



Infrastructure, buildings, environment, communications

Mr. Steven Scharf
Project Manager
New York State Department of Environmental Conservation (NYSDEC)
Remedial Action, Bureau A
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

ARCADIS G&M, Inc.
88 Duryea Road
Melville
New York 11747
Tel 631 249 7600
Fax 631 249 7610
www.arcadis-us.com

ENVIRONMENTAL

Subject:

Interim Data Report for Outpost Well OW2-2, Northrop Grumman Corporation and Naval Weapons Industrial Reserve Plant Sites, Bethpage, New York. (NYSDEC Site #s 1-30-003A and B)

Date:
19 July 2004

Dear Mr. Scharf:

Contact:
Mike Wolfert

ARCADIS has prepared this Interim Data Report on behalf of Northrop Grumman Corporation (NGC) and the U.S. Navy to serve as formal notification of the analytical results of groundwater samples collected from Outpost Well OW2-2. As you will recall, Outpost Well OW2-2 was installed to provide early warning of the advance of the groundwater plume toward South Farmingdale Water District Public Supply Well N-6150. The following text summarizes groundwater sample collection and analytical procedures, the data evaluation process, and provides our findings and conclusions.

Phone:
(631) 391-5238

Email:
mwolfert@arcadis-us.com

In general, the outpost wells were purged and sampled using a dedicated submersible pump and packer system following methodologies approved by the NYSDEC. Groundwater samples were analyzed in the laboratory for the Target Compound List (TCL) volatile organic compounds (VOCs), using United States Environmental Protection Agency Method 502.2. You will recall that the modeling performed by ARCADIS in support of development of the Public Water Supply Contingency Plan (ARCADIS G&M, Inc. 2003) determined that OW2-2 was located at a distance hydraulically upgradient of Well N-6150 that corresponds to less than five years of groundwater travel time; therefore, a trigger value was not established for Well OW2-2.

The groundwater quality data from Well OW2-2 are provided in Table 1. The subject well was sampled on May 3, 2004. As a conservative measure, based on a detection of one site-related VOC from the May 3rd sampling event, the well was re-sampled on May 27th and June 4, 2004 to confirm the May 3rd results. The results of the May 27th and June 4th confirmation sampling events showed that VOCs were not detected. The results were validated by ARCADIS and determined to be representative of current water quality conditions and indicate that the groundwater plume comprised of site-related VOCs has not impacted Well OW2-2.

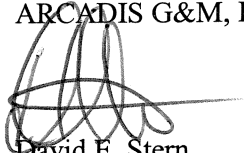
ARCADIS

Mr. Steven Scharf
19 July 2004

If you have any questions or need additional information, please feel free to contact us.

Sincerely,

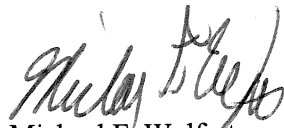
ARCADIS G&M, Inc.



David E. Stern
Senior Hydrogeologist



Carlo San Giovanni
Project Manager



Michael F. Wolfert
Project Director

Enclosures

Copies:

John Cofman, Northrop Grumman
Larry Leskovjan, Northrop Grumman
James Colter, NAVFAC Northern Division
Ian Ushe, NYSDOH
Edoardo Licci, South Farmingdale Water District
Gary Loesch, H2M

Table 1. Concentrations of Site-Related Volatile Organic Compounds Detected in Outpost Well OW2-2, Northrop Grumman Corporation, Bethpage, New York. ⁽¹⁾

CONSTITUENT (Units in ug/L)	NYSDEC Standards Criteria and Guidance Values ⁽²⁾	WELL:	OW 2-2	OW 2-2	OW 2-2
		SAMPLE ID:	OW2-2	OW-2-2	OW-2-2
		DATE:	05/03/2004	05/27/2004	6/4/2004
Chlorobenzene	5		<0.50	<0.50	<0.50
1,1-Dichloroethene	5		<0.50	<0.50	<0.50
1,1-Dichloroethane	5		<0.50	<0.50	<0.50
trans-1,2-Dichloroethene	5		<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	5		<0.50	<0.50	<0.50
Chloroform	7		<0.50	<0.50	<0.50
1,2-Dichloroethane	5		<0.50	<0.50	<0.50
1,1,1-Trichloroethane	5		<0.50	<0.50	<0.50
Carbon tetrachloride	5		<0.50	<0.50	<0.50
Trichloroethene	5		0.82	<0.50	<0.50
1,1,2,2-Tetrachloroethane	5		<0.50	<0.50	<0.50
Tetrachloroethene	5		<0.50	<0.50	<0.50
Freon-113 *	5		<0.50	<0.50	<0.50
1,1,2-Trichloroethane	5		<0.50	<0.50	<0.50
Total Site-Related VOCs:			0.82	0.00	0.00
Well Cluster OW-2 TVOC Trigger Value: ⁽¹⁾			NE	NE	NE

Footnotes:

- ⁽¹⁾ Site-related VOCs and trigger values were established in the Public Water Supply Contingency Plan (ARCADIS G&M, Inc. 2003). A trigger value for Well OW2-2 was not established since modeling determined that this well is located a distance upgradient of SFWD Well N-6150 that corresponds to less than five years of groundwater travel time.
- ⁽²⁾ Standards, Criteria, and Guidance (SCG) values based on documents referenced in the OU2 Feasibility Study Report (ARCADIS Geraghty & Miller, Inc. 2000); most stringent value listed.

General Notes:

- Results analyzed and reported as a NYSDEC Category A deliverable per the NYS DER-10 Guidance Document (NYSDEC 2002).
- Samples analyzed by EPA Method 502.2, as specified in the OU2 Record of Decision.
- Results were validated by ARCADIS by following the contract laboratory program national functional guidelines for organic data review (USEPA 1999).

Definitions:

- OU2 Operable Unit 2
- VOCs Volatile organic compounds
- TVOCs Total volatile organic compounds
- ug/L Micrograms per liter
- NYSDEC New York State Department of Environmental Conservation
- SFWD South Farmingdale Water District
- * Freon 113 also known as 1,1,1-Trichloro-2,2,2-trifluoroethane.
- NE None Established

Bold value indicates a detection.