



Industrial Waste & Backflow Compliance
1101 Market Street, 6th Floor
Philadelphia, Pennsylvania 19107-2994

RANDY E. HAYMAN
Commissioner

April 13, 2022

Andrew Bradley
Stantec Consulting Services, Inc.
1060 Andrew Drive, Suite 140
West Chester, PA 19380-5602

RE: Groundwater Discharge Permit

Dear Mr. Bradley,

Enclosed is your Groundwater Discharge Permit. The effective and expirations dates appear on the Permit's cover page.

We suggest that you carefully review the provisions of the Permit and familiarize yourself with your monitoring and reporting responsibilities. In particular, please review the following permit sections:

- **Discharge Conditions** - Identifies the conditions in which you are permitted to discharge. *Pay particular attention to dry weather and treatment requirements.*
- **Discharge Limits** – Identifies regulated pollutants and discharge limits for those pollutants.
- **Monitoring Requirements** – Identifies parameters you are required to monitor during your project. *Pay particular attention to the wastewater sampling frequency and parameters.*
- **Reporting Requirements** – Specifies reporting requirements during and upon completion of your project.
- See the attached sheet (Philadelphia Water Department Regulations Section 502.4 (h) for your reporting responsibilities in the event of a permit violation.

Should you have any questions, please feel free to call me at 215-685-6085.

Thank you for your continued cooperation.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jennifer L. Moore".

Jennifer L. Moore
Chief Engineer
Industrial Waste & Backflow Compliance
Philadelphia Water Department



**PHILADELPHIA WATER DEPARTMENT
GROUNDWATER DISCHARGE PERMIT**

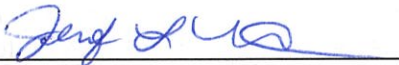


COMPANY: Stantec Consulting Services, Inc.

LOCATION: Evergreen Resources Management Group, LLC
AOI-2 Pollock Street, Deloach Dock
Pollock St. Horizontal Wells Remediation System
Philadelphia, PA 19145

Stantec Consulting Services, Inc. is hereby authorized to discharge groundwater from the location above to the City of Philadelphia (City) sanitary sewer system in accordance with the Philadelphia Water Department Regulations (PWDR), and applicable federal, state, or local law or regulation, and the terms and conditions set forth herein. All discharges authorized herein shall be consistent with the terms and conditions of this Permit. The discharge of any pollutant identified in this Permit more frequently than or at a level in excess of that authorized, as well as failure to fulfill any other term or condition of the Permit, shall constitute a violation of the Permit.

The Permit shall become effective on April 13, 2022 and shall expire at midnight on March 31, 2026.

BY: 
Jennifer L. Moore
Chief Engineer
Industrial Waste & Backflow Compliance
Philadelphia Water Department

Discharge Conditions:

- This permit is valid for Stantec Consulting Services, Inc. only. No other contractor or subcontractor is permitted to discharge under this permit.
- Discharge shall be groundwater from the AOI-2 Pollock St. Horizontal Wells Remediation System site as identified during Stantec Consulting Services, Inc.'s permit application process.
- Initial discharge must be held for sampling. A priority pollutant scan, Total BTEX, and Oil and Grease must be analyzed in accordance with the techniques prescribed in 40 CFR Part 136. Analytical results shall be both mailed and emailed to Jennifer L. Moore at Jennifer.L.Moore@phila.gov and Bishel.Baby@phila.gov prior to discharge. Approval to discharge will be granted based on the results.
- Groundwater is treated using settling tank and oil/water separation before being discharged to the City sewer system.
- Discharge must be made through the approved on-site connection (lateral) to the sanitary sewer shown in Exhibit A.
- The discharges to all other manholes and inlets are prohibited.
- Discharge shall be made in a safe manner with respect to both pedestrian and vehicular traffic.
- No floating layer or visible sheen is present.
- Not to exceed 10% of the lower explosive limit at the point of discharge.

- The discharges must be free of silt, dirt, and mud. If necessary to achieve this, a silt bag, sock, or other type of solids filter, 80-100 mesh or finer must be used.

