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

VIA EMAIL

November 27, 2017

Phyllis Carter
Massachusetts Institute of Technology
77 Massachusetts Avenue
Building N52-496
Cambridge, MA 02139
pcarter@mit.edu

Re: Authorization to discharge under the Remediation General Permit (RGP) – Authorization #MAG910620, for the MIT.nano Project site located in Cambridge, MA

Dear Ms. Carter:

Based on the review of a Notice of Intent (NOI) dated October 20, 2017 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 Turner Construction Company, to discharge in accordance with the provisions of the RGP from this site via the City of Cambridge storm sewer system[1] and/or directly to Charles River (MA72-36). The authorization number is listed above. The effective date of coverage is the date of this authorization letter.

Enclosed with this RGP authorization to discharge is a summary of the applicable parameters and effluent limitations for your activity category III, contaminated site dewatering discharge. A dilution factor of 88.4, approved by the Massachusetts Department of Environmental Protection, was used in calculating effluent limits applicable to the proposed discharge from this site. 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.[2]

This EPA general permit and authorization to discharge will expire on **April 8, 2022**, or upon Notice of Termination (NOT), whichever occurs first. However, in accordance with Part 5.3 of the general permit, your permit coverage will be administratively continued until issuance of a new RGP. Please note that you must submit a NOT within thirty (30) days of the termination of the discharge. You have reported your discharges are expected to last twelve (12) months or more. Because your discharge is expected to last twelve (12) months or more, you are subject to discharge monitoring requirements that begin

[1] 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.
[2] https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire.

December 1, 2018. See Part 4.6 and 5.2 of the RGP, and Appendix IV, Part 3 for more information regarding reporting requirements.

In accordance with Part 2.2.1 of the RGP and using the calculation methodology included in Appendix V, EPA corrected the calculated water quality-based effluent limitations (WQBELs) applicable to this proposed discharge. The cause of the calculation error was identified as the incorrect entry of the influent concentrations for multiple parameters in the fillable electronic format submitted with the NOI and included in Appendix C. These values were corrected to the maximum influent concentrations reported in the NOI. The reason for these corrections is to determine the WQBELs that apply to the proposed discharge. Based on the revised calculations, your authorization to discharge includes an additional WQBEL for total recoverable zinc of 2.52 µg/L.

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 MLs for analysis for a given parameter that is no greater than the effluent limitation for that parameter, unless otherwise specified in the RGP for that parameter. Where no effluent limitation applies, EPA has provided the ML required with the enclosed summary.

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,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction Permits Section

Enclosure

cc: Dick Williamson, Turner Construction Company, via email
Keith E. Johnson, PE, LSP, Haley & Aldrich, Inc., via email
Todd R. Butler, PE, Haley & Aldrich, Inc., via email
Grace Daylor, EIT, Haley & Aldrich, Inc., via email
Cathy Vakalopoulos, MassDEP, via email
City of Cambridge Department of Public Works, via email

Table 1: Authorization Information

Permit Number	MAG910620
Receiving Water	Charles River
Outfall Number	Outfall 001 to City of Cambridge D08OF0010 and/or Directly
Monitoring Frequency	See Part 4.1.2 of the RGP
Reporting Requirement	See Part 4.6.1 of the RGP; NetDMR requirements begin Dec 1, 2018

Table 2: Chemical-Specific Effluent Limitations and Monitor-Only Requirements[1]

Parameter	Effluent Limitation
A. Inorganics	
Ammonia[2]	Report mg/L
Chloride[3]	Report µg/L
Total Suspended Solids	30 mg/L
Antimony[4]	206 µg/L
Arsenic[4]	104 µg/L
Cadmium[4]	10.2 µg/L
Chromium III[4]	323 µg/L
Chromium VI[4]	323 µg/L
Copper[4]	242 µg/L
Iron[4]	5,000 µg/L
Lead[4]	2.52 µg/L
Mercury[4]	0.739 µg/L
Nickel[4]	1,450 µg/L
Selenium[4]	235.8 µg/L
Silver[4]	35.1 µg/L
Zinc[4]	420 µg/L
Cyanide[5]	178 mg/L
B. Non-Halogenated Volatile Organic Compounds	
Acetone	7.97 mg/L
C. Halogenated Volatile Organic Compounds	
Trichloroethylene	5.0 µg/L
cis-1,2 Dichloroethylene	70 µg/L
D. Non-Halogenated Semi-Volatile Organic Compounds	
Total Group I Polycyclic Aromatic Hydrocarbons[5]	1.0 µg/L
Benzo(a)anthracene[6]	0.3358 µg/L
Benzo(a)pyrene[6]	0.3358 µg/L
Benzo(b)fluoranthene[6]	0.3358 µg/L
Benzo(k)fluoranthene[6]	0.3358 µg/L
Chrysene[6]	0.3358 µg/L
Dibenzo(a,h)anthracene[6]	Report µg/L
Indeno(1,2,3-cd)pyrene[6]	0.3358 µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	100 µg/L

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

[3] The ML for analysis of chloride must be less than or equal to 230 mg/L.

[4] The limitation for this parameter is on the basis of total recoverable metal in the water column.

[5] The ML for analysis of total cyanide must be less than or equal to 5.0 µg/L.

[6] The compliance level for group I polycyclic aromatic hydrocarbons (PAHs) is 0.1 µg/L. The ML for analysis of group I PAHs must be less than or equal to 0.1 µg/L.

Table 3: Effluent Flow Limitation

Effluent Flow	**Effluent Limitation**
	0.216 MGD

Table 3 Notes

[1] The following abbreviations are used in Table 3, above:
[a] MGD = million gallons per day

Table 4: pH Limitations for Discharges in Massachusetts

Receiving Water Class	**Effluent Limitation**
Freshwater	6.5 to 8.3 SU

Table 4 Notes

[1] The following abbreviations are used in Table 4, above:
[a] SU = standard units