

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DRAFT GENERAL PERMITS FOR AQUACULTURE FACILITIES**

MAG130000, NHG130000, AND VTG130000

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PART 1. MASSACHUSETTS GENERAL PERMIT, PERMIT NO. MAG130000

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), operators of concentrated aquatic animal production (CAAP) facilities and other, similar facilities located in Massachusetts which discharge pollutants to the classes of waters as designated in the Massachusetts Water Quality Standards, 314 CMR 4.00 et seq. are authorized to discharge to all waters, unless otherwise restricted, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This General Permit and the authorization to discharge shall become effective on the date specified in the notice of availability published in the Federal Register, and will expire at midnight, five (5) years from the effective date.

Signed this day of , 2020

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

Lealdon Langley, Director
Division of Watershed Management
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Commonwealth of Massachusetts,
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1.1 Requirements for Discharges from Fish Hatcheries

During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, the Permittee is authorized to discharge pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the Notice of Intent (NOI). Such discharges shall be limited and monitored by the Permittee as specified below. Monitoring is to be conducted and reported in accordance with Part 7, so as to provide the worst-case conditions for affecting the relevant parameter in the effluent.

For the facilities identified in Part 1.2, the effluent limitations and monitoring requirements for whole effluent toxicity (WET) in Part 1.2 shall apply in addition to the effluent limitations and monitoring requirements in this Part.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Flow ^{7,8}	MGD	Variable	Variable	1/Day	Estimate or Recorder ⁸
Total Suspended Solids (TSS)	mg/L	--	Report ⁹	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
Biochemical Oxygen Demand (BOD ₅)	mg/L	--	Report	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
pH Range for Class A and Class B waters	Standard Units	--	6.5 to 8.3 ¹²	1/Week	Grab
pH Range for Class SA and Class SB waters	Standard Units	--	6.5 to 8.5 ¹²	1/Week	Grab
Total Nitrogen ^{13,14,15}	mg/L, lbs/day	--	Report ¹⁵	1-2/Quarter ^{13,15} or 1/Month ¹⁴	Composite
Total Ammonia Nitrogen	mg/L	--	Report	2/Quarter	Composite
Total Phosphorus	µg/L, lbs/day	--	Report ¹⁶	1/Quarter	Composite
Formaldehyde ^{17,18}	mg/L	1.6 ¹⁹	4.6 ¹⁹	1/Discharge Event	Grab
Dissolved Oxygen for Class A waters (Formalin Present) ¹⁷	mg/L	--	≥6.0 ²⁰	1/Discharge Event	Grab
Dissolved Oxygen for Class B waters (Formalin Present) ¹⁷	mg/L	--	≥5.0 ²¹	1/Discharge Event	Grab

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Dissolved Oxygen for Class SA waters (Formalin Present) ¹⁷	mg/L	--	$\geq 6.0^{20}$	1/Discharge Event	Grab
Dissolved Oxygen for Class SB waters (Formalin Present) ¹⁷	mg/L	--	$\geq 5.0^{21}$	1/Discharge Event	Grab
Hydrogen Peroxide ²²	mg/L	--	0.7^{19}	1/Discharge Event	Grab
Total Residual Chlorine (in freshwater) ²³	mg/L	0.011^{24}	0.019^{24}	1/Day	Grab
Total Residual Chlorine (in saltwater) ²³	mg/L	0.0075^{24}	0.013^{24}	1/Day	Grab
Fish Biomass on Hand	lbs	Report	--	1/Month	Calculate
Fish Feed Used	lbs	Report	--	1/Month	Calculate
Efficiency of Fish Feed Used ²⁵	%	Report	--	1/Month	Calculate

Footnotes

- ¹ Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples are taken at the discharge point to the receiving water after treatment by any settling system, prior to co-mingling with any other waste stream. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 Code of Federal Regulations (CFR) Part 136.
- ² In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) the method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. MLs may be obtained in several ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- ³ When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For calculating and reporting the average monthly concentration when one or more values are not

detected, assign a value of zero to all non-detects and report the average of all the results. The number of exceedances shall be enumerated for each parameter in the field provided on every Discharge Monitoring Report (DMR).

- ⁴ Measurement frequency of 1/day is defined as the recording of one measurement for each 24-hour period. Measurement frequency of 1/week is defined as the recording of one measurement for each week (7-day period). Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 2/quarter is defined as the sampling of a discharge event in 2 out of the 3 months of the calendar quarter; a NODI: 9 code can be used for the month not sampled in a given quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- ⁵ Each composite sample must consist of at least eight grab samples taken during one consecutive 24-hour period, either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
- ⁶ Permittees may request to perform grab sampling in lieu of composite sampling if they can demonstrate to the satisfaction of EPA and the State that the flow and characteristics of the waste stream are relatively constant, including during cleaning operations. To make this demonstration, Permittees may provide information on residence times in treatment units (e.g., settling basins) and/or provide monitoring data.
- ⁷ The discharge flow shall not exceed the limitations specified in the written notice of authorization from EPA.
- ⁸ For flow, calculate the average monthly flow by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Flow can be measured or estimated. For those quarters when a discharge does not occur, the Permittee must still submit the DMR with the appropriate no discharge (NODI) code for each parameter. A written explanation for the NODI code is also required with the DMR report.
- ⁹ If TSS exceeds the maximum daily benchmark of 10 mg/L, the Permittee shall evaluate its best management practices (BMPs) and implement corrective actions necessary to reduce the effluent concentration below the applicable benchmark. The maximum daily TSS value is a benchmark, not an effluent limitation. See Part 5.5 of this General Permit.
- ¹⁰ Permittees with a total annual production greater or equal to 100,000 lbs per year shall conduct monthly monitoring.
- ¹¹ Permittees with a total annual production less than 100,000 lbs per year shall conduct quarterly monitoring.
- ¹² An alternate pH range may be requested in accordance with Part 1.5.a of the Permit.
- ¹³ Total Nitrogen shall be determined by summing total Kjeldahl nitrogen, nitrite-nitrogen, and nitrate-nitrogen concentrations from samples collected concurrently. For example, by performing the “Total Kjeldahl Nitrogen (as N)” test and the “Nitrate-Nitrite (as N)” test and adding the two test results together to produce a value for mg/L of Total Nitrogen. All hatcheries excluding those referenced in Footnotes 14 and 15 are subject to once-per-quarter sampling and reporting frequencies.
- ¹⁴ Permittees within the Long Island Sound watershed shall be subject to monthly monitoring and an annual nitrogen optimization reporting requirement as a supplement to their BMP Plan, provided in Part 5.4 of this General Permit.