Discharge Limits:

Parameter	Daily Maximum	Monthly Average
Discharge Rate	15 GPM	---
Discharge Limit	25,000 GPD	---
Acrolein ³	Monitor Only	Monitor Only
Alpha-BHC ³	Monitor Only	Monitor Only
Arsenic	0.15 mg/L	0.10 mg/L
Benzo(a)anthracene ³	Monitor Only	Monitor Only
Beta-BHC ³	Monitor Only	Monitor Only
Total BTEX+ MTBE ¹	40 mg/L	---
Cadmium	0.2 mg/L	0.1 mg/L
Chromium (Total)	7.0 mg/L	4.0 mg/L
Copper	4.5 mg/L	2.7 mg/L
Cyanide, Total	10 mg/L	---
Delta-BHC ³	Monitor Only	Monitor Only
Gamma-BHC ³	Monitor Only	Monitor Only
Lead	0.69 mg/L	0.43 mg/L
Mercury	0.01 mg/L	0.005 mg/L
Naphthalene ³	Monitor Only	Monitor Only
Nickel	4.1 mg/L	2.6 mg/L
Selenium	0.2 mg/L	0.1 mg/L
Phenanthrene ³	Monitor Only	Monitor Only
Phenol ³	Monitor Only	Monitor Only
Polychlorinated Biphenyls (PCBs)	Non-Detectable by EPA Method 608	---
SGT-HEM ²	100 mg/L	---
Silver	0.43 mg/L	0.24 mg/L
Zinc	4.2 mg/L	2.6 mg/L

¹Total BTEX + MTBE refers to sum of the sampled concentrations of Benzene, Toluene, Ethylbenzene and Xylene & Methyl Tert-Butyl Ether.

²SGT-HEM refers to silica gel treated n-hexane extractable material as determined by an approved EPA method as defined in 40 CFR Part 136.

³These parameters shall be monitored and reported as per the specified monitoring frequency and representative sampling below. Numerical limits may be imposed to these parameters should they have an adverse impact to the collection system, treatment plant, biosolids or any receiving body of water.

Monitoring Requirements and Representative Sampling:

- Flow (volume) to the sewer may be measured continuously or by a method that has been approved in writing by the City.
- Monitoring for the parameters with discharge limits shall be conducted at minimum once weekly for all months during which groundwater is discharged from the project site.
- Samples and measurements taken for purposes of the monitoring requirements specified in this permit shall be representative of the monitored activity.
- Stantec Consulting Services, Inc. shall maintain and submit daily logs, with discharge rates (GPM and GPD) and monthly volumes to show compliance with discharge limits (See Exhibit C).

Parameter	Measurement Frequency	Sample Type
Flow	(a)	(a)
pH	(b)	(b)
Acrolein	1/Week (c)	Composite (d)
Alpha-BHC ³	1/Week (c)	Grab
Arsenic	1/Week (c)	Composite (d)
Benzo(a)anthracene	1/Week (c)	Grab
Beta-BHC	1/Week (c)	Grab
Total BTEX+ MTBE ¹	1/Week (c)	Grab
Cadmium	1/Week (c)	Composite (d)
Chromium (Total)	1/Week (c)	Composite (d)
Copper	1/Week (c)	Composite (d)
Cyanide, Total	1/Week (c)	Composite (d)
Delta-BHC	1/Week (c)	Grab
Gamma-BHC	1/Week (c)	Grab
Lead	1/Week (c)	Composite (d)
Mercury	1/Week (c)	Composite (d)
Naphthalene	1/Week (c)	Grab
Nickel	1/Week (c)	Composite (d)
Selenium	1/Week (c)	Composite (d)
Phenanthrene	1/Week (c)	Grab
Phenol	1/Week (c)	Grab
Polychlorinated Biphenyls (PCBs)	1/Week (c)	Composite (d)
SGT-HEM ²	1/Week (c)	Grab
Silver	1/Week (c)	Composite (d)
Zinc	1/Week (c)	Composite (d)

- a) Flow (volume) to the sewer shall be measured continuously or by a method that has been approved in writing by the City. Measured or estimated average and maximum daily flow for each reporting period shall be reported.

- b) pH - Shall be monitored continuously or by weekly grab samples.
 - 1. For pH that is monitored continuously, the pH shall be no less than 5.5 and no more than 12.0 standard units for at least 55 minutes in every 60-minute period. pH shall be no less than 5.0 standard units at all times.
 - 2. For pH that is measured by weekly grab sample, the pH shall be no less than 5.5 and no more than 12.0 standard units at all times.
- c) If Stantec Consulting Services, Inc. achieves consistent compliance with permit limits over a six-month period, Stantec Consulting Services, Inc. may submit a written request to PWD for a reduction of the required sampling frequency. This frequency may be reduced if approved in writing by the City.
- d) Time proportional composite sample consisting of at least one discrete sample per hour on one process day per week. The discrete samples are to be composited and properly preserved.

