

12 January 2017

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

**DECEMBER 2016 REPORTING PERIOD** 

Dear Mr. Wilkie:

KOMAN Government Solutions, LLC (KGS) 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 December 2016 to 31 December 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,

KOMAN Government Solutions, LLC

Jennifer Good Project Manager

Attachment A: Groundwater and Air Sampling Results from December 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 DECEMBER 2016

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

SPDES Parameters	December 2016							
Process Stream	Daily Treated Effluent Maximum	Units	RW-1 <sup>(1)</sup>	RW-3 <sup>(2)</sup>	Combined Influent <sup>(1)</sup>	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		12/7/16					
Average Flowrate	1100	GPM	987	0.3	987	1,013		
Total Flow	N/A	gallons	44,041,897	11,900	44,053,797	45,236,678		
рН	5.5 - 8.5	SU	5.21	NS	5.21	5.97		
Carbon Tetrachloride	NA	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)		
1,1-Dichloroethane	5	μg/L	2.1	NS	2.1	ND (1.0)		
1,2-Dichloroethane	0.6	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)		
1,1-Dichloroethene	5	μg/L	1.5	NS	1.5	ND (1.0)		
cis 1,2-Dichloroethene	5	μg/L	8.7	NS	8.7	ND (1.0)		
trans 1,2-Dichloroethene	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)		
Tetrachloroethene	5	μg/L	26	NS	26	ND (1.0)		
1,1,1-Trichloroethene	5	μg/L	1.1	NS	1.1	ND (1.0)		
Trichloroethene	5	μg/L	110	NS	110	ND (1.0)		
Vinyl Chloride	2	μg/L	0.30 J	NS	0.30 J	ND (1.0)		
Mercury	0.00025	mg/L	ND (0.00010)	NS	ND (0.00010)	ND (0.00010)		
Total Suspended Solids (TSS)	N/A	mg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)		

### Notes:

- B Method blank contamination
- 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
- NS Not Sampled
- (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. Influent concentrations presented above are therefore equivalent to RW-1 concentrations only.
- (2) 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 is sampled semi-annually, consistent with the groundwater monitoring program.

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

DAR Parameters	Units	Discharge Goal <sup>(1)</sup>	Decem	December 2016	
Process Stream			Influent	Effluent	
Sampling Date	N/A	N/A	12/7/16		
Average Flowrate	CFM	N/A	NR	9,225	
Total Flow	ft <sup>3</sup>	N/A	NR	411,815,160	
Total Flow	m <sup>3</sup>	N/A	NR	11,661,307	
1,2-Dichloroethane	μg/m³	N/A	3.7 J	ND	
cis 1,2-Dichloroethene	μg/m³	> 100,000 <sup>(2)</sup>	120	130	
trans 1,2-Dichloroethene	μg/m³	> 100,000	2.1 J	2.2 J	
1,2-Dichloroethene (total)	μg/m³	>100,000	120	130	
Toluene	μg/m³	N/A	ND	5.3	
Total Xylene	μg/m³	N/A	ND	ND	
1,1,2-Trichloroethane	μg/m³	N/A	2.0 J	ND	
Trichloroethene	μg/m³	2,600	2,000	8.8	
Vinyl Chloride	μg/m³	560	3.3	2.1	
Tetrachloroethene	μg/m³	5,100	380	4.1 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) 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 December 2016

DAR Parameters	Units	Discharge Goal <sup>(1)</sup>	December 2016
Sampling Date	N/A	N/A	12/7/16
Average Flowrate	CFM	N/A	9,225
Total Flow	ft <sup>3</sup>	N/A	411,815,160
Total Flow	$m^3$	N/A	11,661,307
Trichloroethene	lb/hr	0.09	0.00030
Vinyl Chloride	lb/hr	0.02	0.00007
1,2 Dichloroethene	lb/hr	11	0.00449
1,2-Dichloroethane	lb/hr	N/A	0.00000
Toluene	lb/hr	N/A	0.00018
Total Xylene	lb/hr	N/A	0.00000
1,1,2-Trichloroethane	lb/hr	N/A	0.00000
Tetrachloroethene	lb/hr	0.18	0.00014

### 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.