- ¹⁵ Sandwich State Fish Hatchery shall be subject to a rolling annual average Total Nitrogen limit of 14 pounds per day with a monitoring frequency of 2/quarter, consistent with the effluent limitation from the 2015 individual permit (NPDES No. MA0110027). The mass-based average monthly Total Nitrogen effluent limit is an annual average and shall be reported as a rolling average. The value shall be calculated using the current reporting period value for Total Nitrogen in milligrams per liter and the annual average flow calculated using the maximum daily flow from the current reporting period and previous eleven (11) months.
- ¹⁶ Charles L. McLaughlin State Fish Hatchery shall be subject to an average monthly Total Phosphorus limit of 240 µg/L (0.24 mg/L) with a monitoring frequency of 1/month, consistent with the effluent limitation from the 2014 individual permit (NPDES No. MA0110043).
- ¹⁷ Monitoring and reporting is only required during formalin use. When formalin is not in use, the Permittee should report a “NODI: 9” code in the applicable DMR.
- ¹⁸ Formaldehyde shall be tested using EPA Method 1667, Revision A, or 8315A. The ML for formaldehyde is 50 µg/L. Alternate analytical method(s) shall be approved by EPA at the Permittee’s written request as long as the Permittee utilizes method(s) that obtain MLs that are equal to or less than 50 µg/L.
- ¹⁹ The water quality-based effluent limitation (WQBEL) is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 8 for sites located in Massachusetts.
- ²⁰ Applicable to waters designated as warm water fisheries. See Massachusetts Surface Water Quality Standards, 314 CMR 4.02 for definition.
- ²¹ Applicable to waters designated as cold water fisheries. See Massachusetts Surface Water Quality Standards, 314 CMR 4.02 for definition.
- ²² Monitoring and reporting is only required during hydrogen peroxide use. When hydrogen peroxide is not in use, the Permittee should report a “NODI: 9” code in the applicable DMR.
- ²³ Monitoring and reporting is only required during chlorine use or if the discharge is likely to contain residual chlorine (e.g., potable water is in use or chlorine is a chemical used for and/or a byproduct of treatment). The ML for total residual chlorine is defined as 0.02 mg/L. This value is the minimum level for chlorine using EPA approved methods found in Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G, or EPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 0.02 mg/L, compliance/noncompliance will be determined based on the ML. Sample results of 0.02 mg/L or less shall be reported as “<0.02” on the DMR. When chlorine is not in use and the discharge is unlikely to contain residual chlorine, the Permittee should report a “NODI: 9” code in the applicable DMR.
- ²⁴ The applicable effluent limitations for total residual chlorine are based on the appropriate water quality criterion and the available dilution in the receiving water. The WQBEL is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 8 for sites located in Massachusetts. See Part 1.4.g of the Permit.
- ²⁵ Efficiency of Fish Feed Used = [Wet Weight of Fish Gained (lbs)/Dry Weight of Feed Applied (lbs)] x 100

1.2 Whole Effluent Toxicity Requirements for Fish Hatcheries

Sandwich Fish Hatchery, Sunderland Fish Hatchery, and Montague Fish Hatchery are subject to WET effluent limitations under this General Permit in accordance with WET limitations established in individual permits previously issued to these facilities. During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, discharges of wastewater containing formalin from these three hatcheries are subject to the following effluent limitations. Such discharges shall be limited and monitored as specified below.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2}	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Whole Effluent Toxicity ^{3,4}	%	--	$LC_{50} \geq 100^5$	1/Discharge Event	Grab
Whole Effluent Toxicity ^{3,4}	%	--	$A\text{-NOEC} \geq 100^6$	1/Discharge Event	Grab

Footnotes

- ¹ Monitoring and reporting is only required during formalin use. When formalin is not in use, the Permittee should report a "NODI: 9" code in the applicable DMR.
- ² Monitoring must begin in the first full calendar month of permit coverage.
- ³ The Permittee shall conduct acute toxicity tests (LC_{50}) in accordance with freshwater or marine test procedures and protocols (as appropriate for receiving water) in Appendices 11 and 12 to this General Permit. For discharges to freshwater, the test species are the daphnid (*Ceriodaphnia dubia*) and the fathead minnow (*Pimephales promelas*). For discharges to salt water, the test species are mysid shrimp (*Americamysis bahia*) and inland silverside (*Menidia beryllina*). The complete report for each toxicity test shall be submitted as an attachment to the DMR submittal for month following the month in which the test occurred.
- ⁴ If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in Appendix 11 or 12, Section IV., DILUTION WATER.
- ⁵ The LC_{50} is the concentration of wastewater which causes mortality in 50 percent of test organisms.
- ⁶ The A-NOEC (acute-no observed effect concentration) is the highest effluent concentration at which there is no statistically-significant adverse effect on the survival of the test organisms when compared with the diluent control survival at the time of observation.

1.3 Requirements for Discharges from Aquariums and Other Facilities that Hold or Produce Aquatic Organisms for Research

During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, the Permittee is authorized to discharge tank and aquarium water that have been clearly identified in the NOI. Such discharges shall be limited and monitored by the Permittee as specified below. Monitoring is to be conducted and reported in accordance with Part 7.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Flow ⁵	MGD	Varies	Varies	1/Day	Estimate or Recorder ⁶
Total Suspended Solids (TSS) ^{7,8}	mg/L lbs/day	Varies	Varies	2/Month	24-hr Composite ⁹
Biochemical Oxygen Demand (BOD ₅)	mg/L	--	Report	2/Month	24-hr Composite ⁹
pH Range for Class A and Class B waters	S.U.	--	6.5 to 8.3 ¹⁰	1/Week	Grab
pH Range for Class SA and Class SB waters	S.U.	--	6.5 to 8.5 ¹⁰	1/Week	Grab
Total Nitrogen ¹¹	mg/L lbs/day	--	Report	1/Quarter	24-hr Composite ⁹
Total Phosphorus	µg/L lbs/day	--	Report	1/Quarter	24-hr Composite ⁹
<i>Enterococci</i> Bacteria ¹²	cfu/100 mL	35	276	1/Month	Grab
Fecal Coliform Bacteria ¹²	MPN/100 mL	88	260	1/Month	Grab
Total Residual Chlorine (in freshwater) ¹³	mg/L	0.011	0.019	1/Day ¹⁴	Grab
Total Residual Chlorine (in saltwater) ¹³	mg/L	0.0075	0.013	1/Day ¹⁴	Grab
Copper (in freshwater) ¹⁵	µg/L	--	13	1/Discharge Event ¹⁶	24-hr Composite ⁹
Copper (in saltwater) ¹⁵	µg/L	--	4.8	1/Discharge Event ¹⁶	24-hr Composite ⁹
Whole Effluent Toxicity (WET) ^{17,18,19}	%	--	Report LC ₅₀ ²⁰ Report A-NOEC ²¹	1/Year or 1/Permit Term ²²	24-hr Composite ⁹

