

11 April 2018

Mr. Jason Pelton 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

MARCH 2018 REPORTING PERIOD

Dear Mr. Pelton:

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, and the SPDES Permit Equivalent # 13003B.

GWTP operational data from 1 March to 31 March 2018 are presented in Attachment A. On 11 January 2018, the GM38 GWTP was shut down to allow Nassau County Basin NC#495 to drain for maintenance activities. On 24 January 2018, the GWTP was placed back on line with a reduced flowrate at RW-1. At the beginning of March 2018, the GWTP continued to operate at a reduced flowrate of approximately 135 gpm with its effluent discharge diverted into injection well IW-1 in order to accommodate rehabilitation of Nassau County Basin #495. On 9 March 2018, the GM38 GWTP effluent discharge was redirected to Nassau County Basin #495 at an initial flowrate of 350 gpm. On 12 March, the flowrate was increased to 700 gpm, and on 15 March, the GM38 GWTP was return to its normal flowrate of 1,000 gpm.

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

Please contact me at 610-400-0622 with any questions or concerns you may have regarding this report.

Sincerely,

KOMAN Government Solutions, LLC

Stephane Roy Project Manager

Exton, Pennsylvania 19341

Attachment A: Groundwater and Air Sampling Results from March 2018

Cc: S. Edwards, NYSDEC

- D. Hesler, NYSDEC
- C. Haas, NYSDEC Region 1
- W. Parish, NYSDEC Region 1
- R. Wither, NYSDEC Division of Water
- J. Pilewski, NYSDEC Region 1 Water Engineer
- S. Karpinski, NYSDOH
- J. Lovejoy, NCDH
- L. Thantu, USEPA Region 2
- G. Ennis, Nassau County Department of Public Works
- S. Urban, Nassau County Department of Public Works
- T. Licata, Town of Oyster Bay
- M. Russo, Town of Oyster Bay
- L. Fly, NAVFAC Mid-Atlantic RPM
- B. Murray, Mid-Atlantic RPM
- G. Pearman, NWIRP Bethpage
- GM-38 Copy

ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS MARCH 2018

GM-38 Area Groundwater Remediation Groundwater Treatment Plant

Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report March 2018

SPDES Parameters	March 2018 ⁽¹⁾					
Process Stream	Daily Treated Effluent Maximum ⁽¹⁾	Units	RW-1 ⁽²⁾	RW-3 ⁽³⁾	Combined Influent ⁽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		3/7/18			
Effective Flowrate	1100	GPM	579	0.0	579	593
Total Flow	N/A	gallons	26,271,735	0	26,271,735	3,934,920,798
рН	5.5 - 8.5	SU	5.09	NS	5.09	5.98
Chloroform	5	μg/L	0.44 J	NS	0.44 J	ND (1.0)
1,1-Dichloroethane	5	μg/L	1.9	NS	1.9	ND (1.0)
1,2-Dichloroethane	0.6	μg/L	0.23 J	NS	0.23 J	ND (1.0)
1,1-Dichloroethene	5	μg/L	1.1	NS	1.1	ND (1.0)
cis 1,2-Dichloroethene	5	μg/L	7.1	NS	7.1	0.22 J
trans 1,2-Dichloroethene	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)
Tetrachloroethene	5	μg/L	20	NS	20	ND (1.0)
1,1,1-Trichloroethane	5	μg/L	0.78 J	NS	0.78 J	ND (1.0)
Trichloroethene	5	μg/L	76	NS	76	0.37 J
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)
Vinyl Chloride	2	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)
1,4-Dioxane		μg/L	NS	NS	NS	1.9
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:

- 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

N/A - Not Applicable

NS - Not Sampled

- (1) Wastewater discharge equivalence permit renewed on 18 August 2017. Discharge limits established for 10 years. Chloroform, 1,4-dioxane and 1,1,2-trichlorotrifluoroethane are now monitored under the new permit.
- (2) On 11 January 2018, the GM38 GWTP was shut down to allow Nassau County Basin NC#495 to drain for maintenance activities. On 24 January 2018, the GWTP was placed back on line with a reduced flowrate at RW-1 from ~1,000 gpm to ~200 gpm, and further reduced to 135 gpm on 14 February 2018, with treated water diverted to injection well IW-1. Influent concentrations presented above are from RW-1 concentrations only.
- (3) Well RW-3 was turned on for a total of approximately 1 hour this period.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results March 2018

DAR Parameters		Discharge Goal ⁽¹⁾	March 2018	
Process Stream			Influent	Effluent
Sampling Date			3/7/18	
Average Flowrate	CFM	N/A	NR	9,611
Total Flow	ft ³	N/A	NR	428,028,850
Total Flow	m ³	N/A	NR	12,120,427
1,2-Dichloroethane	μg/m³	N/A	ND	ND
cis 1,2-Dichloroethene	μg/m³	> 100,000 (2)	6.3	ND
trans 1,2-Dichloroethene	μg/m³	> 100,000	ND	ND
1,2-Dichloroethene (total)	μg/m³	>100,000	6.3	ND
Toluene	μg/m³	N/A	0.52 J	1.6 J
Total Xylene	μg/m³	N/A	ND	ND
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND
Trichloroethene	μg/m³	2,600	140	0.74 J
Vinyl Chloride	μg/m³	560	ND	ND
Tetrachloroethene	μg/m³	5,100	19	ND

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 March 2018

DAR Parameters	Units	Discharge Goal ⁽¹⁾	March 2018	
Sampling Date			3/7/18	
Average Flowrate	CFM	N/A	9,611	
Total Flow	ft ³	N/A	428,028,850	
Total Flow	m ³	N/A	12,120,427	
Trichloroethene	lb/hr	0.09	0.00003	
Vinyl Chloride	lb/hr	0.02	0.00000	
1,2 Dichloroethene	lb/hr	11	0.00000	
1,2-Dichloroethane	lb/hr	N/A	0.00000	
Toluene	lb/hr	N/A	0.0006	
Total Xylene	lb/hr	N/A	0.00000	
1,1,2-Trichloroethane	lb/hr	N/A	0.00000	
Tetrachloroethene	lb/hr	0.18	0.00000	

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.