

9 October 2023

Ms. Kristin Granzen 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 2023 REPORTING PERIOD

Dear Ms. Granzen:

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 2023 are presented in Attachment A. The plant was down for approximately 8.2 hours during the reporting period as the result of maintenance of the Advanced Oxidation Process (AOP) system, a fire alarm inspection, and a power outage.

As indicated in Attachment A, all SPDES permitted aqueous constituents are in compliance with the established discharge limits, and all stack emissions are in compliance with established discharge goals during the current 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

Robert & Dryng

Project Manager

Attachment A: Groundwater and Air Sampling Results for September 2023

- cc: C. Haas, NYSDEC Region 1
 - C. Engelhardt, NYSDEC Region 1
 - J. Pilewski, NYSDEC Region 1 Water Engineer
 - J. Pelton, NYSDEC
 - M. Travis, NYSDEC
 - 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
 - D. Brayack, Tetra Tech
 - R. Moore, Tetra Tech
 - R. Hoffmaster, KGS
 - P. Schauble, KGS
 - GM-38 Copy

ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS SEPTEMBER 2023

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report September 2023

SPDES Parameters			September 2023					
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	675	N/A	N/A	
Screened Interval	N/A	ft bgs	335-395 410-430	392-412 442-504	570-670	N/A	N/A	
Sampling Date	N/A		9/5/23					
Effective Flowrate	1100	GPM	485	0	492	977	1,002	
Total Flow	N/A	gallons	20,698,268	0	21,032,039	41,730,306	42,807,768	
рН	5.5 - 8.5	SU	5.96	NS	6.33	6.15	6.94	
Chloroform	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-Dichloroethane	5	μg/L	0.962 J	NS	ND (1.0)	0.48 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	0.504 J	NS	1.26 J	0.89 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	2.83 J	NS	1.18 J	2.00 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	12.6	NS	5.45 J	9.0	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	0.294 J	NS	ND (1.0)	0.15 J	ND (1.0)	
Trichloroethene	5	μg/L	44.5	NS	413	230	0.549 J	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	6.77 J	3.4 J	ND (1.0)	
Vinyl Chloride	2	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,4-Dioxane - 8270D	1	μg/L	1.5	NS	9.9	5.7	0.079	
Mercury	0.0025	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	ND (1.0)	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. Limit of Detection (LOD) given in parentheses.
- N/A Not Applicable
- NS Not Sampled
- * Sample was re-analyzed outside of the holding tie due to the initial analysis QC failure.
- (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.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results September 2023

DAR Parameters	September 2023			
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent
Sampling Date			9/5/23	
Average Flowrate ⁽³⁾	CFM	N/A	NR	1,345
Total Flow	ft ³	N/A	NR	57,446,156
Total Flow	m ³	N/A	NR	1,626,694
1,2-Dichloroethane	μg/m³	N/A	ND	2.3 J
cis 1,2-Dichloroethene	μg/m³	≤ 100,000 ⁽²⁾	61	42
trans 1,2-Dichloroethene	μg/m³	_ ≤ 100,000	ND	ND
1,2-Dichloroethene (total)	μg/m³	≤ 100,000	61	42
Toluene	μg/m³	N/A	ND	ND
Total Xylene	μg/m³	N/A	ND	ND
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND
Trichloroethene	μg/m³	≤ 2600	14000	71
Vinyl Chloride	μg/m³	≤ 560	ND	ND
Tetrachloroethene	μg/m³	≤ 5100	530	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.

 Goals based on an assumed air flow rate of 8,000 CFM
- (3) The average flowrate is utilizing the readings from Blower B-1. Blower B-2 was taken offline on 11 May 2023.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Controlled Stack Emissions September 2023

DAR Parameters	Units	Discharge Goal ⁽¹⁾	September 2023	
Sampling Date			9/5/23	
Average Flowrate	CFM	N/A	1,345	
Total Flow	ft ³	N/A	57,446,156	
Total Flow	m ³	N/A	1,626,694	
Trichloroethene	lb/hr	≤ 0.09	0.00035	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00021	
1,2-Dichloroethane	lb/hr	N/A	0.00001	
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. Goals based on an assumed air flow rate of 8,000 CFM