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ENVIRONMENT

Date:

February 10, 2016

Subject:

January 2016 Monthly Progress Report
Northrop Grumman Systems Corporation
Operable Unit 2, NYSDEC Site ID # 1-30-003A,
Bethpage, New York

Contact:

David E. Stern

Phone:

631.391.5284

Dear Henry and Steve:

Email:

david.stern@arcadis.com

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 January 2016. Activities planned for February 2016 are also discussed.

Our ref:

NY001496.0114.LARA5

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 JANUARY 2016

OU2 On-Site Containment (ONCT) System

- Continued Operation, Maintenance and Monitoring (OM&M) of the OU2 ONCT system

Regional Groundwater Monitoring & Outpost Well Monitoring

- Initiated supplemental monthly VOC sampling of Monitoring Well GM-21D2 and other select wells, including ONCT Tower 102 system remedial wells
- Data not routinely reported are provided for the current period as follows:
 - Validated analytical data associated with a sample of purge water generated and discharged to the sanitary sewer during the December 2015 Quarterly Groundwater Monitoring are provided in Table 1 (discharge sample)

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

Other

- Prepared and submitted the December 2015 AOC monthly progress report
- Summarized results (as received) of radiological sampling conducted in support to NYSDEC as part of NYSDEC's radiological sampling plan. Validated supplemental data for VOCs and 1,4-dioxane collected during radiological sampling of select public supply wells. Results will be submitted to the NYSDEC under separate cover

OU2 ACTIVITIES SCHEDULED FOR FEBRUARY 2016

OU2 On-Site Containment (ONCT) System

- Continue OM&M of OU2 ONCT system

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Regional Groundwater Monitoring & Outpost Well Monitoring

- Continue supplemental monthly VOC sampling of Monitoring Well GM-21D2 and other select wells
- Routine groundwater monitoring activities are not planned for in February 2016; next scheduled routine sampling round will be conducted in Second Quarter 2016

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
 - Conduct First Quarter 2016 sampling of additional outpost wells installed by Navy as requested by Navy in May 6, 2015 communication

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Other

- Submit the January 2016 AOC monthly progress report

Sincerely,

Arcadis of New York, Inc.

A handwritten signature in black ink, appearing to read 'David E. Stern', with a long horizontal line extending to the right.

David E. Stern

Senior Hydrogeologist/Associate Project Manager

Enclosures

Copies:

Krista Anders, NYSDOH
Rosalie K. Rusinko, Esq., NYSDEC
Edward J. Hannon, Northrop Grumman
Fred Weber, Northrop Grumman
Jill Palmer, Esq., Northrop Grumman
Daniel Riesel, Esq., Sive, Paget & Riesel, P.C.
Mark A. Chertok, Esq., Sive, Paget & Riesel, P.C.
Lora Fly, NAVFAC Midlant Environmental
Bethpage Public Library, Public Repository
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Mike Wolfert, Arcadis
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Table 1.
Concentrations of Volatile Organic Compounds
in Discharge Sample Validated in January 2016,
Operable Unit 2, Northrop Grumman Systems Corporation
Bethpage, New York

Constituents (units in µg/L)	Well ID: Sample ID: Sample Date:	DISCHARGE DISCHARGE_121115 12/11/2015
<u>Volatile Organic Compounds</u> ⁽¹⁾		
1,1,1-Trichloroethane		<1.0
1,1,1,2-Tetrachloroethane		<1.0
1,1,2-trichloro-1,2,2-trifluoroethane		<2.0
1,1,2-Trichloroethane		0.36 J
1,1-Dichloroethane		<1.0
1,1-Dichloroethene		<1.0
1,2-Dichloroethane		<1.0
1,2-Dichloropropane		<1.0
2-Butanone (MEK)		<5.0
4-Methyl-2-Pentanone		<5.0
Acetone		<5.0
Benzene		<1.0
Bromodichloromethane		<1.0
Bromoform		<1.0
Bromomethane		<1.0
Carbon Disulfide		<1.0
Carbon Tetrachloride		0.46 J
CFC-11		<2.0
CFC-12		<2.0
Chlorobenzene		<1.0
Chlorodibromomethane		<1.0
Chloroethane		<1.0
Chloroform		0.60 J
Chloromethane		<1.0
cis-1,2-Dichloroethene		0.77 J
cis-1,3-Dichloropropene		<1.0
Dichloromethane		<1.0
Ethylbenzene		<1.0
m,p-Xylene		<1.0
Methyl N-Butyl Ketone (2-Hexanone)		<5.0
Methyl-tert-butylether		<1.0
o-Xylene		<1.0
Styrene (Monomer)		<2.0
Tetrachloroethene		<1.0
Toluene		<1.0
trans-1,2-Dichloroethene		<1.0
trans-1,3-Dichloropropene		<1.0
Trichloroethene		47.8
Vinyl chloride		<1.0
Total VOCs ⁽²⁾		50

Footnotes on next page.

Table 1.
Concentrations of Volatile Organic Compounds
in Discharge Sample Validated in January 2016,
Operable Unit 2, Northrop Grumman Systems Corporation
Bethpage, New York

Notes and Abbreviations:

(1) Sample analysis by Method 624

(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
<5.0	Constituent not detected above its laboratory quantification limit.
OU2	Operable Unit 2