Footnotes

- ¹ Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples are taken at the discharge point to the receiving water after treatment by any settling system, prior to co-mingling with any other waste stream. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 CFR Part 136.
- ² In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) the method ML is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the MDL, whichever is higher. MLs may be obtained in several ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- ³ When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For calculating and reporting the average monthly concentration when one or more values are not detected, assign a value of zero to all non-detects and report the average of all the results. The number of exceedances shall be enumerated for each parameter in the field provided on every DMR.
- ⁴ Measurement frequency of 1/day is defined as the recording of one measurement for each 24-hour period. Measurement frequency of 1/week is defined as the recording of one measurement for each week (7-day period). Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 1/year is defined as the sampling of one discharge event during one calendar year. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- ⁵ The discharge flow shall not exceed the limitations specified in the written notice of authorization from EPA.
- ⁶ For flow, calculate the average monthly flow by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Flow can be measured or estimated. For those quarters when a discharge does not occur, the Permittee must still submit the DMR with the appropriate NODI code for each parameter. A written explanation for the NODI code is also required with the DMR report.
- ⁷ New England Aquarium Corporation shall be subject to an average monthly TSS limit of 30 mg/L and 38 lbs/day and a maximum daily TSS limit of 60 mg/L and 75 lbs/day with a monitoring frequency of 2/month, consistent with the effluent limitation from the 2013 individual permit (NPDES No. MA0003123).
- ⁸ New England Aquarium Off-site Holding Facility shall be subject to a maximum daily TSS limit of 30 mg/L and 75 lbs/day with a monitoring frequency of 2/month, consistent with the effluent limitation from the 2010 individual permit (NPDES No. MA0040380). The Permittee shall report

the average monthly TSS concentration and average monthly TSS load.

- ⁹ A 24-hour composite sample will be comprised of at least twenty-four (24) grab samples taken during a consecutive 24-hour period (e.g., 7:00 A.M. Monday to 7:00 A.M. Tuesday).
- ¹⁰ An alternate pH range may be requested in accordance with Part 1.5.a of the Permit.
- ¹¹ Total Nitrogen shall be determined by summing total Kjeldahl nitrogen, nitrite-nitrogen, and nitrate-nitrogen concentrations from samples collected concurrently. For example, by performing the “Total Kjeldahl Nitrogen (as N)” test and the “Nitrate-Nitrite (as N)” test and adding the two test results together to produce a value for mg/L of Total Nitrogen.
- ¹² Discharges to the Boston Harbor, Weymouth-Weir, and Mystic Watershed are subject to bacteria limits based on the Final Pathogen TMDL. The average monthly values for fecal coliform and *Enterococci* bacteria shall be determined by calculating the geometric mean.
- ¹³ The Permittee shall minimize the use of chlorine while maintaining adequate bacterial control. The applicable effluent limitations for total residual chlorine are based on the appropriate water quality criterion and the available dilution in the receiving water. The WQBEL is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 8 for sites located in Massachusetts. See Part 1.4.b of the Permit.
- ¹⁴ Monitoring and reporting is only required during chlorine use or if the discharge is likely to contain residual chlorine (e.g., potable water is in use or chlorine is a chemical used for and/or a byproduct of treatment). The ML for total residual chlorine is defined as 0.02 mg/L. This value is the minimum level for chlorine using EPA approved methods found in Standard Methods for the Examination of Water and Wastewater, 20th Edition, Method 4500 CL-E and G, or EPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 0.02 mg/L, compliance/noncompliance will be determined based on the ML. Sample results of 0.02 mg/L or less shall be reported as “<0.02” on the DMR. When chlorine is not in use and the discharge is unlikely to contain residual chlorine, the Permittee should report a “NODI: 9” code in the applicable DMR.
- ¹⁵ The WQBEL for copper is expressed on the basis of dissolved metal in the water column. The WQBEL shall apply in the form of total recoverable copper in the water column. Copper is hardness-dependent in freshwater. The WQBEL shown assumes a hardness of 100 mg/L CaCO₃. Copper WQBELs must be adjusted for actual hardness using the calculation methodology included in Appendix 8. The hardness-dependent calculation requirement does not apply to saltwater discharges.
- ¹⁶ Monitoring and reporting is only required during copper sulfate use or if discharges are likely to contain high copper concentrations (e.g., when a municipal water source is used that contains elevated copper concentrations). When copper sulfate is not in use and the discharge is unlikely to contain high copper concentrations, the Permittee should report a “NODI: 9” code in the applicable DMR.
- ¹⁷ The Permittee shall conduct acute toxicity tests (LC₅₀) in accordance with freshwater or marine test procedures and protocols (as appropriate for receiving water) annually during the calendar quarter ending September 30. For discharges to freshwater, the Permittee is required to conduct acute WET testing following the protocol in Appendix 12 to this General Permit. The test species are the daphnid, *Ceriodaphnia dubia*, and the fathead minnow, *Pimephales promelas*. For discharges to salt water, the Permittee is required to conduct acute WET testing following the protocol in Appendix 11 to this General Permit. The test species are mysid shrimp (*Americamysis bahia*) and inland silverside (*Menidia beryllina*). The complete

report for each toxicity test shall be submitted as an attachment to the September DMR submitted by October 15th.

- ¹⁸ New England Aquarium Off-site Holding Facility shall be subject to a $LC_{50} \geq 100\%$ consistent with the effluent limitation from the 2010 individual permit (NPDES No. MA0040380).
- ¹⁹ If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in Appendix 11, Section IV., DILUTION WATER.
- ²⁰ The LC_{50} is the concentration of wastewater which causes mortality in 50 percent of test organisms.
- ²¹ The A-NOEC (acute-no observed effect concentration) is the highest effluent concentration at which there is no statistically-significant adverse effect on the survival of the test organisms when compared with the diluent control survival at the time of observation.
- ²² New England Aquarium Corporation (NPDES No. MA003123) shall conduct one acute whole effluent toxicity test during the fourth full calendar year of the permit during the calendar quarter ending September 30.

