

10 October 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 SEPTEMBER 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 September to 30 September 2021 are presented in Attachment A. The plant was down for approximately 10 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 & Strang

Robert G. Gregory Project Manager

Attachment A: Groundwater and Air Sampling Results for September 2021

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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
V. Varricchio, NWIRP Bethpage Facilities Management
P. Schauble, KGS
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ATTACHMENT A

GROUNDWATER AND AIR SAMPLING RESULTS

SEPTEMBER 2021

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

SPDES Parameters			September 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		9/2/21					
Effective Flowrate	1100	GPM	630	0	176	806	852	
Total Flow	N/A	gallons	26,859,100	0	7,477,300	34,336,400	36,301,900	
рН	5.5 - 8.5	SU	5.67	NS	6.16	5.78	6.96	
Chloroform	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-Dichloroethane	5	μg/L	1.09 J	NS	ND (1.0)	0.85 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	0.584 J	NS	2.24 J	0.945 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	3.23 J	NS	1.90 J	2.94 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	14.6	NS	4.99 J	12.51	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	0.415 J	NS	ND (1.0)	0.325 J	ND (1.0)	
Trichloroethene	5	μg/L	49.3	NS	588	166.6	0.288 J	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	5.48 J	1.193	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	1.7	NS	12	3.94	0.042	
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	6.9	1.50	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 September 2021

DAR Parameters	September 2021				
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent	
Sampling Date			9/2/21		
Average Flowrate	CFM	N/A	NR	8,868	
Total Flow	ft ³	N/A	NR	377,782,125	
Total Flow	m³	N/A	NR	10,697,598	
1,2-Dichloroethane	μg/m ³	N/A	1.7 J	ND	
cis 1,2-Dichloroethene	μg/m ³	(100 000 (2)	40	30	
trans 1,2-Dichloroethene	μg/m ³	≤ 100,000 ⁽²⁾	ND	0.83 J	
1,2-Dichloroethene (total)	μg/m ³	≤ 100,000	40	30	
Toluene	μg/m ³	N/A	1.8 J	0.26 J	
Total Xylene	μg/m ³	N/A	ND	ND	
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND	
Trichloroethene	μg/m³	≤ 2600	2900	1.1 J	
Vinyl Chloride	μg/m ³	≤ 560	ND	ND	
Tetrachloroethene	μg/m ³	≤ 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 September 2021

DAR Parameters	Units	Discharge Goal ⁽¹⁾	September 2021	
Sampling Date			9/2/21	
Average Flowrate	CFM	N/A	8,868	
Total Flow	ft ³	N/A	377,782,125	
Total Flow	m ³	N/A	10,697,598	
Trichloroethene	lb/hr	≤ 0.09	0.00004	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00098	
1,2-Dichloroethane	lb/hr	N/A	0.00000	
Toluene	lb/hr	N/A	0.00001	
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.