



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

VIA EMAIL

January 15, 2021

Seth Kinderman
Massachusetts Institute of Technology
77 Massachusetts Ave, Bldg NW23-100
Cambridge, MA 02139

Re: Authorization to discharge under the Remediation General Permit (RGP) – Authorization #MAG910960 for the STV-4 Steam Utility Replacement site located at 51 Vassar Street in Cambridge, MA

Seth Kinderman:

Based on the review of a Notice of Intent (NOI) dated October 13, 2020 submitted by Haley & Aldrich, Inc. for the site referenced above, the U.S. Environmental Protection Agency, Region 1 (EPA) hereby authorizes Massachusetts Institute of Technology, as the named owner, and as a named operator and co-permittee with United Civil, to discharge in accordance with the provisions of the RGP from this site via the City of Cambridge storm sewer system to the Charles River (MA72-38). Please note that the operator is responsible for obtaining permission to discharge to this system, prior to initiating discharges. EPA's authorization to discharge does not convey any such permission. The authorization number is listed above. The effective date of coverage is the date of this authorization letter. The RGP and this authorization to discharge will expire on April 8, 2022, or upon Notice of Termination, whichever occurs first. In accordance with Part 5.3 of the RGP, your permit coverage will be administratively continued upon expiration if the RGP has not been reissued.

Enclosed with this RGP authorization to discharge is a summary of the applicable effluent limitations and monitoring requirements for your activity category III, contaminated site dewatering discharge. Where a given parameter does not apply to the discharge, EPA has indicated "Not Required" in the enclosed summary. A dilution factor of 29.2, approved by the Massachusetts Department of Environmental Protection, was used in calculating effluent limits applicable to the proposed discharge from this site, except for parameters for which the receiving water is impaired, if applicable. Please note that this summary does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of the RGP, including influent and effluent monitoring, record keeping, and reporting requirements. For the complete general permit, see EPA's RGP website, currently available at: <https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire>.

A Best Management Practices Plan (BMPP) and Best Management Practices (BMPs) are required for all operators. This includes corrective actions required upon discovery of a violation of a permit limitation or requirement. See Part 2.5.1 and 2.5.2 of the RGP for more information. In accordance with Part 2.5.3 of the RGP, no discharges chemical(s) and/or additive(s) are authorized. To discharge any new chemical(s) and/or additive(s), a Notice of Change is required. See Part 5.1 and Appendix IV, Part 2 of the RGP for more information.

Your authorization to discharge also includes a monitor-only requirement for barium. This additional monitoring requirement is being required in accordance with Part 2.2.3.c and Part 2.2.4 of the RGP because you disclosed that this pollutant is present at the site. This letter provides the additional condition in writing. Monitoring for barium shall be conducted in conjunction with the monitoring required for the other parameters applicable in Part 2.1.1 of the RGP. Any sufficiently sensitive test method in 40 CFR Part 136 may be used for the analysis of barium.

Monitoring requirements begin upon initiation of discharge. Please ensure that sufficiently sensitive test methods are used for all sample analyses conducted for this permit. To be considered sufficiently sensitive, test methods must achieve a minimum level (ML) for analysis for a given parameter that is no greater than the effluent limitation for that parameter, unless otherwise specified for that parameter. Where no effluent limitation applies, EPA has provided the ML required with the enclosed summary. Where a compliance level applies, EPA has provided the required compliance level with the enclosed summary. See Part 4.1, 4.3, and 4.4 of the RGP for more information regarding monitoring requirements. Also see Appendix VII for more information regarding sufficiently sensitive test methods.

You must submit a Notice of Termination (NOT) within thirty (30) days of the termination of discharges, which must include an electronic attachment in accordance with Appendix VIII of all monitoring data collected. Since you have reported your discharges are not expected to last twelve (12) months or more, EPA expects you will not be subject to NetDMR reporting requirements. However, if EPA does not receive a NOT, you must begin submitting monitoring data using NetDMR for the monitoring period beginning on February 1, 2022. See Parts 4.6, 5.1, 5.2 and 6, Appendix IV, and Appendix VIII of the RGP for more information regarding reporting requirements. For additional Appendix VIII resources, including instructions for establishing a NetDMR account, see EPA's RGP website noted above.

