



**DEPARTMENT OF THE NAVY**  
**OFFICE OF THE ASSISTANT SECRETARY**  
**(ENERGY, INSTALLATIONS AND ENVIRONMENT)**  
**1000 NAVY PENTAGON**  
**WASHINGTON, DC 20350-1000**

September 6, 2019

Mr. Basil Seggos  
Commissioner  
New York State Department of  
Environmental Conservation (NYSDEC)  
625 Broadway  
Albany, NY 12233-1011

Dear Commissioner Seggos,

Enclosed please find the Department of the Navy (DON) comments on NYSDEC's Feasibility Study and proposed Amended Record of Decision (collectively addressed herein as "AROD") that seek to address groundwater contamination in the vicinity of properties previously owned by the DON and Northrop Grumman. As the lead federal agency responsible for the remediation of contamination emanating from DON property, DON will further evaluate the information provided in the NYSDEC AROD as part of its ongoing cleanup process under the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA). As more fully explained in the enclosed comments, the DON has the following overarching concerns:

- The AROD proposes a remedy that will directly compete with DON's ongoing remediation, reducing the effectiveness of DON's remedy;
- The AROD asserts that the proposed new actions are necessary to protect human health, and yet that protection comes entirely from existing remedies (hot spot treatment, well-head treatment, and the On-Site Containment System (ONCT));
- The AROD fails to address that the heterogeneity of the Long Island's aquifer system will impair hydraulic containment of the plume;
- The AROD fails to address the significant implementation challenges of acquiring property interests for locating wells/pipes in non-public locations, particularly the challenges of the likely necessity to acquire such interests through condemnation actions;
- The AROD fails to address the significant community disruption in the installation of such a vast network of extractions wells, connecting pipes, and treatment systems;
- The AROD is incomplete as it fails to provide the necessary level of technical detail required for a rigorous scientific review;
- The AROD does not comply with New York's cleanup process requirements applicable to state actions, particularly for analysis of feasibility, risk reduction and achievement of remedial action objectives;
- The AROD fails to comply with the National Contingency Plan;

- The new Remedial Action Objective of hydraulic containment for off-property contamination is inconsistent with previous NYSDEC Records of Decision (RODs) for other similarly contaminated groundwater plumes in this region;
- The AROD provides no assessment of human health or ecological risk or the reduction of risk attributable to any of the remedy alternatives;
- The AROD fails to adequately assess whether the cost of the proposed remedy is proportional to the overall effectiveness;
- The AROD does not assess remedy effectiveness because it only describes the behavior of groundwater – it never addresses the behavior of the contamination itself, by evaluating contaminant fate and transport over time to determine plume migration; and
- The AROD does not describe the consequences to public water supply wells from impacts to groundwater capture areas and distortions of regional contaminant plumes caused by the proposed containment wells.

The inadequacies of the AROD are largely traceable to the very genesis of the requirement to produce this study in the first place. The AROD is the product of a 2014 New York law (A9492) that directed NYSDEC to develop a remediation plan focused on hydraulic containment. The passage of this law marked a dramatic turning point from a collaborative, science-based, and legally-grounded remediation strategy to a reverse-engineered, pre-determined outcome strategy. Before this law, NYSDEC and the DON, in consultation with New York State Department of Health (NYSDOH), U.S. Geological Survey (USGS), U.S. Army Corps of Engineers (USACE) and Nassau County Department of Health (NCDOH), worked together to develop remediation plans to protect human health and the environment. In 2001, NYSDEC issued its state-based ROD, mandating several actions for those subject to its jurisdiction. In exercising its lead agency authority under federal law, the DON then issued its own CERCLA ROD in 2003, largely incorporating the appropriate portions of the 2001 NYSDEC ROD. The State and the DON thus arrived at a common strategy, supported by a common understanding of the underlying scientific challenges at the time. This strategy had the benefit of emerging through the application of the respective governing legal frameworks, thereby ensuring scientific integrity, public transparency, and reasoned decision-making.

The NYSDEC/DON strategy was also a dynamic, iterative process. Per CERCLA and with the concurrence of NYSDEC, the DON has conducted Five-Year Reviews of the ongoing remedy to determine its continued protectiveness. In addition, the DON has specifically assessed the remedy during two other significant studies. The first assessment was detailed in the *Remedy Optimization Team Report* in 2011. For this study, the DON convened a team of independent nationally-recognized experts to evaluate the effectiveness of the ongoing remedy and recommend potential future steps for optimizing the remedy. This team consisted of third-party technical experts from USGS, industry and academia.

The 2011 *Optimization Report* was followed by the 2012 *Study of Alternatives for Management of Impacted Groundwater*. This study concluded that the OU2 ROD remedy remains protective of the public water supplies in the area (i.e., that considerable plume capture is ongoing via the ONCT, hot spot treatment, and capture in treatment systems for potentially impacted public water supply wells). NYSDEC and the U.S. Environmental Protection Agency

concluded with these conclusions. This report also identified several disadvantages associated with attempting to implement off-property plume or hydraulic containment, including:

- The continued inability to completely eliminate potential impacts to downgradient public water supply wells that would still necessitate treatment on public water supply wells;
- The potential adverse impacts to the operation of supply wells located near new extraction wells;
- The extensive use of resources that provide little benefit to reduce risk; and
- The disruption of transportation, commerce, and residents during construction.

When the New York bill was first sent to the Governor for signature, the DON expressed its concern, while noting the consensus conclusion of highly qualified engineers and scientists that full plume containment was technically and practically infeasible. The DON was not alone in objecting to this legislation: NYSDEC and NYSDOH both recommended disapproval. NYSDEC, in particular, strongly opposed the legislation:

In sum, this bill calls for a study which has already been conducted, undermines Executive discretion and replaces the work of experts with political judgment and if DEC is expected to implement this bill, would cost the State Superfund nearly \$200 million which would likely not be recovered from the responsible parties.

In the face of these objections, the bill was nevertheless enacted into law.

The DON, for its part, will continue its ongoing remediation while expeditiously working through the 2019 Five-Year Review process for the DON's existing, ongoing OU2 remedy, as required by CERCLA. That process is currently underway. Through this statutorily-mandated process, the DON will evaluate the continued protectiveness of its remedy, including whether the remedy is functioning as intended and whether the assumptions used in the development of the remedy remain valid. It is through this process that the DON will continue to evaluate NYSDEC's proposed AROD. The DON will continue to cooperate with NYSDEC and other stakeholders as the Five-Year Review proceeds.

Sincerely,



Karnig Ohannessian  
Deputy Assistant Secretary of the Navy  
(Environment)

Enclosure