

9 September 2024

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

AUGUST 2024 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 July to 31 August 2024 are presented in Attachment A. The plant was offline for approximately 17 hours during the reporting period associated with a storm-related power outage, conduct of ultraviolet (UV) lamp changeouts, carbon media changeout for vapor-phase granular activated carbon (VGAC) Unit #2, and backwashing of liquid-phase granular activated carbon (LGAC) units #100, #200, and #300.

As indicated in Attachment A, 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 Project Manager

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Attachment A: Groundwater and Air Sampling Results for August 2024

- S. Johnston, NYSDEC
- M. Yau, 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
- R. Hoffmaster, KGS
- P. Schauble, KGS
- GM-38 Copy

ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS AUGUST 2024

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report August 2024

SPDES Parameters			August 2024					
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		8/1/24					
Effective Flowrate	1100	GPM	821	0	501	1,322	1,101	
Total Flow	N/A	gallons	35,829,917	0	10,304,600	46,134,517	48,012,244	
рН	5.5 - 8.5	SU	5.75	NS	6.29	5.95	6.91	
Chloroform	5	μg/L	ND (1.0)	NS	ND (1.0)	ND (1.0)	ND (1.0)	
1,1-Dichloroethane	5	μg/L	0.710 J	NS	0.230 J	0.528 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	0.340 J	NS	0.860 J	0.54 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	2.19 J	NS	0.970 J	1.73 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	11.2	NS	6.39	9.4	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	0.250 J	NS	ND (1.0)	0.16 J	ND (1.0)	
Trichloroethene	5	μg/L	39.1	NS	402 E	177	0.230 J	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	8.33	3.2 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	1.8	NS	11	5.3	ND (0.035)	
Mercury	0.0025	mg/L	ND (0.001)	NS	ND (0.001)	ND (0.001)	ND (0.001)	
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
- E Concentration has exceeded the calibration range.
- ND Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.
- N/A Not Applicable
- NS Not Sampled
- LIT Lost In Transit, the cooler containing the samples was lost while in transit to the laboratory.
- (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 August 2024

DAR Parameters	August 2024				
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent	
Sampling Date			8/1/24		
Average Flowrate ⁽³⁾	CFM	N/A	NR	1,355	
Total Flow	ft ³	N/A	NR	59,122,326	
Total Flow	m ³	N/A	NR	1,674,158	
1,2-Dichloroethane	μg/m³	N/A	ND	4.7	
cis 1,2-Dichloroethene	μg/m³	≤ 100,000 ⁽²⁾	81	42	
trans 1,2-Dichloroethene	μg/m³	≤ 100,000	ND	ND	
1,2-Dichloroethene (total)	μg/m³	≤ 100,000	79	40	
Toluene	μg/m³	N/A	ND	0.67 J	
Total Xylene	μg/m³	N/A	ND	ND	
1,1,2-Trichloroethane	μg/m³	N/A	ND	ND	
Trichloroethene	μg/m³	≤ 2600	24000	450	
Vinyl Chloride	μg/m³	≤ 560	ND	ND	
Tetrachloroethene	μg/m³	≤ 5100	820	3.1 J	

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 August 2024

DAR Parameters	Units	Discharge Goal ⁽¹⁾	August 2024	
Sampling Date			8/1/24	
Average Flowrate	CFM	N/A	1,355	
Total Flow	ft ³	N/A	59,122,326	
Total Flow	m ³	N/A	1,674,158	
Trichloroethene	lb/hr	≤ 0.09	0.00223	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00020	
1,2-Dichloroethane	lb/hr	N/A	0.00002	
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	0.00002	

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