
Nickel	52	52
Zinc	410	410

NA Not available