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ENVIRONMENT

Date:

December 10, 2015

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Our ref:

NY001496.0114.LARA5

Subject:

November 2015 Monthly Progress Report
Northrop Grumman Systems Corporation
Operable Unit 2, NYSDEC Site ID # 1-30-003A,
Bethpage, New York

Dear Henry and Steve:

In accordance with Appendix “A”, Section III, C of Administrative Order on Consent (AOC) Index # W1-118-14-12, this letter reports Operable Unit 2 (OU2) activities performed by Northrop Grumman Systems Corporation (Northrop Grumman) during the month of November 2015. Activities planned for December 2015 are also discussed.

This progress report provides data validated in the current period that are not included in routine reporting, as applicable. Validated data submitted as part of routine reporting (e.g., quarterly reports as specified in the Groundwater Monitoring Plan) are not included to avoid redundancy.

Since this is an ongoing remediation project, Northrop Grumman would like to submit future progress reports on a quarterly frequency.

OU2 ACTIVITIES CONDUCTED DURING NOVEMBER 2015

OU2 On-Site Containment (ONCT) System

- Continued Operation, Maintenance and Monitoring (OM&M) of the OU2 ONCT system
- Finalized and submitted Third Quarter 2015 Groundwater Monitoring data report
- Data not routinely reported are provided for the current period as follows:
    - Validated analytical data associated with October 2015 monthly sampling for Remedial Wells 1 and 3R are provided in Table 1

Regional Groundwater Monitoring & Outpost Well Monitoring

- Continued Fourth Quarter 2015 groundwater monitoring activities, including routine sampling of semi-annual frequency monitoring wells (plume monitoring wells including 8 of the 15 original outpost wells) for VOCs and 1,4-dioxane.
- Performed annual well inspection of Northrop Grumman owned monitoring wells
- Finalized and submitted Third Quarter 2015 Groundwater Monitoring Report

Northrop Grumman Cooperation with Navy

- Continued to work cooperatively with the Navy through periodic communications and meetings while NYSDEC is in process of reviewing the previously submitted Plan for Coordination with the U.S. Navy on the RE-108D2 Hot Spot (June 30 2015), including:
    - Continued communications with Navy to develop a plan to address the elevated levels of impacted groundwater identified in the vicinity of Well RE-108D2
    - Continued sampling of additional outpost wells and monitoring wells installed by Navy as requested by Navy (in May 6, 2015 letter)

Other

- Prepared and submitted the October 2015 AOC monthly progress report
- Provided support to NYSDEC as part of NYSDEC's radiological sampling plan, including coordination for sampling select municipal supply wells

OU2 ACTIVITIES SCHEDULED FOR DECEMBER 2015

OU2 On-Site Containment (ONCT) System

- Continue OM&M of OU2 ONCT system
- Conduct Fourth Quarter 2015 ONCT system sampling

Regional Groundwater Monitoring & Outpost Well Monitoring

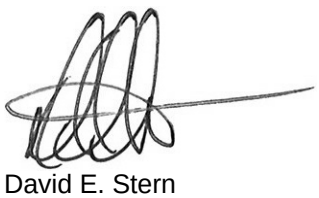
- Continue Fourth Quarter 2015 groundwater monitoring activities

Northrop Grumman Cooperation with Navy

- Continue to work cooperatively with the Navy through periodic communications and meetings while NYSDEC is in process of reviewing the previously submitted Plan for Coordination with the U.S. Navy on the RE-108D2 Hot Spot (June 30, 2015), including:
    - Continue with communications and meetings supporting the Navy plan to address the elevated levels of impacted groundwater identified in the vicinity of Well RE-108D2
    - Sample new/additional outpost wells and/or monitoring wells installed by Navy as requested in May 6, 2015 communication

Sincerely,

Arcadis of New York, Inc.



