

18 June 2015

Mr. Henry Wilkie New York State Department of Environmental Conservation Division of Solid & Hazardous Materials 625 Broadway Albany, NY 12233-7252

Subject: GROUNDWATER DISCHARGE MONITORING/AIR EMISSION REPORT

GM-38 AREA, NWIRP BETHPAGE, NY; DER SITE # 1-30-003B-OU 2

MAY 2015 REPORTING PERIOD

Dear Mr. Wilkie:

H&S Environmental, Inc. (H&S) is submitting this monthly monitoring report of the groundwater discharge and air emission results for the Groundwater Treatment Plant (GWTP) located at the Former Naval Weapons Industrial Reserve Plant (NWIRP), Bethpage, NY, GM-38 Area. This report was prepared in accordance with GWTP operational requirements for DER Site # 1-30-003B-OU 2.

GWTP operational data from 1 May 2015 to 31 May 2015 are presented in Attachment A. There was no significant downtime for the GWTP during this reporting period.

As indicated in Attachment A, all permitted constituents were in compliance with regulatory guidelines during this reporting period.

Please contact me at 508-366-7442 with any questions or concerns you may have regarding this report.

Sincerely,

H&S Environmental, Inc.

Jennifer Good Project Manager

Attachment A: Groundwater and Air Sampling Results from May 2015

Mr. Henry Wilkie 18 June 2015 Page 2 of 2

Cc: Steven Scharf – NYSDEC

Jean Occidental - NYSDEC Division of Water

Jennifer Pilewski - NYSDEC – Region 1 Water Engineer

Gerard Ennis - Nassau County Department of Public Works

Linda Bianculli - Town of Oyster Bay

Lora Fly - NAVFAC Mid-Atlantic RPM

Al Taormina – H&S

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ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS MAY 2015

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report May 2015

SPDES Parameters	May 2015							
Process Stream	Daily Treated Effluent Maximum	Units	RW-1	RW-3	Combined Influent ⁽¹⁾ (RW-1 + RW-3)	Treated Effluent		
Well Depth	N/A	ft	445	530	N/A	N/A		
Screened Interval	N/A	ft bgs	335-395 410-430	392-412 442-504	N/A	N/A		
Sampling Date	N/A		5/6/15					
Average Flowrate	1100	GPM	824	202	1,027	1,067		
Total Flow	N/A	gallons	36,797,600	9,035,900	45,833,500	47,652,600		
pH ⁽²⁾	5.5 - 8.5	SU	5.01	5.04	5.02	6.55		
Carbon Tetrachloride	NA	μg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)		
1,1-Dichloroethane	5	μg/L	2.2	2.4	2.2	ND (1.0)		
1,2-Dichloroethane	0.6	μg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)		
1,1-Dichloroethene	5	μg/L	2.4	1.7	2.3	ND (1.0)		
cis 1,2-Dichloroethene	5	μg/L	15.0	1.7	12.4	0.46 J		
trans 1,2-Dichloroethene	5	μg/L	0.26 J	ND (1.0)	0.21 J	ND (1.0)		
Tetrachloroethene	5	μg/L	36.3	ND (1.0)	29.1	ND (1.0)		
1,1,1-Trichloroethene	5	μg/L	ND (1.0)	0.80 J	0.16 J	ND (1.0)		
Trichloroethene	5	μg/L	159	209	169	1.0		
Vinyl Chloride	2	μg/L	0.49 J	ND (2.0)	0.39 J	ND (2.0)		
Mercury	0.25	mg/L	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)		
Total Suspended Solids (TSS)	N/A	mg/L	ND (5)	ND (5)	ND (5)	ND (5)		

Notes:

- J Estimated result between laboratory method detection limit and reporting limit
- ND Not detected above laboratory method detection limit. Limit of detection (LOD) given in parentheses.
- NR Not Recorded
- N/A Not Applicable
- (1) Influent concentrations presented are the weighted average concentrations of RW-1 and RW-3.
- (2) pH values were measured on 5/7/15.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results May 2015

DAR Parameters	Units	Discharge Goal ⁽¹⁾	- I N/61/201E	
Process Stream			Influent	Effluent
Sampling Date	N/A	N/A	5/	6/15
Average Flowrate	CFM	N/A	NR	9,268
Total Flow	ft ³	N/A	NR	413,723,520
Total Flow	m ³	N/A	NR	11,715,345
1,2-Dichloroethane	μg/m³	N/A	3.9 J	ND
cis 1,2-Dichloroethene	μg/m³	> 100,000 ⁽²⁾	160	130
trans 1,2-Dichloroethene	μg/m³	> 100,000	ND	ND
1,2-Dichloroethene (total)	μg/m³	>100,000	160	130
Toluene	μg/m³	N/A	1.7 J	0.56 J
Total Xylene	μg/m³	N/A	ND	ND
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND
Trichloroethene	μg/m³	2,600	2,500	8.0
Vinyl Chloride	μg/m³	560	5.3	2.5
Tetrachloroethene	μg/m³	5,100	440	2.1 J

Notes:

CFM - cubic feet per minute

DAR - Division of Air Resources

J - Estimated result between laboratory method detection limit and reporting limit

N/A - Not Applicable

NR - Not recorded

- (1) Disharge goal as approved by NYSDEC's letter dated 31 October 2013.
- (2) Disharge goal is for total 1,2-Dichloroethene.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Controlled Stack Emissions May 2015

DAR Parameters	Units	Discharge Goal ⁽¹⁾	May 2015	
Sampling Date	N/A	N/A	5/6/15	
Average Flowrate	CFM	N/A	9,268	
Total Flow	ft ³	N/A	413,723,520	
Total Flow	m^3	N/A	11,715,345	
Trichloroethene	lb/hr	0.09	0.00028	
Vinyl Chloride	lb/hr	0.02	0.00009	
1,2 Dichloroethene	lb/hr	11	0.00451	
1,2-Dichloroethane	lb/hr	N/A	0.00000	
Toluene	lb/hr	N/A	0.00002	
Total Xylene	lb/hr	N/A	0.00000	
1,1,2-Trichloroethane	lb/hr	N/A	0.00000	
Tetrachloroethene	lb/hr	0.18	0.00007	

Notes:

CFM - cubic feet per minute

DAR - Division of Air Resources

N/A - Not Applicable

(1) Disharge goal as approved by NYSDEC's letter dated 31 October 2013.