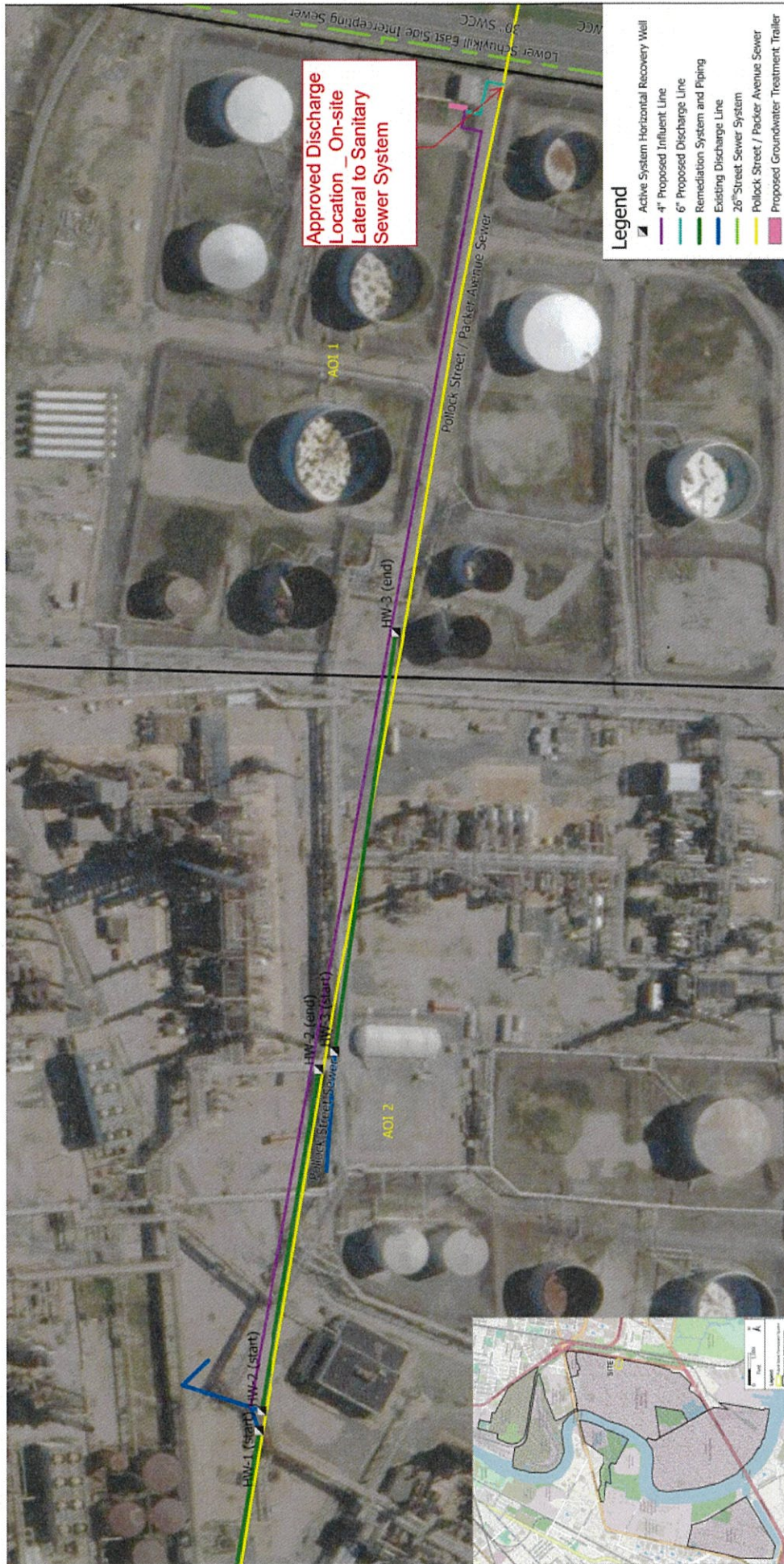
Reporting Requirements:

- Exceedances of permitted limits must be reported pursuant to Section 502.4 (h) of the PWDR.
- Monthly discharge (flow) quantities and analytical data for the previous 3 months shall be provided to this office during the month of July, October, January, and April.
 - Flow reporting is still required in the event that no discharge is made during a particular week or month.
 - Monthly discharge (flow) quantities must include discharge rate in Gallons per Minute and Gallons per Day. (See Exhibit C)
 - Each discharge must be in compliance with the GPM and GPD limit at all times.
- All reports must include the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- Stantec Consulting Services, Inc. will be invoiced for the volume of groundwater discharged to the City sanitary sewer at the current rate listed in the Section 7.1 of the PWD Rates and Charges.
- Stantec Consulting Services, Inc. must request an extension 30 days prior to the expiration of this permit.