1.4 Other Permit Conditions

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The discharge shall be free from pollutants in concentrations or combinations that, in the receiving water, settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.
- c. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
- d. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life, or wildlife.
- e. The discharge shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to the receiving waters.
- f. No components of the effluent shall result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this General Permit may be revised or amended in accordance with such standards, with the Permittee being so notified.
- g. The maximum daily and average monthly concentration of total residual chlorine allowed in the effluent are based on the appropriate water quality criterion and the available dilution in the receiving water. This is expressed in the following equation:

$$\text{Effluent Limit} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria})$$

Note that the Permittee's provided total residual chlorine effluent limits will be no greater than 1.0 mg/L, regardless of the dilution factor of the receiving water (see section 3.12 of the fact sheet). The appropriate water quality criteria for the calculation are listed in Part 1.1 and 1.3 and shown below:

- Freshwater acute (Class A or B) = 19 µg/L (0.019 mg/L); use for daily maximum
- Freshwater chronic (Class A or B) = 11 µg/L (0.011 mg/L); use for average monthly
- Marine acute (Class SA or SB) = 13 µg/L (0.013 mg/L); use for daily maximum
- Marine chronic (Class SA or SB) = 7.5 µg/L (0.0075 mg/L); use for average monthly

The available dilution shall be determined by EPA using the equations found in Appendix 8 of the Permit. Both the dilution factor and applicable chlorine limits will be reviewed by EPA during review of the facility's NOI. The Permittee will be provided with the appropriately determined limits when notified of permit coverage.

- h. The Permittee shall notify EPA and the State within 24-hours upon the occurrence of a water quality induced mortality of greater than 25 percent in any aquatic species under culture at the

facility (excluding larval fish and eggs) during a single mortality event.

- i. In accordance with 40 CFR § 122.42, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - i. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR § 122.44(f) and applicable State regulations.
 - ii. That any activity has occurred or will occur which would result in the discharge, on a nonroutine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and applicable State regulations.
 - iii. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- j. This General Permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (d), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
 - i. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - ii. Controls any pollutants not limited in the permit. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.
- k. The Permittee shall use only those aquaculture drugs and chemicals approved by the U.S. Food and Drug Administration (USFDA) and in accordance with labeling instructions or as allowed in Part 5.1 (Drug Use).

EPA will defer to the USFDA regarding whether or not a particular drug and/or chemical is used in accordance with appropriate USFDA requirements. Each year as an attachment to the December DMR, the Permittee shall certify in writing that all aquaculture drugs and chemicals

used at the facility during that calendar year were drugs approved by the USFDA and were used in accordance with USFDA labeling or as allowed under Part 5.1.

- l. The discharge of any chemical or additive, including chemical substitution, which was not reported in the NOI submitted to EPA and the State or provided through a subsequent written notification submitted to EPA and the State, other than additives used in accordance with Part 5.1, is prohibited. Upon the effective date of this permit, chemicals and/or additives which have been disclosed to EPA and the State or used in accordance with Part 5.1 may be discharged up to the frequency and level disclosed, provided that such discharge does not violate § § 307 or 311 of the CWA or applicable State water quality standards. With the exception of additives used in accordance with Part 5.1, discharges of a new chemical or additive are authorized under this permit 30 days following written notification to EPA and the State unless otherwise notified by EPA and/or the State. To request authorization to discharge a new chemical or additive, the Permittee must submit a written notification to EPA and the State in accordance with Part 8.1 of this permit. The written notification must include the following information at a minimum:
 - i. The following information for each new chemical and/or additive that will be discharged:
 - (1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
 - (2) Purpose or use of the chemical/additive;
 - (3) Safety Data Sheet (SDS), Chemical Abstracts Service (CAS) Registry number, and EPA registration number, if applicable, for each chemical/additive;
 - (4) The frequency (e.g. daily, monthly, etc.), magnitude (i.e. maximum application concentration), duration (e.g. hours), and method of application for the chemical/additive;
 - (5) The maximum discharge concentration; and
 - (6) The vendor's reported aquatic toxicity, if available (i.e. NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
 - ii. Written rationale which demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) add any pollutants in concentrations which exceed any permit effluent limitation; and 2) will not add any pollutants that would justify the application of permit conditions different from, or in addition to those currently in this permit.
- m. There shall be no discharge of untreated wastewaters resulting from cleaning accumulated solids in raceways, culture tanks, screens, and associated equipment absent some form of solids removal. The discharge of water from the hatchery house, or any raceway, pond, canal, circular tanks, etc. to a settling pond, tank, empty raceway, and/or clarifier for the purposes of settling solids, including the temporary storage of those solids, is allowed. The discharges of any decant water that accumulates above those solids and/or any water that flows slowly over those solids is allowed.
- n. Any hypochlorite solution applied to the surface of any rearing equipment exposed to culture water must be neutralized prior to that equipment being exposed to culture water.

- o. There shall be no discharge of iodine and/or phosphoric acid solution(s) to the receiving water.
- p. The Permittee shall notify EPA and the State in writing of any changes in the operations, including the use of chemical additives, at the facility that may have an effect on the permitted discharge of wastewater from the facility.

1.5 State Permit Conditions

The Massachusetts state permit conditions require that all Massachusetts Permittees shall comply with the following conditions, which are included as state certification requirements.

- a. The pH range of 6.5 to 8.3 standard units (S.U.) for Class A and B waters and 6.5 to 8.5 for Class SA and SB waters must be achieved in the final effluent unless the Permittee can demonstrate to the Massachusetts Department of Environmental Protection (MassDEP) that Massachusetts Surface Water Quality Standards can be attained with an alternate range. Applicants should contact MassDEP to determine what information and protocol is required to make such a determination. In no case shall the above procedure result in pH limits outside the range of 6.0 – 9.0 S.U. See Part 8.1 below.
- b. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal NPDES permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal CWA, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the MassDEP pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 CMR. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.
- c. This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal CWA, 40 CFR 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.
- d. Each Agency shall have the independent right to enforce the terms and conditions of this General Permit. Any modification, suspension or revocation of this General Permit shall be effective only with respect to the Agency taking such action and shall not affect the validity or status of this General Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this General Permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES permit issued by the EPA. In the event this General Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this General Permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

PART 2. NEW HAMPSHIRE GENERAL PERMIT, PERMIT NO. NHG130000

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§ 1251 et seq.; the "CWA"), operators of concentrated aquatic animal production (CAAP) facilities and other, similar facilities located in New Hampshire which discharge pollutants are authorized to discharge to Class B waters, unless otherwise restricted by the New Hampshire water quality standards, 50 RSA §485-A:8 and the New Hampshire Code of Administrative Rules Env-Wq 1700-1709 in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This General Permit and the authorization to discharge shall become effective on the date specified in the notice of availability published in the Federal Register, and will expire at midnight, five (5) years from the effective date.

