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NWIRP CALVERTON  
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LETTER REGARDING NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION REVIEW OF OPTIONS EVALUATION REPORT FOR FENCE LINE  
GROUNDWATER EXTRACTION, TREATMENT AND DISCHARGE SYSTEM AT SITE 6A  
NWIRP CALVERTON NY  
07/25/2011  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# New York State Department of Environmental Conservation

## Division of Environmental Remediation

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Joe Martens  
Commissioner

JUL 25 2011

Ms. Lora Fly  
Remedial Project Manager (Code OPNEEV)  
Facilities Engineering Command, Mid-Atlantic Naval Facilities  
Engineering Command Building Z-144  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Re: July 19, 2011 Options Evaluation Report for the Fence Line Groundwater Extraction, Treatment and Discharge System at Site 6A – Southern Area, Naval Weapons Industrial Reserve Plant (NWIRP), Calverton, New York

The New York State Department of Environmental Conservation (the Department) has reviewed the referenced report.

The report evaluates two extraction options to achieve fence line control of the plume. Option 1 targets water with DCA concentrations greater than 500 ug/l. Option 2 targets groundwater with DCA concentrations greater than 5 ug/l. The report also evaluates two options for the treatment system. Treatment option A is a Granular Activated Carbon (GAC) system. Treatment option B is air stripping.

Our understanding of the pertinent characteristics of these options is summarized in the table below.

	Option 1	Option 2
Target Concentration	>500 ug/l	5 ug/l
Number of Wells	5	3
Pumping Rate	15 GPM	100 GPM
Time to Cleanup		
Fence-line Contaminant Reduction	67%	90%
4 year Cost (Capital Cost and Maintenance) – GAC Treatment	\$1,980,000	\$2,290,000
4 year Cost (Capital Cost and Maintenance) – Air Stripper Treatment	\$1,866,000	\$2,237,000
Expected Duration of Remedy*	2 – 8 years	2 – 8 years

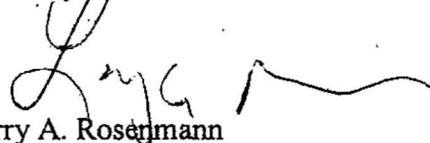


Based on this information, it appears that there are no significant cost, or other benefits associated with the less protective, Option 1. In fact, the Department expects the time until cleanup with Option 2 to be shorter than that for Option 1 because the higher pumping rate is likely to increase the flow rate of contaminants along the length of the plume. Further, Option 2 clearly addresses the Department's first remedial priority, to eliminate contaminant migration past the fence line as soon as possible.

This report is approved and the Navy is requested to prepare a Basis of Design Report for Option 2 that targets groundwater with VOCs at concentrations greater than 5 ug/l. In addition, the Department encourages the Navy to rigorously monitor the source area near the Fuel Calibration Area and to implement additional source control measures, if needed, to protect human health and the environment.

If you have any questions, please contact me or Henry Wilkie at (518) 402-9625 or by email at [larosenm@gw.dec.state.ny.us](mailto:larosenm@gw.dec.state.ny.us) or [Hjwilkie@gw.dec.state.ny.us](mailto:Hjwilkie@gw.dec.state.ny.us).

Sincerely Yours



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