

13 June 2022

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

MAY 2022 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 May to 31 May 2022 are presented in Attachment A. The plant was down for approximately 81 hours during the reporting period as the result of high air stripper alarms attributable to loss of efficiency in the filter bag system resulting from suspended solids in the plant influent, the redevelopment of well RW-4, and intermittent communication losses between the Advanced Oxidation Process (AOP) unit and the hydrogen peroxide feed system.

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

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Attachment A: Groundwater and Air Sampling Results for May 2022

- cc: C. Haas, NYSDEC Region 1
 - C. Engelhardt, NYSDEC Region 1
 - J. Pilewski, NYSDEC Region 1 Water Engineer
 - K. Granzen, 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
 - P. Schauble, KGS
 - GM-38 Copy

ATTACHMENT A GROUNDWATER AND AIR SAMPLING RESULTS MAY 2022

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Discharge Monitoring Report May 2022

SPDES Parameters			May 2022					
Process Stream	Daily Treated Effluent Maximum ⁽¹⁾	Units	RW-1	RW-3	RW-4 ⁽²⁾	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		5/20/22					
Effective Flowrate	1100	GPM	938	0	10	947	976	
Total Flow	N/A	gallons	37,275,784	0	451,300	37,727,084	38,816,757	
рН	5.5 - 8.5	SU	5.52	NS	NS	5.52	6.53	
Chloroform	5	μg/L	0.353 J	NS	NS	0.35	ND (1.0)	
1,1-Dichloroethane	5	μg/L	1.08 J	NS	NS	1.07	ND (1.0)	
1,2-Dichloroethane	0.6	μg/L	ND (1.0)	NS	NS	ND (1.0)	ND (1.0)	
1,1-Dichloroethene	5	μg/L	0.729 J	NS	NS	0.72 J	ND (1.0)	
cis 1,2-Dichloroethene	5	μg/L	3.11 J	NS	NS	3.08	ND (1.0)	
trans 1,2-Dichloroethene	5	μg/L	ND (1.0)	NS	NS	ND (1.0)	ND (1.0)	
Tetrachloroethene	5	μg/L	13.8	NS	NS	13.66	ND (1.0)	
1,1,1-Trichloroethane	5	μg/L	0.389 J	NS	NS	0.38 J	ND (1.0)	
Trichloroethene	5	μg/L	56.8	NS	NS	56.2	ND (1.0)	
1,1,2-Trichlorotrifluoroethane	5	μg/L	ND (1.0)	NS	NS	ND (1.0)	ND (1.0)	
Vinyl Chloride	2	μg/L	ND (1.0)	NS	NS	ND (1.0)	ND (1.0)	
1,4-Dioxane - 8270D	1	μg/L	1.8	NS	NS	1.78	0.085	
1,4-Dioxane - 8270D SIM IDMS	1	μg/L	2.1	NS	NS	2.08	0.095	
Mercury	0.00025	mg/L	ND (0.00010)	NS	NS	ND (0.00010)	ND (0.00010)	
Total Suspended Solids (TSS)	N/A	mg/L	ND (1.0)	NS	NS	ND (1.0)	ND (1.0)	

Notes:

- J Estimated result between laboratory method detection limit and reporting limit
- $ND Not \ detected \ above \ laboratory \ method \ detection \ limit. \ Limit \ of \ Detection \ (LOD) \ given \ in \ parentheses.$
- 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.
- (2) RW-4 was offline during sampling; undergoing redevelopment.

GM-38 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant - Bethpage, NY Air Sampling Results May 2022

DAR Parameters	May 2022				
Process Stream	Units	Discharge Goal ⁽¹⁾	Influent	Effluent	
Sampling Date			5/20/22		
Average Flowrate	CFM	N/A	NR	8,957	
Total Flow	ft ³	N/A	NR	356,118,858	
Total Flow	m ³	N/A	NR	10,084,163	
1,2-Dichloroethane	μg/m³	N/A	2.1 J	ND	
cis 1,2-Dichloroethene	μg/m³	≤ 100,000 ⁽²⁾	36	50	
trans 1,2-Dichloroethene	μg/m³	≤ 100,000	ND	ND	
1,2-Dichloroethene (total)	μg/m³	≤ 100,000	36	50	
Toluene	μg/m³	N/A	1.2 J	ND	
Total Xylene	μg/m³	N/A	ND	ND	
1,1,2-Trichloroethane	μg/m³	N/A	0.92 J	ND	
Trichloroethene	μg/m³	≤ 2600	800	ND	
Vinyl Chloride	μg/m³	≤ 560	ND	ND	
Tetrachloroethene	μg/m³	≤ 5100	180	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 May 2022

DAR Parameters	Units	Discharge Goal ⁽¹⁾	May 2022	
Sampling Date			5/20/22	
Average Flowrate	CFM	N/A	8,957	
Total Flow	ft ³	N/A	356,118,858	
Total Flow	m ³	N/A	10,084,163	
Trichloroethene	lb/hr	≤ 0.09	0.00000	
Vinyl Chloride	lb/hr	≤ 0.02	0.00000	
1,2 Dichloroethene	lb/hr	≤ 11	0.00149	
1,2-Dichloroethane	lb/hr	N/A	0.00000	
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.