

## **USEPA Briefing**

### **NWIRP and Northrop Grumman Corporation**

**Other (Former) Names of Site:** NWIRP - Bethpage, Grumman Aerospace Corporation

#### **Site Description**

- The combined Northrop Grumman (Grumman Aerospace) and former Naval Weapons Industrial Reserve Plant Site (NWIRP) Facility is situated on 605 acres in the Town of Oyster Bay, Bethpage, New York.
- Approximately 105 of the 605 acres are occupied by the NWIRP, a Government Owned Contractor Operated (GOCO) facility.
- The Northrop Grumman Corporation was established in the early 1930s, and NWIRP-Bethpage was established in 1941. Activities conducted at the facility included engineering, administrative, research and development, and testing operations, as well as manufacturing operations for the Navy and NASA.
- The facility also had an active airfield. Both Northrop Grumman and the NWIRP had numerous industrial groundwater supply wells and recharge basins. The manufacturing portion of the Northrop Grumman and the complete NWIRP facility are now closed.
- The facility is surrounded by industrial and commercial facilities along with several residential communities. There are a number of public supply wells located within a two-mile radius of the facility.
- All public water is drawn from the Nassau-Suffolk aquifer system, which was designated a sole-source aquifer by EPA in 1975.
- This is a RCRA permitted storage facility in an authorized State. Both the Navy and Grumman are listed as responsible parties in the 6 NYCRR Part 373 hazardous waste permit and are class 2 inactive hazardous waste sites pursuant to 6 NYCRR Part 375.
- As the facility no longer operates, the hazardous waste permit now covers only the on-site corrective action requirements for cleaning up the area formerly operated by Grumman. Groundwater remediation (both on-site and off-site) is being conducted under the authority of NYSDEC's Division of Environmental Remediation (Part 375).

- NYSDEC issued Records of Decision under Part 375 for site soils in 1995 (OU1) and for groundwater (OU2) in March 2001. OU1 deals with source area(s) and OU2 deals with groundwater onsite containment (ONCT), offsite groundwater hotspot removal, a wellhead treatment contingency program and long term groundwater monitoring for the regional groundwater involving both the Northrop Grumman and Navy sites.

### **Potential Threats and Contaminants**

- A plume of groundwater contaminated with volatile contaminated compounds (VOCs) is approximately 3,000-plus acres and extends south of Hempstead Turnpike and extends in some areas to a depth of approximately 750 feet.
- Three of the Bethpage Water District (BWD) well fields have been impacted by the plume and VOC treatment has been in place for over 10 years. AQUA NY well field has recently been impacted and VOC (Trichloroethene) concentrations are increasing in the well field. Design for treatment at AQUA NY is almost complete and construction is slated to begin first quarter federal fiscal year 2010-11.

### **Cleanup Approach and Progress**

- Construction by the Navy of an offsite groundwater hot spot remediation system (GM-38 Area) was completed in December 2009 and currently is in operation.
- The Navy recently completed negotiations with South Farmingdale Water District for treatment on two of its well fields.
- In 2009, six additional vertical profile borings (VPBs), in addition to over thirty other VPBs, were installed to establish depth-specific contamination. The latest borings were drilled to a depth of 750 to 841 feet below ground surface (bgs). The Navy submitted a work plan for additional vertical profile borings and monitoring wells for regulatory comment in May 2010. The Navy finalized this work plan in September 2010.
- The Navy is working on selecting a location for a clustered outpost well location for the Massapequa Water District. The Navy has indicated that it first would install another sentry well upgradient of the AQUA NY well field. After that, it would install a sentry well for Massapequa using the information gained from the additional AQUA NY well. If this strategy were used, the

scheduling of a sentry well for Massapequa would be approximately a year from now.

- In accordance with the remedial objectives set forth in the 2001 OU-2 ROD, Northrop Grumman Corporation continues to operate and maintain the Onsite Groundwater Containment system. Northrop Grumman certifies that the system is operating properly and successfully.
- Northrop Grumman continues to collect groundwater samples as part of the long term groundwater monitoring for the regional groundwater to collect regional groundwater samples from 77 wells in accordance with Public Water Supply Contingency Plan and the ROD.

### **Massapequa Water District Issue**

- An August 27, 2010 letter from U.S. Senator Charles Schumer to Administrator Lisa Jackson and Hon Ray Mabus, Secretary of the Navy, requested that a joint emergency field meeting be conducted in order to put in place a plan for cleaning up the plume from this facility.
- On June 7, 2010 and July 29, 2010, the Massapequa Water District wrote letters to the NYSDEC Commissioner on this subject as well.
- The Massapequa Water District's website expresses its position that wellhead treatment for off-site groundwater contamination is unreliable and not suitable for its own District.
- Northrop Grumman operates and maintains the Onsite Containment System (ONCT) and submits an annual report to the NYSDEC, the Navy and the Water Districts regarding its effectiveness. NYSDEC concurs that the source of the groundwater contamination has been completely contained by the Onsite Containment System (ONCT), and that the off-site plume is from contamination that migrated off-site before the remediation system was in place.
- The Navy and NYSDEC also maintain that treating the entire off-site plume is not feasible due to the immense area that the plume covers.
- The August 27, 2010 letter from Senator Schumer states the following: "I am aware that the EPA determined many years ago that the groundwater remedy at the site was operating properly and successfully."
  - We have no indication that this conclusion was made by EPA. As noted above, this is a state-authorized program, with EPA having an oversight

role. NYSDEC reviews and concurs annually on a report regarding the effectiveness of the on-site groundwater containment system which controls the source.

- The off-site plume is still being defined due to its complex nature. As a result, the CA750 determination (migration of contaminated groundwater under control) for this site has not yet been achieved.
- Under the provisions of the Safe Drinking Water Act, EPA allows for wellhead treatment, as long as drinking water standards (MCLs) are met.