

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§ 26-53),

Aquatic Research Organisms, Inc.

is authorized to discharge from the facility located at

**1 Lafayette Road, Building #7
Hampton, New Hampshire 03842**

to receiving water named

**Taylor River; Piscataqua-Salmon Falls Watershed
Hydrologic Code 01060003 - Class B**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit issued on April 1, 2021, except as modified with new language in **bold** in Part I.A.1 on Page 2 and footnote 10 of Part I.A.1 (Page 5). In addition footnote 11 on Page 5 has been removed as well as the first sentence of Part I.E.3 on Page 12.

This permit modification shall become effective upon the date of signature.

This modified permit and the authorization to discharge expire at midnight, May 31, 2026.

This modified permit is issued pursuant to 40 CFR § 124.5, and revises and supersedes the relevant portions of the permit that was issued on April 1, 2021.

This permit consists of Part I; **Attachment A** (Marine Acute Toxicity Test Procedure and Protocol, July 12); and **Part II** (NPDES Part II Standard Conditions, April 2018).

Signed this day of

KENNETH MORAFF Digitally signed by
KENNETH MORAFF
Date: 2022.09.30
16:07:18 -0400

Ken Moraff, Director
Water Division
Environmental Protection Agency
Region 1
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge wastewater resulting from facility processes, waste streams, and operations at Outfall 002 to the Taylor River. Such discharges shall be limited and monitored by the Permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent prior to mixing with any waste streams authorized under NPDES permit number NH0022055.

Effluent Characteristic	Units	Effluent Limitations		Monitoring Requirements ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Effluent Flow ⁶	gallons/day	7,000	12,000	Continuous	Meter or Totalizer
Total Suspended Solids (TSS) ⁷	mg/L	Report	50	1/Week	Grab
pH ⁸	S.U.	6.5 – 8.0		1/Day	Grab
Fecal Coliform ^{9,10,11}	# /100mL %	14 --	Report 10	5/Week	Grab
<i>Enterococci</i> ⁹	# / 100mL	35	104	5/Week	Grab
Total Nitrogen ¹²	mg/L	--	Report	1/Quarter	Composite
Total Phosphorus	mg/L	--	Report	1/Quarter	Composite
Total Residual Chlorine (when in use) ¹³	mg/L	0.75	1.0	2/Day	Grab
Formaldehyde ¹⁴	mg/L	--	Report	1/Quarter	Grab
Whole Effluent Toxicity (WET) Effluent Parameters ^{15,16}					
LC50	%	--	≥ 100	1/Year	Composite
Ammonia Nitrogen as N	mg/L	--	Report	1/Year	Composite
Total Recoverable Cadmium	mg/L	--	Report	1/Year	Composite
Total Recoverable Copper	mg/L	--	Report	1/Year	Composite

Footnotes:

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- 10 Fecal coliform shall be tested using **an approved test method in 40 CFR Part 136.** ~~the 5-tube decimal dilution test.~~ The average monthly value for Fecal Coliform shall be determined by calculating the geometric mean using the daily sample results. In addition, not more than 10 percent of the fecal coliform samples collected shall exceed **28** ~~43~~ Most Probable Number (MPN) per 100 mL ~~for a 5-tube decimal dilution test.~~ The percentage of samples that exceed **28** ~~43~~ MPN per 100 mL ~~for the 5-tube decimal dilution test~~ in a given month shall be reported as a Daily Maximum value on the monthly DMR.

See Part I.E.3 below for additional fecal coliform State 401 Certification Conditions.

11. ~~Additional monitoring for fecal coliform is required as part of a State 401 Certification Condition. See Part I.E below.~~

E. STATE 401 CERTIFICATION CONDITIONS

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3. ~~Daily post-disinfection effluent grab samples shall be collected and analyzed for fecal coliform using an EPA approved analytical method (published in 40 CFR Part 136) that meets the timeliness requirements of the NHDES Shellfish Program below.~~ Bacteria monitoring does not need to be done on the six major holidays of each year: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas.

The Permittee is responsible for immediately notifying the NHDES, Watershed Management Bureau, Shellfish Section of possible high bacteria/virus loading events from its facility. Such events include:

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