

17 January 2020

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 DECEMBER 2019 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 December to 31 December 2019 are presented in Attachment A. The plant was down for approximately 36.5 hours over the course of the reporting period because of the installation of pump 4B and from various backwashing events.

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

Please contact me at 610-400-0636 with any questions or concerns you may have regarding this report.

Sincerely,

KOMAN Government Solutions, LLC

Kolut & Dryng

Robert Gregory Project Manager

Attachment A: Groundwater and Air Sampling Results from December 2019

Cc: S. Edwards, NYSDEC D. Hesler, NYSDEC C. Haas, NYSDEC Region 1 W. Parish, NYSDEC Region 1 J. Pilewski, NYSDEC – Region 1 Water Engineer S. Karpinski, NYSDOH J. Lovejoy, NCDH G. Ennis, Nassau County Department of Public Works T. Licata, Town of Oyster Bay M. Russo, Town of Oyster Bay L. Fly, NAVFAC Mid-Atlantic B. Murray, NAVFAC Mid-Atlantic RPM G. Pearman, NWIRP Bethpage P. Schauble, KGS GM-38 Copy

ATTACHMENT A

GROUNDWATER AND AIR SAMPLING RESULTS

DECEMBER 2019

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report December 2019

SPDES Parameters			December 2019 ⁽¹⁾			
Process Stream	Daily Treated Effluent Maximum ⁽¹⁾	Units	RW-1	RW-3 ⁽²⁾	Combined Influent ⁽³⁾ (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		12/2/19			
Effective Flowrate	1100	GPM	616	160	776	832
Total Flow	N/A	gallons	27,514,266	7,121,604	34,635,870	37,137,950
рН	5.5 - 8.5	SU	5.04	5.37	5.11	6.45
Chloroform	5	μg/L	0.300 J	0.320 J	0.30 J	ND (1.0)
1,1-Dichloroethane	5	μg/L	1.34 J	2.50 J	1.58 J	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	0.920 J	1.22 J	0.982 J	ND (1.0)
cis 1,2-Dichloroethene	5	μg/L	4.86 J	1.29 J	4.13 J	ND (1.0)
trans 1,2-Dichloroethene	5	μg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Tetrachloroethene	5	μg/L	18.5	0.260 J	14.75	ND (1.0)
1,1,1-Trichloroethane	5	μg/L	0.550 J	0.590 J	0.558 J	ND (1.0)
Trichloroethene	5	μg/L	73.2	159	90.8	ND (1.0)
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	0.650 J	0.13 J	ND (1.0)
Vinyl Chloride	2	μg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,4-Dioxane		μg/L	2.2	5.4	2.9	NS
Mercury	0.00025	mg/L	ND (0.00010)	ND (0.00010)	ND (0.00010)	ND (0.00010)
Total Suspended Solids (TSS)	N/A	mg/L	ND (1.0)	8.4	1.7	ND (1.0)

Notes:

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

D - Concentration is a result of a dilution.

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) Well RW-3 was placed back in operation on 1 June, 2018.

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

(4) pH reading was collected on 18 November 2019.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results December 2019

DAR Parameters	December 2019			
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent
Sampling Date			12/2/19	
Average Flowrate	CFM	N/A	NR	8,911
Total Flow	ft ³	N/A	NR	378,259,821
Total Flow	m ³	N/A	NR	10,711,125
1,2-Dichloroethane	μg/m ³	N/A	1.6 J	1.4 J
cis 1,2-Dichloroethene	μg/m ³	≤ 100,000 ⁽²⁾	42	62
trans 1,2-Dichloroethene	μg/m ³	≤ 100,000 * ′	0.81 J	1.2 J
1,2-Dichloroethene (total)	μg/m ³	≤ 100,000	43	64
Toluene	μg/m ³	N/A	0.35 J	ND
Total Xylene	μg/m ³	N/A	ND	ND
1,1,2-Trichloroethane	μg/m ³	N/A	1.5 J	ND
Trichloroethene	μg/m³	≤ 2600	920	1.0 J
Vinyl Chloride	μg/m ³	≤ 560	ND	ND
Tetrachloroethene	μg/m ³	≤ 5100	150	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 December 2019

DAR Parameters	Units	Discharge Goal ⁽¹⁾	December 2019	
Sampling Date			12/2/19	
Average Flowrate	CFM	N/A	8,911	
Total Flow	ft ³	N/A	378,259,821	
Total Flow	m ³	N/A	10,711,125	
Trichloroethene	lb/hr	≤ 0.09	0.00003	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00203	
1,2-Dichloroethane	lb/hr	N/A	0.00004	
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	0.00000	

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.