

7 September 2021

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

AUGUST 2021 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 August to 31 August 2021 are presented in Attachment A. The plant was down for approximately 50 hours during the reporting period as the result of power failures attributable to inclement weather and from construction and testing activities associated with the addition of the Advanced Oxidation Process (AOP) system to the current treatment train.

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

Robert G. Gregory Project Manager

Robert & Granz

Attachment A: Groundwater and Air Sampling Results for August 2021

- cc: C. Haas, NYSDEC Region 1
 - C. Engelhardt, NYSDEC Region 1
 - J. Pilewski, NYSDEC Region 1 Water Engineer
 - J. Sullivan, NYSDOH
 - G. Ennis, Nassau County Department of Public Works
 - T. Licata, Town of Oyster Bay
 - M. Russo, Town of Oyster Bay
 - S. Sokolowski, NAVFAC Mid-Atlantic
 - J. Watts-Gravette, NAVFAC Mid-Atlantic
 - V. Varricchio, NWIRP Bethpage Facilities Management
 - P. Schauble, KGS
 - GM-38 Copy

ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS AUGUST 2021

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report August 2021

SPDES Parameters			August 2021 ⁽¹⁾					
Process Stream	Daily Treated Effluent Maximum ⁽¹⁾	Units	RW-1	RW-3	RW-4	Combined Influent (RW-1 + RW-3 + RW-4)	Treated Effluent	
Well Depth	N/A	ft	445	530	655*	N/A	N/A	
Screened Interval	N/A	ft bgs	335-395 410-430	392-412 442-504	550-650*	N/A	N/A	
Sampling Date	N/A		8/2/21					
Effective Flowrate	1100	GPM	675	0	200	874	928	
Total Flow	N/A	gallons	31,089,498	0	8,690,192	39,779,690	42,197,309	
рН	5.5 - 8.5	SU	5.45	NS	6.18	5.62	6.83	
Chloroform	5	μg/L	0.317 J	NS	ND (1.0)	0.245 J	ND (1.0)	
1,1-Dichloroethane	5	μg/L	1.38 J	NS	ND (1.0)	1.06 J	ND (1.0)	
1,2-Dichloroethane	0.6	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-Dichloroethene	5	μg/L	0.583 J	NS	1.30 J	0.747 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	3.92 J	NS	ND (1.0)	3.03 J	ND (1.0)	
trans 1,2-Dichloroethene	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
Tetrachloroethene	5	μg/L	15.0	NS	2.75 J	12.20	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	0.514 J	NS	ND (1.0)	0.397 J	ND (1.0)	
Trichloroethene	5	μg/L	56.2	NS	331	118.9	0.288 J	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	2.84 J	0.648	ND (1.0)	
Vinyl Chloride	2	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,4-Dioxane		μg/L	2.6	NS	16	5.66	NS	
Mercury	0.00025	mg/L	ND (0.00010)	NS	ND (0.00010)	ND (0.00010)	ND (0.00010)	
Total Suspended Solids (TSS)	N/A	mg/L	ND (1.0)	NS	5.8	1.32	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.
- * Design depths

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results August 2021

DAR Parameters	August 2021			
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent
Sampling Date			8/2/21	
Average Flowrate	CFM	N/A	NR	8,749
Total Flow	ft ³	N/A	NR	362,487,864
Total Flow	m ³	N/A	NR	10,264,513
1,2-Dichloroethane	μg/m³	N/A	2.3 J	ND
cis 1,2-Dichloroethene	μg/m³	≤ 100,000 ⁽²⁾	40	24
trans 1,2-Dichloroethene	μg/m³	≤ 100,000 ` ′	ND	ND
1,2-Dichloroethene (total)	μg/m³	≤ 100,000	40	24
Toluene	μg/m³	N/A	ND	1.5 J
Total Xylene	μg/m³	N/A	ND	ND
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND
Trichloroethene	μg/m³	≤ 2600	3200	4.1
Vinyl Chloride	μg/m³	≤ 560	ND	ND
Tetrachloroethene	μg/m³	≤ 5100	190	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 August 2021

DAR Parameters	Units	Discharge Goal ⁽¹⁾	August 2021	
Sampling Date			8/2/21	
Average Flowrate	CFM	N/A	8,749	
Total Flow	ft ³	N/A	362,487,864	
Total Flow	m ³	N/A	10,264,513	
Trichloroethene	lb/hr	≤ 0.09	0.00012	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00377	
1,2-Dichloroethane	lb/hr	N/A	0.00000	
Toluene	lb/hr	N/A	0.00005	
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.