

12 December 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

NOVEMBER 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 November to 30 November 2023 are presented in Attachment A. The plant was offline for approximately 1.5 hours during the reporting period as the result of UV lamp alarms and lamp replacement.

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 & Drang

Project Manager

Attachment A: Groundwater and Air Sampling Results for November 2023

cc: J. Pelton, NYSDEC

M. Travis, NYSDEC

- 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
- D. Brayack, Tetra Tech
- R. Moore, Tetra Tech
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ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS NOVEMBER 2023

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

SPDES Parameters			November 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		11/1/23					
Effective Flowrate	1100	GPM	495	0	496	991	1,022	
Total Flow	N/A	gallons	21,338,800	0	21,388,500	42,727,300	44,039,200	
рН	5.5 - 8.5	SU	5.81	NS	6.33	6.07	6.93	
Chloroform	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-Dichloroethane	5	μg/L	0.855 J	NS	ND (1.0)	0.43 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	0.525 J	NS	1.37 J	0.95 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	2.49 J	NS	ND (1.0)	1.24 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	13.0	NS	5.64 J	9.3	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
Trichloroethene	5	μg/L	45.9	NS	461	254	0.258 J	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	6.71 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	1.2	NS	7.5	4.4	0.15 *	
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 November 2023

DAR Parameters	November 2023				
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent	
Sampling Date			11/1/23		
Average Flowrate ⁽³⁾	CFM	N/A	NR	1,211	
Total Flow	ft ³	N/A	NR	52,206,210	
Total Flow	m ³	N/A	NR	1,478,315	
1,2-Dichloroethane	μg/m³	N/A	ND	2.0 J	
cis 1,2-Dichloroethene	μg/m³	≤ 100,000 ⁽²⁾	90	48	
trans 1,2-Dichloroethene	μg/m³	≤ 100,000	ND	ND	
1,2-Dichloroethene (total)	μg/m³	≤ 100,000	91	48	
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	18000	97	
Vinyl Chloride	μg/m³	≤ 560	ND	ND	
Tetrachloroethene	μg/m³	≤ 5100	810	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 November 2023

DAR Parameters	Units	Discharge Goal ⁽¹⁾	November 2023	
Sampling Date			11/1/23	
Average Flowrate	CFM	N/A	1,211	
Total Flow	ft ³	N/A	52,206,210	
Total Flow	m ³	N/A	1,478,315	
Trichloroethene	lb/hr	≤ 0.09	0.00044	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00022	
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