Signed this day of , 2020

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

2.1 Requirements for Discharges from Fish Hatcheries

During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, the Permittee is authorized to discharge pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the Notice of Intent (NOI). Such discharges shall be limited and monitored by the Permittee as specified below. Monitoring is to be conducted and reported in accordance with Part 7, so as to provide the worst-case conditions for affecting the relevant parameter in the effluent.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Flow ^{7,8}	MGD	Variable	Variable	1/Day	Estimate or Meter ⁸
Total Suspended Solids (TSS)	mg/L	--	Report ⁹	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
Biochemical Oxygen Demand (BOD ₅)	mg/L	--	Report	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
pH Range ¹²	Standard Units	--	6.5 to 8.0	1/Week	Grab
Total Nitrogen (October-May) ^{13,14,15}	mg/L, lbs/day	--	Report	1/Quarter	Composite
Total Nitrogen (June-September) ^{13,14,15}	mg/L, lbs/day	Report	Report	2/Month	Composite
Total Ammonia Nitrogen	mg/L	--	Report	2/Quarter	Composite
Total Phosphorus (October-May) ^{14,16}	µg/L, lbs/day	--	Report	1/Quarter	Composite
Total Phosphorus (June-September) ^{14,16}	µg/L, lbs/day	Report	Report	2/Month	Composite
Dissolved Oxygen (Formalin Absent) ¹⁷	mg/L	--	Report Min.	1/Month	Grab
Dissolved Oxygen Saturation (Formalin Absent) ¹⁷	%	--	Report Min.	1/Month	Grab
Effluent Temperature ¹⁷	°C	--	Report	1/Week	Grab
Formaldehyde ^{18,19}	mg/L	1.6 ²⁰	4.6 ²⁰	1/Discharge Event	Grab

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Dissolved Oxygen (Formalin Present) ¹⁸	mg/L	--	≥5.0	1/Discharge Event	Grab
Dissolved Oxygen Saturation (Formalin Present) ¹⁸	%	--	≥75	1/Discharge Event	Grab
Hydrogen Peroxide ²¹	mg/L	--	0.7 ²⁰	1/Discharge Event	Grab
Total Residual Chlorine (in freshwater) ²²	mg/L	0.011 ²³	0.019 ²³	Daily ²²	Grab
Total Residual Chlorine (in saltwater) ²²	mg/L	0.0075 ²³	0.013 ²³	Daily ²²	Grab
Fish Biomass on Hand	lbs	Report	--	1/Month	Calculate
Fish Feed Used	lbs	Report	--	1/Month	Calculate
Efficiency of Fish Feed Used ²⁴	%	Report	--	1/Month	Calculate
Upstream Receiving Water Monitoring Requirements^{14,25,26}					
Total Nitrogen (June-September) ¹³	mg/L	--	Report	2/Month	Grab ²⁶
Total Phosphorus (June-September) ¹⁶	µg/L	--	Report	2/Month	Grab ²⁶
Downstream Receiving Water Monitoring Requirements^{14,25,26}					
Total Nitrogen (June-September) ¹³	mg/L	--	Report	2/Month	Grab ²⁶
Total Phosphorus (June-September) ¹⁶	µg/L	--	Report	2/Month	Grab ²⁶

Footnotes

- ¹ Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples are taken at the discharge point to the receiving water after treatment by any settling system, prior to co-mingling with any other waste stream. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 Code of Federal Regulations (CFR) Part 136.

- ² In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except whole effluent toxicity, or WET). A method is “sufficiently sensitive” when: 1) the method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. MLs may be obtained in several ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- ³ When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For calculating and reporting the average monthly concentration when one or more values are not detected, assign a value of zero to all non-detects and report the average of all the results. The number of exceedances shall be enumerated for each parameter in the field provided on every Discharge Monitoring Report (DMR).
- ⁴ Measurement frequency of 1/day is defined as the recording of one measurement for each 24-hour period. Measurement frequency of 1/week is defined as the sampling of discharge event in each week (7-day period). Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 2/month is defined as the sampling of two discharge events in each calendar month; these events cannot occur on the same day but can occur during the same week as long as both events represent worst-case conditions, as described in Part 7. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 2/quarter is defined as the sampling of a discharge event in 2 out of the 3 months of the calendar quarter; a NODI: 9 code can be used for the month not sampled in a given quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. For measurement frequency of 1/discharge event, see the applicable footnotes. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- ⁵ Each composite sample must consist of at least eight grab samples taken during one consecutive 24-hour period, either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
- ⁶ Permittees may request to perform grab sampling in lieu of composite sampling if they can demonstrate to the satisfaction of EPA and the State that the flow and characteristics of the waste stream are relatively constant, including during cleaning operations. To make this demonstration, Permittees may provide information on residence times in treatment units (e.g., settling basins) and/or provide monitoring data.
- ⁷ The discharge flow shall not exceed the limitations specified in the written notice of authorization from EPA.
- ⁸ For flow, calculate the average monthly flow by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Flow can be measured or estimated. For those quarters when a discharge does not occur, the Permittee must still submit the DMR with the appropriate no discharge (NODI) code for each parameter. A written explanation for the NODI code is also required with the DMR report.
- ⁹ If TSS exceeds the maximum daily benchmark of 10 mg/L, the Permittee shall evaluate its best management practices (BMPs) and implement

corrective actions necessary to reduce the effluent concentration below the applicable benchmark. The maximum daily TSS value is a benchmark, not an effluent limitation. See Part 5.5 of this General Permit.