Thank you in advance for your cooperation in this matter. Please contact Shauna Little at (617) 918-1989 or little.shauna@epa.gov, if you have any questions.

Sincerely,

Todd Borci, Acting Chief
Stormwater and Construction Permits Section
Water Division

Enclosure

cc: Kimberly Scalise, Haley & Aldrich, Inc., via email
Todd R. Butler, Haley & Aldrich, Inc., via email
Joel S. Mooney, Haley & Aldrich, Inc., via email
Cathy Vakalopoulos, MassDEP, via email
City of Cambridge DPW, via email

GENERAL PERMIT FOR REMEDIATION ACTIVITY DISCHARGES

Table 1: Authorization Information

Permit Number	MAG910960
Receiving Water	Charles River
Outfall Number(s)	Outfall 001 to City of Cambridge
Monitoring Requirements	See Table 2 through Table 6, below; See Parts 4.1, 4.3 and 4.4 of the RGP; WET testing not required
Reporting Requirements	See Parts 4.6, 5.1, 5.2 and 6 of the RGP; NetDMR reporting will begin Feb 1, 2022 unless NOT received by EPA

Table 2: Chemical-Specific Effluent Limitations and Monitor-Only Requirements¹

Parameter²	Effluent Limitation³
A. Inorganics	
Ammonia ⁴	Report mg/L
Chloride ⁵	Report µg/L
Total Residual Chlorine ⁶	Not Required
Total Suspended Solids	30 mg/L
Antimony ⁷	206 µg/L
Arsenic ⁷	104 µg/L
Cadmium ⁷	10.2 µg/L
Chromium III ⁷	323 µg/L
Chromium VI ⁷	323 µg/L
Copper ⁷	242 µg/L
Iron ⁷	5,000 µg/L
Lead ⁷	160 µg/L
Mercury ⁷	0.739 µg/L
Nickel ⁷	1,450 µg/L
Selenium ⁷	235.8 µg/L
Silver ⁷	35.1 µg/L
Zinc ⁷	420 µg/L
Cyanide ⁸	Not Required
B. Non-Halogenated Volatile Organic Compounds	
Total BTEX ⁹	100 µg/L
Benzene	5.0 µg/L
1,4 Dioxane	Not Required
Acetone	Not Required
Phenol	Not Required
C. Halogenated Volatile Organic Compounds	
Carbon Tetrachloride	Not Required
1,2 Dichlorobenzene	Not Required
1,3 Dichlorobenzene	Not Required
1,4 Dichlorobenzene	Not Required
1,1 Dichloroethane	Not Required
1,2 Dichloroethane	Not Required

1,1 Dichloroethylene	Not Required
Ethylene Dibromide	Not Required
Methylene Chloride	Not Required
1,1,1 Trichloroethane	Not Required
1,1,2 Trichloroethane	Not Required
Trichloroethylene	Not Required
Tetrachloroethylene	Not Required
cis-1,2 Dichloroethylene	Not Required
Vinyl Chloride	Not Required
D. Non-Halogenated Semi-Volatile Organic Compounds	
Total Phthalates ¹⁰	Not Required
Diethylhexyl Phthalate	Not Required
Total Group I Polycyclic Aromatic Hydrocarbons ¹¹	Not Required
Benzo(a)anthracene ¹¹	Not Required
Benzo(a)pyrene ¹¹	Not Required
Benzo(b)fluoranthene ¹¹	Not Required
Benzo(k)fluoranthene ¹¹	Not Required
Chrysene ¹¹	Not Required
Dibenzo(a,h)anthracene ¹¹	Not Required
Indeno(1,2,3-cd)pyrene ¹¹	Not Required
Total Group II Polycyclic Aromatic Hydrocarbons ¹²	100 µg/L
Naphthalene	20 µg/L
E. Halogenated Semi-Volatile Organic Compounds	
Total Polychlorinated Biphenyls ¹³	Not Required
Pentachlorophenol	Not Required
F. Fuels Parameters	
Total Petroleum Hydrocarbons	Not Required
Ethanol ¹⁴	Not Required
Methyl-tert-Butyl Ether	Not Required
tert-Butyl Alcohol	Not Required
tert-Amyl Methyl Ether	Not Required

Table 2 Notes:

1: The following abbreviations are used in Table 2, above:

a: mg/L = milligrams per liter

b: µg/L = micrograms per liter

2: The sample type required for all parameters is grab. Grab samples must be analyzed individually and cannot be composited.