- Upon the expiration of this permit (see below) a Closure Statement must be provided to this office within 30 days. This Closure Statement shall be submitted in writing, and shall contain, at a minimum, the following:
 - 1) Name and address of permittee (that at which the permitted discharge took place);
 - 2) Name and telephone number of company contact person;
 - 3) Final discharge report including flow volumes and analytical results, if needed (see Exhibit C);
 - 4) Statement of Compliance;
 - 5) Request for a Permit Closure with an effective date for the closure;
 - 6) List of other discharge(s) that will continue to operate at same location;
 - 7) A certification statement signed and dated by an authorized representative of the permittee.
- All reports and closure statement must be sent to:

Attn: Jennifer L. Moore
PWD-Industrial Waste & Backflow Compliance
1101 Market Street, 6th Floor
Philadelphia, PA 19107



PROPOSED DISCHARGE PIPING AND LOCATION
 POLLOCK STREET SEWER - AOI 1
 EVERGREEN RESOURCES GROUP, LLC
 FORMER PES REFINERY - 3144 PASSYUNK AVENUE
 PHILADELPHIA, PENNSYLVANIA



Sources: Nearmap, Aquaterra
 Field Measurements

Figure: 1
 Drawn: SJ
 Check: JR
 Date: 4/1/2022

EXHIBIT B
PHILADELPHIA WATER DEPARTMENT REGULATIONS
SECTION 502.4 (h)

any hazardous waste, where allowed by its Permit, do not require additional notification.

(3) In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the Industrial User must notify the City, the EPA Regional Waste Management Division Director, and State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.

(4) In the case of any notification made under this Section, the Industrial User shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

(f) Closure Statement

If Industrial User requests modification or termination of Industrial User's Wastewater Discharge Permit due to ceasing all or part of the process(es) regulated by the Permit, Industrial User shall submit to the City, in writing, thirty (30) days prior to closing, a Closure Statement which shall contain, at a minimum, the following:

(1) company name and address (at which regulated process(es) are or were located);

(2) name and telephone number of company contact person;

(3) closure date(s) of regulated process(es);

(4) list of other process(es) that will continue to operate at same location;

(5) indication of whether a water shut-off request has been filed if entire facility has or will shut down;

(6) ultimate plans for disposal of building(s), equipment and materials;

(7) schedule for (6) above;

(8) receipts and manifests for disposal of hazardous wastes and materials, etc.; and

(9) a certification statement, signed and dated by an Authorized Representative of the Industrial User, as required by 40 CFR 403.6(a)(2)(ii) and Section 502.4(k) of these Regulations.

(g) Notice of Potential Problems

Industrial User shall notify the City immediately of all discharges which could cause problems to the POTW, including spills or slug discharges.

(h) Notice of Indication of Violation

If sampling performed by Industrial User indicates a violation, User shall notify the City within twenty-four (24) hours of becoming aware of the violation, and submit to the City within five (5) business days, unless otherwise specified, a detailed written report describing the discharge and the measures taken to prevent similar future occurrences. User shall also repeat the sampling and analysis and submit the results of the repeat analysis to the City within thirty (30) days of becoming aware of the violation.

¹GPM Limit (Gallons Per Minute)
²GPD Limit (Gallons Per Day)

¹GPM Limit (Gallons Per Minute)

- Groundwater Discharge Monthly Log must be sent to:

Attn: Jennifer L. Moore
PWD - Industrial Waste & Backflow Compliance
1101 Market Street, 6th Floor
Philadelphia, PA 19107
Ph: 215-685-6085
Email: Jennifer.L.Moore@phila.gov

- Email shall only be for notification of mailings and shall not be the final submission for any documentation.
- Any person signing a discharge log shall make the following certification: -

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

NAME - AUTHORIZED REPRESENTATIVE

SIGNATURE

OFFICIAL TITLE

DATE