- 10 Permittees with a total annual production greater or equal to 100,000 lbs per year shall conduct monthly monitoring.
- 11 Permittees with a total annual production less than 100,000 lbs per year shall conduct quarterly monitoring.
- 12 An alternate pH range may be requested in accordance with Part 2.3.a of the Permit.
- 13 Total Nitrogen shall be determined by summing total Kjeldahl nitrogen, nitrite-nitrogen, and nitrate-nitrogen concentrations from samples collected concurrently. For example, by performing the “Total Kjeldahl Nitrogen (as N)” test and the “Nitrate-Nitrite (as N)” test and adding the two test results together to produce a value for mg/L of Total Nitrogen.
- 14 As part of State Certification, hatcheries discharging in New Hampshire are subject to the monitoring requirements for Total Nitrogen and Total Phosphorus detailed here as well as a nutrient stressor-response monitoring plan described further in Part 2.3 (State Conditions).
- 15 Permittees in the Long Island Sound watershed shall be subject to an annual nitrogen optimization reporting requirement as a supplement to their BMP Plan, provided in Part 5.4 of this General Permit.
- 16 Total Phosphorus analysis must be completed using a test method from 40 C.F.R. Part 136 that achieves an ML of 10 µg/L.
- 17 Dissolved oxygen samples shall be collected from a discharge without formalin present. Reporting for dissolved oxygen will be the minimum daily concentration for the month and the percent saturation and effluent temperature that corresponds with the minimum daily value (effluent temperature is required both when formalin is present and not present).
- 18 Formaldehyde monitoring and reporting is only required during formalin use. Dissolved oxygen limits apply only when formalin is in use. See FN 17 for requirements when formalin is absent. Reporting for dissolved oxygen will be the minimum daily value for the month. When formalin is not in use, the Permittee should report a “NODI: 9” code in the applicable DMR.
- 19 Formaldehyde shall be tested using EPA Method 1667, Revision A, or 8315A. The ML for formaldehyde is 50 µg/L. Alternate analytical method(s) shall be approved by EPA at the Permittee’s written request as long as the Permittee utilizes method(s) that obtain MLs that are equal to or less than 50 µg/L.
- 20 The water quality-based effluent limitation (WQBEL) is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 9 for sites located in New Hampshire.
- 21 Monitoring and reporting is only required during hydrogen peroxide use. When hydrogen peroxide is not in use, the Permittee should report a “NODI: 9” code in the applicable DMR.
- 22 Monitoring and reporting is only required during chlorine use or if the discharge is likely to contain residual chlorine (e.g., potable water is in use or chlorine is a chemical used for and/or a byproduct of treatment). The ML for total residual chlorine is defined as 0.02 mg/L. This value is the minimum level for chlorine using EPA approved methods found in Standard Methods for the Examination of Water and Wastewater Method 4500 CL-E and G, or EPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual

chlorine. For effluent limitations less than 0.02 mg/L, compliance/noncompliance will be determined based on the ML. Sample results of 0.02 mg/L or less shall be reported as “<0.02” on the DMR. When chlorine is not in use and the discharge is unlikely to contain residual chlorine, the Permittee should report a “NODI: 9” code in the applicable DMR.

- ²³ The applicable effluent limitations for total residual chlorine are based on the appropriate water quality criterion and the available dilution in the receiving water. The WQBEL is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 9 for sites located in New Hampshire. See Part 2.4.f of the Permit.
- ²⁴ Efficiency of Fish Feed Used = [Wet Weight of Fish Gained (lbs)/Dry Weight of Feed Applied (lbs)] x 100
- ²⁵ Upstream is defined as a location representative of ambient conditions prior to mixing with effluent from the hatchery. Downstream is defined as a location representative of the receiving water after complete mixing with effluent from the hatchery.
- ²⁶ Receiving water samples shall be taken concurrently with effluent samples (i.e., the receiving water grab samples shall be taken during the 24-hour composite period for the effluent). To the extent practicable, receiving water samples shall be collected following a minimum of 72 hours with no precipitation (i.e., dry weather).

2.2 Other Permit Conditions

- b. The discharge shall be free from substances in kind or quantity that settle to form harmful benthic deposits; float as foam, debris, scum or other visible substances; produce odor, color, taste or turbidity that is not naturally occurring and would render the surface water unsuitable for its designated uses; result in the dominance of nuisance species; or interfere with recreational activities.
- c. Tainting substances shall not be present in the discharge in concentrations that individually or in combination are detectable by taste and odor tests performed on the edible portions of aquatic organisms.
- d. The discharge shall not result in toxic substances or chemical constituents in concentrations or combinations in the receiving water that injure or are inimical to plants, animals, humans or aquatic life; or persist in the environment or accumulate in aquatic organisms to levels that result in harmful concentrations in edible portions of fish, shellfish, other aquatic life, or wildlife that might consume aquatic life.
- e. The discharge shall not result in benthic deposits that have a detrimental impact on the benthic community. The discharge shall not result in oil and grease, color, slicks, odors, or surface floating solids that would impair any existing or designated uses in the receiving water.
- f. The discharge shall not result in an exceedance of the naturally occurring turbidity in the receiving water by more than 10 NTUs.
- g. The maximum daily and average monthly concentration of total residual chlorine allowed in the effluent are based on the appropriate water quality criterion and the available dilution in the receiving water. This is expressed in the following equation:

$$\text{Effluent Limit} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria})$$

Note that the Permittee's provided total residual chlorine effluent limits will be no greater than 1.0 mg/L, regardless of the dilution factor of the receiving water (see section 3.12 of the fact sheet). The appropriate water quality criteria for the calculation are shown below:

- Freshwater acute = 19 µg/L (0.019 mg/L); use for daily maximum
- Freshwater chronic = 11 µg/L (0.011 mg/L); use for average monthly
- Marine acute = 13 µg/L (0.013 mg/L); use for daily maximum
- Marine chronic = 7.5 µg/L (0.0075 mg/L); use for average monthly

The available dilution shall be determined by EPA and NHDES using the equations found in Appendix 9 of the Permit. Both the dilution factor and applicable chlorine limits will be reviewed by EPA and NHDES during review of the facility's NOI. The Permittee will be provided with the appropriately determined limits when notified of permit coverage.

- h. No components of the effluent shall result in any demonstrable harm to aquatic life or violate any

water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this General Permit may be revised or amended in accordance with such standards, with the Permittee being so notified.

- i. The Permittee shall notify EPA and the State within 24-hours upon the occurrence of a water quality induced mortality of greater than 25 percent in any aquatic species under culture at the facility (excluding larval fish and eggs) during a single mortality event.
- j. In accordance with 40 CFR § 122.42, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - i. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR § 122.44(f) and applicable State regulations.
 - ii. That any activity has occurred or will occur which would result in the discharge, on a nonroutine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR § 122.44(f) and applicable State regulations.
 - iii. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- k. This General Permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (d), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
 - i. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - ii. Controls any pollutants not limited in the permit. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.
- l. The Permittee shall inform the EPA and State in writing at least ninety (90) days before any

change in the fish species to be raised or development stage to be attained at this facility, and before any increase in annual fish biomass greater than 20 percent.

