



16 February 2016

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
JANUARY 2016 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 January 2016 to 31 January 2016 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 January 2016

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
Greg Pearman – NWIRP Bethpage
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ATTACHMENT A
GROUNDWATER AND AIR SAMPLING RESULTS
JANUARY 2016

**GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Discharge Monitoring Report
January 2016**

SPDES Parameters	January 2016					
Process Stream	Daily Treated Effluent Maximum	Units	RW-1 ⁽¹⁾	RW-3 ⁽¹⁾	Combined Influent ⁽¹⁾	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		1/7/16			
Average Flowrate	1100	GPM	987	0.2	987	1,022
Total Flow	N/A	gallons	44,068,260	10,000	44,078,260	45,632,760
pH	5.5 - 8.5	SU	5.49	N/A	5.49	6.09
Carbon Tetrachloride	NA	µg/L	ND (1.0)	N/A	ND (1.0)	ND (1.0)
1,1-Dichloroethane	5	µg/L	2.2	N/A	2.2	ND (1.0)
1,2-Dichloroethane	0.6	µg/L	ND (1.0)	N/A	ND (1.0)	ND (1.0)
1,1-Dichloroethene	5	µg/L	2.7	N/A	2.7	ND (1.0)
cis 1,2-Dichloroethene	5	µg/L	12.8	N/A	12.8	0.27 J
trans 1,2-Dichloroethene	5	µg/L	0.28 J	N/A	0.28 J	ND (1.0)
Tetrachloroethene	5	µg/L	33.7	N/A	33.7	ND (1.0)
1,1,1-Trichloroethene	5	µg/L	1.5	N/A	1.5	ND (1.0)
Trichloroethene	5	µg/L	147	N/A	147	ND (1.0)
Vinyl Chloride	2	µg/L	0.47 J	N/A	0.47 J	ND (2.0)
Mercury	0.00025	mg/L	ND (0.00050)	N/A	ND (0.00050)	ND (0.00050)
Total Suspended Solids (TSS)	N/A	mg/L	ND (5)	N/A	ND (5)	ND (5)

Notes:

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

ND - Not detected above laboratory method detection limit. Reporting Limit (RL) given in parentheses.

NR - Not Recorded

NS - Not Sampled. RW-3 sampling frequency has been reduced from monthly to semi-annually.

N/A - Not Applicable

(1) On 1 July 2015, the RW-1 flowrate was increased from ~800 gpm to ~1,000 gpm and RW-3 was taken off-line, as approved by NYSDEC on 20 April 2015. To maintain the integrity of RW-3 for potential future use, approximately 200 gallons per minute of water are pumped for a 1-hour period from the well on a monthly basis. RW-3 will be sampled semi-annually, consistent with the groundwater monitoring program. Influent concentrations presented above are therefore equivalent to RW-1 concentrations only.

**GM-38 Area Groundwater Remediation
Groundwater Treatment Plant
Naval Weapons Industrial Reserve Plant - Bethpage, NY
Air Sampling Results
January 2016**

DAR Parameters	Units	Discharge Goal ⁽¹⁾	January 2016	
			Influent	Effluent
Process Stream				
Sampling Date	N/A	N/A	1/7/16	
Average Flowrate	CFM	N/A	NR	9,415
Total Flow	ft ³	N/A	NR	420,276,672
Total Flow	m ³	N/A	NR	11,900,910
1,2-Dichloroethane	µg/m ³	N/A	3.1	ND
cis 1,2-Dichloroethene	µg/m ³	> 100,000 ⁽²⁾	110	ND
trans 1,2-Dichloroethene	µg/m ³		2.0 J	ND
1,2-Dichloroethene (total)	µg/m ³	>100,000	120	ND
Toluene	µg/m ³	N/A	4.4	ND
Total Xylene	µg/m ³	N/A	ND	ND
1,1,2-Trichloroethane	µg/m ³	N/A	ND	ND
Trichloroethene	µg/m ³	2,600	1,400	5.7
Vinyl Chloride	µg/m ³	560	3.8	1.8 J
Tetrachloroethene	µg/m ³	5,100	310	2.8 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) Discharge goal as approved by NYSDEC's letter dated 31 October 2013.

(2) Discharge 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
January 2016**

DAR Parameters	Units	Discharge Goal ⁽¹⁾	January 2016
Sampling Date	N/A	N/A	1/7/16
Average Flowrate	CFM	N/A	9,415
Total Flow	ft ³	N/A	420,276,672
Total Flow	m ³	N/A	11,900,910
Trichloroethene	lb/hr	0.09	0.00020
Vinyl Chloride	lb/hr	0.02	0.00006
1,2 Dichloroethene	lb/hr	11	0.00000
1,2-Dichloroethane	lb/hr	N/A	0.00000
Toluene	lb/hr	N/A	0.00000
Total Xylene	lb/hr	N/A	0.00000
1,1,2-Trichloroethane	lb/hr	N/A	0.00000
Tetrachloroethene	lb/hr	0.18	0.00010

Notes:

CFM - cubic feet per minute

DAR - Division of Air Resources

N/A - Not Applicable

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