

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

Subject:  
October 2010 Monthly Progress Report  
Northrop Grumman Systems Corporation  
Operable Unit 3, NYSDEC Site ID # 1-30-003A,  
Bethpage, New York

Dear Steve:

In accordance with Section III of Administrative Order on Consent (AOC) Index # W1-0018-04-01, this letter reports Operable Unit 3 (OU3) activities performed by Northrop Grumman Systems Corporation (Northrop Grumman) during the month of October 2010. Activities planned for November 2010 are also discussed.

### **OU3 Activities Conducted During October 2010**

#### **Site Area and Study Area Remedial Investigation/Feasibility Studies (RI/FS)**

- Continued preparation of Study Area Feasibility Study (FS).

#### **Soil Gas IRM**

- Continued Operation, Maintenance, and Monitoring (OM&M) of the Soil Gas Interim Remedial Measure (IRM)

#### **Groundwater IRM**

- Continued OM&M of the Groundwater IRM
- Performed the 4<sup>th</sup> Quarter sampling, including the annual groundwater monitoring event.

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ENVIRONMENT

Date:  
November 9, 2010

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Our ref:  
NY001496.0910.00007

**Other**

- Performed monthly monitoring of Monitoring Well MW116-5
- Current validated analytical data associated with the sampling of the Study Area Monitoring Well MW-116-5 are provided in Table 1. Well locations are shown on Figure 1.
- Submitted the September 2010 AOC Monthly Progress Report to the NYSDEC

**OU3 Activities Scheduled November 2010****Site Area and Study Area RI/FSs**

- Continue to prepare the Study Area FS.

**Soil Gas IRM**

- Continue routine OM&M of the Soil Gas IRM
- Submit the 3<sup>rd</sup> Quarter 2010 OM&M Report to the NYSDEC

**Groundwater IRM**

- Continue routine OM&M of the Groundwater IRM
- Submit the 3<sup>rd</sup> Quarter 2010 OM&M Report to the NYSDEC

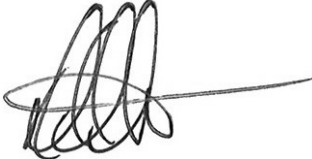
**Other**

- Perform the November 2010 monitoring of Monitoring Well MW116-5
- Submit the October 2010 AOC Monthly Progress Report to the NYSDEC

Feel free to call us if you have any questions.

Sincerely,

ARCADIS of New York, Inc.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

David E. Stern  
Senior Scientist/Associate Project Manager

Copies:

J. Cofman, Northrop Grumman  
K. Smith, Northrop Grumman  
E. Hannon, Northrop Grumman  
C. Henry, EMAGIN  
Bethpage Public Library – Public Repository  
C. San Giovanni, ARCADIS  
M. Wolfert, ARCADIS  
File, ARCADIS



Table 1. Concentrations of Volatile Organic Compounds in Groundwater Samples Collected from Monitoring Well MW-116-5, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