- m. The Permittee shall use only those aquaculture drugs and chemicals approved by the U.S. Food and Drug Administration (USFDA) in accordance with labeling instructions or as allowed in Part 5.1 (Drug Use). EPA will defer to the USFDA regarding whether or not a particular drug, chemical, or additive is used in accordance with appropriate USFDA requirements. Each year as an attachment to the December DMR, the Permittee shall certify in writing that all aquaculture drugs and chemicals used at the facility during that calendar year were drugs approved by the USFDA and were used in accordance with USFDA labeling or as allowed under Part 5.1.
- n. The discharge of any chemical or additive, including chemical substitution, which was not reported in the application submitted to EPA and the State or provided through a subsequent written notification submitted to EPA and the State, other than additives used in accordance with Part 5.1, is prohibited. Upon the effective date of this permit, chemicals and/or additives which have been disclosed to EPA and the State or used in accordance with Part 5.1 may be discharged up to the frequency and level disclosed, provided that such discharge does not violate § 307 or 311 of the CWA or applicable State water quality standards. With the exception of additives used in accordance with Part 5.1, discharges of a new chemical or additive are authorized under this permit 30 days following written notification to EPA and the State unless otherwise notified by EPA and/or the State. To request authorization to discharge a new chemical or additive, the Permittee must submit a written notification to EPA and the State in accordance with Part 8.1 of this permit. The written notification must include the following information at a minimum:
 - i. The following information for each new chemical and/or additive that will be discharged:
 - (1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
 - (2) Purpose or use of the chemical/additive;
 - (3) Safety Data Sheet (SDS), Chemical Abstracts Service (CAS) Registry number, and EPA registration number, if applicable, for each chemical/additive;
 - (4) The frequency (e.g. daily, monthly, etc.), magnitude (i.e. maximum application concentration), duration (e.g. hours), and method of application for the chemical/additive;
 - (5) The maximum discharge concentration; and
 - (6) The vendor's reported aquatic toxicity, if available (i.e. NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
 - ii. Written rationale which demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) add any pollutants in concentrations which exceed any permit effluent limitation; and 2) will not add any pollutants that would justify the application of permit conditions different from, or in addition to those currently in this permit.
- o. There shall be no discharge of untreated wastewaters resulting from cleaning accumulated solids in raceways, culture tanks, screens, and associated equipment.

- p. Any hypochlorite solution applied to the surface of any rearing equipment exposed to culture water must be neutralized prior to that equipment being exposed to culture water.
- q. There shall be no discharge of iodine and/or phosphoric acid solution(s) to the receiving water.
- r. The Permittee shall notify EPA and the State in writing of any changes in the operations, including the use of chemical additives, at the facility that may have an effect on the permitted discharge of wastewater from the facility.

2.3 State Permit Conditions

The Permittee shall comply with the following conditions which are included as State Certification requirements.

- a. The pH range of 6.5 to 8.0 Standard Units (S.U.) must be achieved in the final effluent unless the ambient upstream pH in the receiving water is outside of this range, and is not altered by the discharge or activities. If the discharge pH is lower than 6.5 S.U., the Permittee may demonstrate compliance by showing that the discharge pH is either higher than, or no more than 0.5 S.U. lower than, the ambient upstream river water pH. For this demonstration, the upstream river water sample must be collected on the same day that the discharge pH is measured. The location where the upstream ambient pH sample is collected must be representative of the upstream conditions unaffected by the Facility's discharge(s) or activities. Results of the ambient upstream river water pH sampling that are obtained to determine compliance with this limit shall be submitted as an attachment to the DMR. The Permittee can also choose to demonstrate to NHDES-WD that NH State Water Quality standards can be attained with an alternative range. Prior to the implementation of any demonstration project, the scope of the demonstration project must receive approval from NHDES-WD. In no case shall the above procedure result in pH limits outside the range of 6.0 – 9.0 S.U.
- b. The Permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).
- c. This NPDES Discharge Permit is issued by the EPA under Federal and State law. Upon final issuance by the EPA, the NHDES-WD may adopt this General Permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13. Each Agency shall have the independent right to enforce the terms and conditions of this General Permit. Any modification, suspension or revocation of this General Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of the Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation.
- d. In addition to the monitoring requirements referenced in section 2.1, footnote 14, within six (6)

months of permit authorization, the permittee shall submit an ambient nutrient-stressor response monitoring plan to NHDES – Watershed Management Bureau for approval. Upon approval of the plan by NHDES, the permittee shall regularly submit reports, in accordance with the schedule provided in the plan, to NHDES – Watershed Management Bureau. Additional information on the monitoring plan is provided in Appendix 13. At a minimum, the ambient stressor-response monitoring plan should include the following:

- i. Selection of appropriate response indicators to monitor nutrients in the receiving water. The response indicators shall be attached algae and benthic macroinvertebrates, unless it is determined that attached algae and benthic macroinvertebrates are not suitable response indicators for the site.
- ii. Methods and procedures for monitoring selected response indicators, including sampling locations.
- iii. Schedule for implementation of monitoring and reporting efforts outlined in the plan. Monitoring and reporting shall occur no less frequently than twice per year for attached algae and once per year for benthic macroinvertebrates.

PART 3. VERMONT GENERAL PERMIT, PERMIT NO. VTG130000

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§ 1251 et seq.; the "CWA"), operators of federally-owned concentrated aquatic animal production (CAAP) facilities and other, similar federal facilities located in Vermont which discharge pollutants are authorized to discharge to all waters, unless otherwise restricted by the Vermont Water Quality Standards in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

This General Permit and the authorization to discharge shall become effective on the date specified in the notice of availability published in the Federal Register, and will expire at midnight, five (5) years from the effective date.

Signed this day of , 2020

Ken Moraff, Director
Water Division
Environmental Protection Agency
Boston, MA 02109-3912

3.1 Requirements for Discharges from Fish Hatcheries

During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, the Permittee is authorized to discharge pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the Notice of Intent (NOI). Such discharges shall be limited and monitored by the Permittee as specified below. Monitoring is to be conducted and reported in accordance with Part 7, so as to provide the worst-case conditions for affecting the relevant parameters in the effluent.

For facilities identified in Part 3.2, the effluent limitations and monitoring requirements for a given parameter in Part 3.2 shall apply in lieu of the effluent limitations and monitoring requirements for the same parameter in this Part.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Flow ⁷	MGD	Variable	Variable	1/Day	Estimate or Recorder ⁸
Total Suspended Solids (TSS) ⁹	mg/L	--	Report	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
Biochemical Oxygen Demand (BOD ₅)	mg/L	--	Report	1/Month ¹⁰ or 1/Quarter ¹¹	Composite
pH Range	Standard Units	--	6.5 to 8.5	1/Week	Grab
Total Nitrogen ^{12,13}	mg/L, lbs/day	--	Report	1/Quarter ¹² or 1/Month ¹³	Composite
Total Ammonia Nitrogen ^{14,15}	mg/L	--	Report	2/Quarter	Composite
Total Phosphorus ¹⁶	µg/L, lbs/day	--	Report	1/Quarter	Composite
Formaldehyde ^{17,18}	mg/L	1.6 ¹⁹	4.6 ¹⁹	1/Discharge Event	Grab
Dissolved Oxygen for Cold Water Fish Habitat (Formalin Present) ¹⁷	mg/L	--	≥7.0 ²⁰ ≥6.0 ²¹	1/Discharge Event	Grab
Dissolved Oxygen for Warm Water Fish Habitat (Formalin Present) ¹⁷	mg/L	--	≥5.0 ²¹	1/Discharge Event	Grab
Hydrogen Peroxide ²²	mg/L	--	0.7 ¹⁹	1/Discharge Event	Grab