David E. Stern

Senior Hydrogeologist/Associate Project Manager

Enclosures

Mr. Henry Wilkie
Mr. Steven Scharf, P.E.
December 10, 2015

Copies:
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Table 1.
Concentrations of Volatile Organic Compounds in Remedial Wells 1 and 3R, Validated in November 2015,
Operable Unit 2, Northrop Grumman Systems Corporation
Bethpage, New York

Constituents (units in ug/L)	Well ID: Sample ID: Sample Date:	Well1 Well1 10/20/2015	Well 3R Well 3R 10/20/2015	Trip Blank TB-102015-KD1 10/20/2015
Volatile Organic Compounds [1]				
1,1,1-Trichloroethane		<2.0 U	<2.0 U	<1.0 U
1,1,2,2-Tetrachloroethane		<1.0 U	<1.0 U	<0.50 U
1,1,2-Trichloroethane		<2.0 U	<2.0 U	<1.0 U
1,1-Dichloroethane		**0.79 J**	**1.4 J**	<1.0 U
1,1-Dichloroethene		**2.6**	**3.9**	<1.0 U
1,2-Dichloroethane		<2.0 U	<2.0 U	<1.0 U
1,2-Dichloropropane		**4.7**	<4.0 U	<2.0 U
2-Butanone (MEK)		<20 U	<20 U	<10 U
Methyl N-Butyl Ketone (2-Hexanone)		<20 U	<20 U	<10 U
4-methyl-2-pentanone		<10 U	<10 U	<5.0 U
Acetone		<20 U	<20 U	<10 U
Benzene		<1.0 U	<1.0 U	<0.50 U
Bromodichloromethane		<2.0 U	<2.0 U	<1.0 U
Bromoform		<2.0 U	<2.0 U	<1.0 U
Bromomethane		<4.0 U	<4.0 U	<2.0 U
Carbon Disulfide		<10 U	<10 U	<5.0 U
Carbon Tetrachloride		<2.0 U	<2.0 U	<1.0 U
Chlorobenzene		<2.0 U	<2.0 U	<1.0 U
Chloroethane		<4.0 U	<4.0 U	<2.0 U
Chloroform		<2.0 U	<2.0 U	<1.0 U
Chloromethane		<4.0 U	<4.0 U	<2.0 U
cis-1,2-dichloroethene		**4.6**	**5.6**	<1.0 U
cis-1,3-dichloropropene		<1.0 U	<1.0 U	<0.50 U
Chlorodibromomethane		<2.0 U	<2.0 U	<1.0 U
Ethylbenzene		<2.0 U	<2.0 U	<1.0 U
Dichloromethane		<4.0 U	<4.0 U	<2.0 U
Styrene (Monomer)		<10 U	<10 U	<5.0 U
Tetrachloroethene		**26.1**	**26.5**	<1.0 U
Toluene		<2.0 U	<2.0 U	<1.0 U
trans-1,2-dichloroethene		<2.0 U	<2.0 U	<1.0 U
trans-1,3-dichloropropene		<1.0 U	<1.0 U	<0.50 U
Trichloroethene		**762**	**502**	<1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane		**3.1 J**	**3.0 J**	<5.0 U
Vinyl Chloride		<2.0 U	**11.2**	<1.0 U
m,p-Xylene		<2.0 U	<2.0 U	<1.0 U
o-Xylene		<2.0 U	<2.0 U	<1.0 U
Total VOCs [2]		**804**	**550**	**0**

Notes and Abbreviations:
(1) Sample analysis by Method 8260C
(2) Results rounded to two significant figures.
Results validated following protocols specified in OU2 Groundwater Monitoring Plan (ARCADIS 2014).

Bold	Constituent detected
VOCs	Volatile Organic Compounds
µg/L	Micrograms per liter
J	Constituent value is estimated
D	Sample was diluted
<5.0	Compound not detected above its laboratory quantification limit.
OU2	Operable Unit 2
U	Compound is not detected
TB	Trip blank