

6 July 2023

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

JUNE 2023 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 June to 30 June 2023 are presented in Attachment A. The plant was down for approximately 5.8 hours during the reporting period as the result of ultraviolet (UV) lamp alarms from the Advanced Oxidation Process (AOP) unit and liquid-phase granular activated carbon (LGAC) backwash efforts.

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 Project Manager

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Attachment A: Groundwater and Air Sampling Results for June 2023

- 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 JUNE 2023

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

| SPDES Parameters | | | June 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 | | 6/6/23 | | | | | |
| Effective Flowrate | 1100 | GPM | 479 | 0 | 487 | 966 | 1,009 | |
| Total Flow | N/A | gallons | 20,522,100 | 0 | 20,868,200 | 41,390,300 | 43,223,100 | |
| рН | 5.5 - 8.5 | SU | 5.88 | NS | 6.35 | 6.12 | 6.87 | |
| Chloroform | 5 | μg/L | ND (1.0) | NS | ND (1.0) | ND (1.0) | ND (1.0) | |
| 1,1-Dichloroethane | 5 | μg/L | 1.02 J | NS | ND (1.0) | 0.51 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 | 0.450 J | NS | 1.30 J | 0.88 J | ND (1.0) | |
| cis 1,2-Dichloroethene | 5 | μg/L | 2.77 J | NS | ND (1.0) | 1.37 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 | 11.7 | NS | 4.85 J | 8.2 | ND (1.0) | |
| 1,1,1-Trichloroethane | 5 | μg/L | 0.300 J | NS | ND (1.0) | 0.15 J | ND (1.0) | |
| Trichloroethene | 5 | μg/L | 42.8 | NS | 456 | 251 | 0.210 J | |
| 1,1,2-Trichlorotrifluoroethane | 5 | μg/L | ND (1.0) | NS | 6.10 J | 3.1 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 | 1.6 | NS | 11 | 6.3 | 0.066 | |
| 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 | 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
- (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 June 2023

| DAR Parameters | June 2023 | | | | |
|----------------------------|-----------------|----------------------------------|----------|-------------|--|
| Process Stream | Units | Discharge Goal ⁽¹⁾ | Influent | Effluent | |
| Sampling Date | | | 6/6/23 | | |
| Average Flowrate | CFM | N/A | NR | 3,973 | |
| Total Flow | ft ³ | N/A | NR | 170,262,915 | |
| Total Flow | m ³ | N/A | NR | 4,821,309 | |
| 1,2-Dichloroethane | μg/m³ | N/A | ND | 2.2 J | |
| cis 1,2-Dichloroethene | μg/m³ | ≤ 100,000 ⁽²⁾ | 56 | 18 | |
| trans 1,2-Dichloroethene | μg/m³ | ≤ 100,000 ` ′ | ND | ND | |
| 1,2-Dichloroethene (total) | μg/m³ | ≤ 100,000 | 56 | 18 | |
| 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 | 8500 | 7.6 | |
| Vinyl Chloride | μg/m³ | ≤ 560 | ND | 0.46 J | |
| Tetrachloroethene | μg/m³ | ≤ 5100 | 310 | 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

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

| DAR Parameters | Units | Discharge Goal ⁽¹⁾ | June 2023 | |
|-----------------------|-----------------|----------------------------------|-------------|--|
| Sampling Date | | | 6/6/23 | |
| Average Flowrate | CFM | N/A | 3,973 | |
| Total Flow | ft ³ | N/A | 170,262,915 | |
| Total Flow | m ³ | N/A | 4,821,309 | |
| Trichloroethene | lb/hr | ≤ 0.09 | 0.00011 | |
| Vinyl Chloride | lb/hr | ≤ 0.02 | 0.00001 | |
| 1,2 Dichloroethene | lb/hr | ≤ 11 | 0.00027 | |
| 1,2-Dichloroethane | lb/hr | N/A | 0.00003 | |
| 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