



10 October 2012

Mr. Steven Scharf  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Action, Bureau A  
625 Broadway  
Albany, NY 12233-7015

**Subject: GROUNDWATER DISCHARGE MONITORING/AIR EMISSION REPORT  
GM-38 AREA, NWIRP BETHPAGE, NY; DER SITE # 1-30-003B-OU 2  
SEPTEMBER 2012 REPORTING PERIOD**

Dear Mr. Scharf:

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 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. H&S assumed operational responsibility of the GWTP on 1 June 2011. GWTP operational data from 1 September 2012 to 30 September 2012 are included in Attachment A. All constituents were within permit limitations 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, P.G.  
Project Manager

Attachment A: Groundwater and Air Sampling Results from September 2012

Cc: Jean Occidental - NYSDEC Division of Water  
William Spitz - NYSDEC – Region 1 Water Engineer  
Gerard Ennis - Nassau County Department of Public Works  
Richard Pfaender - Town of Oyster Bay  
Lora Fly - NAVFAC Mid-Atlantic RPM  
Al Taormina – H&S  
GM-38 Copy

**ATTACHMENT A**  
**GROUNDWATER AND AIR SAMPLING RESULTS**  
**SEPTEMBER 2012**

**GM-38 Area Groundwater Remediation  
Groundwater Treatment Plant  
Naval Weapons Industrial Reserve Plant - Bethpage, NY  
Controlled Stack Emissions  
September 2012**

SPDES Parameters	September 2012					
Process Stream	Daily Treated Effluent Maximum	Units	RW-1	RW-3	Combined Influent <sup>(1)</sup> (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		9/7/12			
Average Flowrate	1100	GPM	811	193	1,004	1,005
Total Flow	N/A	gallons	35,032,800	8,353,546	43,386,346	43,404,186
pH	5.5 - 8.5	SU	7.3	6.9	7.2	6.7
Carbon Tetrachloride	NA	µg/L	ND	ND	ND	ND
1,1-Dichloroethane	5	µg/L	2.2 J	2.1 J	2.2 J	ND
1,2-Dichloroethane	0.6	µg/L	ND	ND	ND	ND
1,1-Dichloroethene	5	µg/L	5.7	1.9 J	5.0 J	ND
cis 1,2-Dichloroethene	5	µg/L	30.9	2.3 J	25.4 J	ND
trans 1,2-Dichloroethene	5	µg/L	ND	ND	ND	ND
Tetrachloroethene	5	µg/L	71.9	ND	58.1	ND
1,1,1-Trichloroethene	5	µg/L	4.5 J	ND	3.6 J	ND
Trichloroethene	5	µg/L	285	299	288	ND
Vinyl Chloride	2	µg/L	ND	ND	ND	ND
Mercury	0.25	µg/L	ND	ND	ND	ND
Total Suspended Solids (TSS)	N/A	mg/L	ND	ND	ND	ND

**Notes:**

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

ND - Not detected above laboratory method detection limit

N/A - Not Applicable

(1) Influent concentrations presented are the weighted average concentrations of RW-1 and RW-3.

**GM-38 Area Groundwater Remediation  
Groundwater Treatment Plant  
Naval Weapons Industrial Reserve Plant - Bethpage, NY  
Controlled Stack Emissions  
September 2012**

DAR Parameters	Units	SGC	September 2012	
			Influent	Effluent
Process Stream				
Sampling Date	N/A	N/A	9/8/12	
Average Flowrate	CFM	N/A	NR	8,432
Total Flow	ft <sup>3</sup>	N/A	NR	364,281,600
Total Flow	m <sup>3</sup>	N/A	NR	10,315,306
1,2-Dichloroethane	µg/m <sup>3</sup>	N/A	ND	8.9
cis 1,2-Dichloroethene	µg/m <sup>3</sup>	N/A	330	100
trans 1,2-Dichloroethene	µg/m <sup>3</sup>	N/A	3.5 J	ND
1,2-Dichloroethene (total)	µg/m <sup>3</sup>	N/A	330	100
Toluene	µg/m <sup>3</sup>	37,000	4.6 J	ND
Total Xylene	µg/m <sup>3</sup>	4,300	4.2 J	ND
1,1,2-Trichloroethane	µg/m <sup>3</sup>	N/A	ND	ND
Trichloroethene	µg/m <sup>3</sup>	14,000	3400	69
Vinyl Chloride	µg/m <sup>3</sup>	180,000	12	1.5 J
Tetrachloroethene	µg/m <sup>3</sup>	1,300	720	6.4

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

SGC - Short-term Guideline Concentration

**GM-38 Area Groundwater Remediation  
Groundwater Treatment Plant  
Naval Weapons Industrial Reserve Plant - Bethpage, NY  
Controlled Stack Emissions  
September 2012**

<b>DAR Parameters</b>	<b>Units</b>	<b>Discharge Goal</b>	<b>September 2012</b>
Sampling Date	N/A	N/A	9/8/12
Average Flowrate	CFM	N/A	8,432
Total Flow	ft <sup>3</sup>	N/A	364,281,600
Total Flow	m <sup>3</sup>	N/A	10,315,306
Trichloroethene	lb/hr	0.09	0.00211
Vinyl Chloride	lb/hr	0.01	0.00005
1,2 Dichloroethene	lb/hr	0.03	0.00306
1,2-Dichloroethane	lb/hr	BRT	0.00027
Toluene	lb/hr	BRT	0.00000
Total Xylene	lb/hr	BRT	0.00000
1,1,2-Trichloroethane	lb/hr	BRT	0.00000
Tetrachloroethene	lb/hr	0.02	0.00020

Notes:

BRT - below reporting thresholds

CFM - cubic feet per minute

DAR - Division of Air Resources

N/A - Not Applicable