Compound (ug/L)	Location ID: Sample Date:	MW-116-5 8/25/2010	MW-116-5 9/20/2010
1,1,1-Trichloroethane		< 50	< 50
1,1,1,2-Tetrachloroethane		< 50	< 50
1,1,2-Trichloroethane		< 50	< 50
1,1-Dichloroethane		< 50	< 50
1,1-Dichloroethene		< 50	<b>3.6 J</b>
1,2-Dichloroethane		<b>8.4 J</b>	<b>9.0 J</b>
1,2-Dichloropropane		<b>5.1 J</b>	<b>5.1 J</b>
2-Butanone		< 500	< 500
2-Hexanone		< 500	< 500
4-methyl-2-pentanone		< 500	< 500
Acetone		< 500	<b>9.5 J</b>
Benzene		< 7.0	< 7.0
Bromodichloromethane		< 50	< 50
Bromoform		< 50	< 50
Bromomethane		< 50	< 50
Carbon Disulfide		< 50	< 50
Carbon tetrachloride		< 50	< 50
Chlorobenzene		< 50	< 50
Chlorodifluoromethane (Freon 22)		< 50	< 50
Chloroethane		< 50	< 50
Chloroform		<b>15 J</b>	<b>15 J</b>
Chloromethane		< 50	< 50
cis-1,2-dichloroethene		<b>190</b>	<b>160</b>
cis-1,3-dichloropropene		< 50	< 50
Dibromochloromethane		< 50	< 50
Dichlorodifluoromethane (Freon 12)		< 50	< 50
Ethylbenzene		< 50	< 50
Methyl tert-Butyl Ether		< 50	< 50
Methylene Chloride		< 50	< 50
Styrene		< 50	< 50
Tetrachloroethene		< 50	< 50
Toluene		< 50	< 50
trans-1,2-dichloroethene		<b>3.5 J</b>	< 50
trans-1,3-dichloropropene		< 50	< 50
Trichloroethylene		<b>1900</b>	<b>2100 D</b>
Trichlorofluoromethane (Freon 11)		< 50	< 50
Trichlorotrifluoroethane (Freon 113)		< 50	< 50
Vinyl Chloride		< 20	< 20
Xylene-o		< 50	< 50
Xylenes - m,p		< 50	< 50
<b>TVOC</b>		<b>2100</b>	<b>2300</b>