3: The effluent limitation and/or monitor-only requirement for any parameter applies, unless “Not Required” is shown. The limitation type for all parameters is monthly average.

4: The minimum level (ML) for analysis of ammonia must be less than or equal to 0.1 mg/L.

5: The ML for analysis of chloride must be less than or equal to 230 mg/L.

- 6: The ML for analysis of total residual chlorine (TRC) must be less than or equal to 50 µg/L.
- 7: The limitation for this parameter is on the basis of total recoverable metal in the water column.
- 8: The ML for analysis of total cyanide must be less than or equal to 5.0 µg/L.
- 9: Total BTEX is the sum of: benzene; toluene; ethylbenzene; and (m,p,o) xylenes.
- 10: Total Phthalates is the sum of: diethylhexyl phthalate; butyl benzyl phthalate; di-n-butyl phthalate; diethyl phthalate; dimethyl phthalate; and di-n-octyl phthalate.
- 11: Total Group I PAHs is the sum of: benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(k)fluoranthene; chrysene; dibenzo(a,h)anthracene; indeno(1,2,3-cd)pyrene. ML for analysis of group I polycyclic aromatic hydrocarbons (PAHs) must be less than or equal to 0.1 µg/L using a test method in 40 CFR §136 with selected ion monitoring. MassDEP (e.g., EPH) and RCRA (e.g., 8260) methods cannot be used for analysis.
- 12: Total Group II PAHs is the sum of: acenaphthene; acenaphthylene; anthracene (CAS No. 120-12-7); benzo(g,h,i)perylene; fluoranthene; fluorene; naphthalene; phenanthrene; pyrene. MassDEP (e.g., EPH) and RCRA (e.g., 8270) methods cannot be used for analysis.
- 13: Total PCBs is the sum of the following aroclors: PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260. The ML for analysis of total polychlorinated biphenyls (PCBs) must be less than or equal to 0.5 µg/L.

Table 3: Effluent Flow Limitation¹

Effluent Flow	Effluent Limitation
	0.144 MGD

Table 3 Notes:

- 1: The following abbreviations are used in Table 3, above:
a: MGD = million gallons per day
- 2: The limitation type for effluent flow is daily maximum.

Table 4: pH Limitations¹

Receiving Water Class	Effluent Limitation ²
Freshwater	6.5 to 8.3 SU

Table 4 Notes:

- 1: The following abbreviations are used in Table 4, above:
a: SU = standard units
- 2: The limitation type for pH is range. The sample type required for pH is grab.

Table 5: Temperature Limitations¹

Receiving Water Class		Effluent Limitation ²	ΔT Limitation
Freshwater	Class B	Not Required	Not Required

Table 5 Notes

1: The following abbreviations are used in Table 5, above:

a: °F = degrees Fahrenheit

b: ΔT = change in temperature

c: $\leq$ = less than or equal to

2: The limitation type for temperature is daily maximum. The ample type required for temperature is grab.

3: Change in temperature from background shall be determined by subtracting the temperature of the effluent from the temperature of the receiving water measured at a point immediately upstream of a discharge's zone of influence at a reasonably accessible location.

Table 6: Additional Requirements

Parameter ²	Effluent Limitation ³
Barium	Report $\mu\text{g/L}$

Table 6 Notes:

1: The following abbreviations are used in Table 6, above:

a: $\mu\text{g/L}$ = micrograms per liter

2: Total recoverable barium must be analyzed.

3: Minimum level required: 1,000 $\mu\text{g/L}$ for barium.