

N90845.AR.001057
NWIRP BETHPAGE
5090.3a

LETTER REGARDING NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION COMMENTS ON THE REMOVAL OF SUB SLAB DEPRESSURIZATION
SYSTEM AT HOME NUMBER 3 NWIRP BETHPAGE NY

9/15/2010

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

New York State Department of Environmental Conservation

Division of Environmental Remediation

Remedial Bureau A, 11th Floor

625 Broadway, Albany, New York 12233-7015

Phone: (518) 402-9625 • Fax: (518) 402-9627

Website: www.dec.ny.gov



Alexander B. Grannis
Commissioner

September 15, 2010

Lora fly
Naval Facilities Engineering Command Midlant
9742 Maryland Avenue
Norfolk, VA 23511-3095

RE: Naval Weapons Industrial Reserve Plant Site
(NWIRP)-Bethpage, Nassau County, Site No.
130003B.

Dear Ms. Fly:

The Department of the Navy (Navy) has submitted a request via e-mail to the New York State Department of Environmental Conservation (NYSDEC) to remove a sub-slab depressurization system (SSDS) at home No. 3. This SSDS system was one of six systems installed as part of remedial work related to Site 1 of the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage facility. The Navy needs to submit an SSDS termination plan in order for a determination to be made whether to remove one or more of these SSDS systems.

The SSDS systems associated with Site 1 have been installed, along with an active soil vapor extraction system, between Site 1 and the nearby homes on 10th and 11th Streets. The Navy's goal is to have the active systems replace the need for continued SSDS operation. This SSDS termination plan will be reviewed by the NYSDEC and the NYSDOH in conjunction with the Nassau County Department of Health (NCDH). Section 4.3.5 and section 4.5 of the NYSDOH document entitled "Guidance for evaluating Soil Vapor Intrusion in New York" is enclosed for your reference in preparing this termination plan.

If you have any questions, please contact me at your earliest convenience at (518)402-9620.

Sincerely,

Steven M. Scharf, P.E.

Project Engineer

Division of Environmental Remediation

Bureau of Remedial Action A

Enclosure

4.3.5 SVE systems designed to also mitigate exposures

- a. Backdrafting conditions should be evaluated and corrected [Section 4.3.1].
- b. The distance that a pressure change is induced in the sub-slab area should be conducted. This may be done by operating the SVE system and simultaneously observing the movement of smoke downward into small holes (e.g., 3/8 inch) drilled through the building's slab at sufficient locations to demonstrate that a vacuum is being created beneath the entire slab.
- c. Adequate operation of the warning device or indicator, if applicable, should be confirmed.
- d. Post-mitigation indoor and outdoor air testing should be conducted in buildings where pre-mitigation samples were collected [Section 4.3.1].

4.5 Termination of mitigation system operations

Mitigation systems should not be turned off, until the State receives, and has had the opportunity to comment on, a proposal to turn off mitigation systems. The party seeking to turn off the mitigation systems should consider any comments the State may have on the proposal, except in emergency situations. Systems should remain in place and operational until they are no longer needed to address current or potential exposures related to soil vapor intrusion. This determination should be based upon several factors, including the following:

- a. subsurface sources (e.g., groundwater, soil, etc.) of volatile chemical contamination in subsurface vapors have been remediated based upon an evaluation of appropriate post-remedial sampling results;
- b. residual contamination, if any, in subsurface vapors is not expected to affect indoor air quality significantly based upon soil vapor and/or sub-slab vapor sampling results;
- c. residual contamination, if any, in subsurface vapors is not affecting indoor air quality when active mitigation systems are turned off based upon indoor air, outdoor air and sub-slab vapor sampling results at a representative number of buildings; and
- d. there is no "rebound" effect for which additional mitigation efforts would be appropriate observed when the mitigation system is turned off for prolonged periods of time. This determination should be based upon indoor air, outdoor air and/or subslab vapor sampling from the building over a time period, determined by site-specific conditions.

Given the prevalence of radon throughout the State of New York, consideration should be given to leaving the system in place and operating to address exposures related to radon intrusion after concurrence is reached that the system is no longer needed to mitigate exposures related to soil vapor intrusion. This action should be done only with permission of the property owner and after the property owner is aware of their responsibilities in operating, monitoring and maintaining the system for this specific purpose. If the property owner declines the offer, the system should be shut down and, if requested, removed in a timely manner.