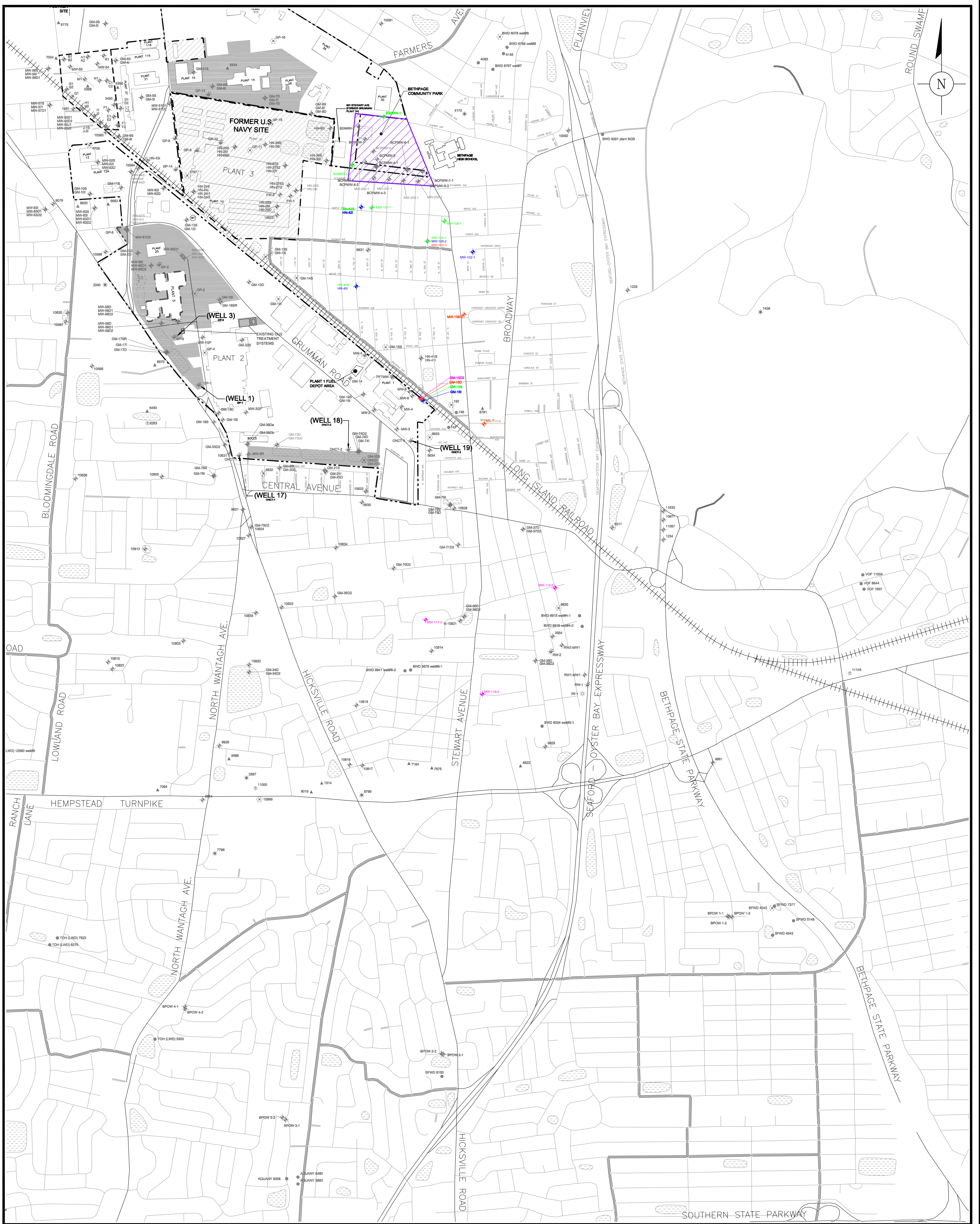
**Notes and Abbreviations:**

Results validated following protocols specified in March 2006 RI/FS Work Plan (ARCADIS G&M, Inc. 2006).  
 Samples analyzed for the TCL VOCs using NYSDEC ASP Method 2000 OLM4.2.

**Bold value indicates a detection.**

- RI/FS Remedial Investigation/Feasibility Study.
- NYSDEC New York State Department of Environmental Conservation.
- TCL Target compound list.
- VOC Volatile Organic Compound.
- TVOC Total Volatile Organic Compounds
- ASP Analytical services protocol.
- ug/L Micrograms per liter.
- J Value is estimated.

XREFS: IMAGES: PROJECTNAME: NY001493.0809.00008  
 offsite



EXPLANATION:

- |       |  |   |  |
|-------|--|---|--|
| ----- | PROPERTY BOUNDARY OF THE FORMER GRUMMAN AEROSPACE PROPERTY | + | OBSERVATION, MONITORING WELL             |
| ----- | PROPERTY BOUNDARY OF THE FORMER U.S. NAVY PROPERTY         | ▲ | INDUSTRIAL WELL                          |
| ----- | PROPERTY BOUNDARY OF THE FORMER OCC PROPERTY               | ● | PUBLIC SUPPLY WELL                       |
| +++++ | LONG ISLAND RAILROAD                                       | * | IRRIGATION WELL                          |
| ■     | DENOTES NORTHROP GRUMMAN OWNED PROPERTY                    | ✦ | INJECTION WELL                           |
| ▨     | DENOTES FORMER U.S. NAVY OWNED PROPERTY                    | ✦ | NORTHROP GRUMMAN OR NAVY PRODUCTION WELL |
| ■     | RECHARGE BASIN   | ⊗ | ABANDONED WELL                           |
| ■     | SITE AREA  |   |  |

DESIGNATION OF HYDROGEOLOGIC ZONE FOR MONITORING WELL SCREENED INTERVALS (ARCADIS 2003)

- |   |              |
|---|--------------|
| ■ | SHALLOW      |
| ■ | INTERMEDIATE |
| ■ | DEEP         |
| ■ | DEEP2        |

NOTES:

- HYDROGEOLOGIC ZONE BASED ON MODEL LAYER ELEVATIONS PRESENTED IN COMPREHENSIVE GROUNDWATER MODEL (ARCADIS 2003).



NORTHROP GRUMMAN SYSTEMS CORPORATION  
 OPERABLE UNIT 3  
 (FORMER GRUMMAN SETTLING PONDS)  
 BETHPAGE, NEW YORK

STUDY AREA SHOWING  
 MONITORING WELL LOCATIONS



FIGURE

1

ALL COORDINATES REFERENCED TO NORTH AMERICAN DATUM 1983