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ^{1,2,3}	
		Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ^{5,6}
Total Residual Chlorine ²³	mg/L	0.011 ²⁴	0.019 ²⁴	1/Day	Grab
Fish Biomass on Hand	lbs	Report	--	1/Month	Calculate
Fish Feed Used	lbs	Report	--	1/Month	Calculate
Efficiency of Fish Feed Used ²⁵	%	Report	--	1/Month	Calculate

Footnotes

- ¹ Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples are taken at the discharge point to the receiving water after treatment by any settling system, prior to co-mingling with any other waste stream. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 Code of Federal Regulations (CFR) Part 136.
- ² In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except whole effluent toxicity, or WET). A method is “sufficiently sensitive” when: 1) the method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. MLs may be obtained in several ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- ³ When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For calculating and reporting the average monthly concentration when one or more values are not detected, assign a value of zero to all non-detects and report the average of all the results. The number of exceedances shall be enumerated for each parameter in the field provided on every Discharge Monitoring Report (DMR).
- ⁴ Measurement frequency of 1/day is defined as the recording of one measurement for each 24-hour period. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 2/quarter is defined as the sampling of a discharge event in 2 out of the 3 months of the calendar quarter; a NODI: 9 code can be used for the month not sampled in a given quarter. Calendar quarters are defined as January through

March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.

- 5 Each composite sample must consist of at least eight grab samples taken during one consecutive 24-hour period, either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
- 6 Permittees may request to perform grab sampling in lieu of composite sampling if they can demonstrate to the satisfaction of EPA and the State that the flow and characteristics of the waste stream are relatively constant, including during cleaning operations. To make this demonstration, Permittees may provide information on residence times in treatment units (e.g., settling basins) and/or provide monitoring data.
- 7 The discharge flow shall not exceed the limitations specified in the written notice of authorization from EPA.
- 8 For flow, calculate the average monthly flow by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Flow can be measured or estimated. For those quarters when a discharge does not occur, the Permittee must still submit the DMR with the appropriate no discharge (NODI) code for each parameter. A written explanation for the NODI code is also required with the DMR report.
- 9 If TSS exceeds the maximum daily benchmark of 10 mg/L, the Permittee shall evaluate its best management practices (BMPs) and implement corrective actions necessary to reduce the effluent concentration below the applicable benchmark. The maximum daily TSS value is a benchmark, not an effluent limitation. See Part 5.5 of this General Permit.
- 10 Permittees with a total annual production greater or equal to 100,000 lbs per year shall conduct monthly monitoring.
- 11 Permittees with a total annual production less than 100,000 lbs per year shall conduct quarterly monitoring.
- 12 Total Nitrogen shall be determined by summing total Kjeldahl nitrogen, nitrite-nitrogen, and nitrate-nitrogen concentrations from samples collected concurrently. For example, by performing the “Total Kjeldahl Nitrogen (as N)” test and the “Nitrate-Nitrite (as N)” test and adding the two test results together to produce a value for mg/L of Total Nitrogen. All hatcheries excluding those referenced in Footnote 13 are subject to once-per-quarter sampling and reporting frequencies.
- 13 Permittees within the Long Island Sound watershed shall be subject to monthly monitoring and an annual nitrogen optimization reporting requirement as a supplement to their BMP Plan, provided in Part 5.4 of this General Permit.
- 14 White River National Fish Hatchery shall be subject to an average monthly Total Ammonia limit of 2.3 mg/L with a monitoring frequency of 2/quarter, consistent with the derivation of the effluent limitation from the 2009 individual permit (NPDES No. VT0020711) updated to the most recent state water quality standards.
- 15 Pittsford National Fish Hatchery shall be subject to an average monthly Total Ammonia limit of 0.7 mg/L and a maximum daily Total Ammonia limit of 3.4 mg/L with a monitoring frequency of 2/quarter, consistent with the derivation of the effluent limitation from the 2009 individual permit (NPDES No. VT0000451) updated to the most recent state water quality standards.
- 16 Permittees with the Lake Champlain watershed shall be subject to Total Phosphorus limitations provided in Part 3.2 of this General Permit.
- 17 Monitoring and reporting is only required during formalin use. When formalin is not in use, the Permittee should report a “NODI: 9” code in the

applicable DMR.

- ¹⁸ Formaldehyde shall be tested using EPA Method 1667, Revision A, or 8315A. The ML for formaldehyde is 50 µg/L. Alternate analytical method(s) shall be approved by EPA at the Permittee's written request as long as the Permittee utilizes method(s) that obtain MLs that are equal to or less than 50 µg/L.
- ¹⁹ The water quality-based effluent limitation (WQBEL) is shown with zero dilution. The WQBEL must be adjusted using the calculation methodology included in Appendix 10 for sites located in Vermont.
- ²⁰ Applies to all waters that the Secretary of the Agency of Natural Resources determines are salmonid spawning or nursery areas important to the establishment or maintenance of the fishery resource.
- ²¹ Applies to all other waters.
- ²² Monitoring and reporting is only required during hydrogen peroxide use. When hydrogen peroxide is not in use, the Permittee should report a "NODI: 9" code in the applicable DMR.
- ²³ Monitoring and reporting is only required during chlorine use or if the discharge is likely to contain residual chlorine (e.g., potable water is in use or chlorine is a chemical used for and/or a byproduct of treatment). The ML for total residual chlorine is defined as 0.02 mg/L. This value is the minimum level for chlorine using EPA approved methods found in Standard Methods for the Examination of Water and Wastewater, 20th Edition, Method 4500 CL-E and G, or EPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 0.02 mg/L, compliance/noncompliance will be determined based on the ML. Sample results of 0.02 mg/L or less shall be reported as "<0.02" on the DMR. When chlorine is not in use and the discharge is unlikely to contain residual chlorine, the Permittee should report a "NODI: 9" code in the applicable DMR.
- ²⁴ The applicable effluent limitations for total residual chlorine are based on the appropriate water quality criterion and the available dilution in the receiving water. See Part 3.3.f of the Permit.
- ²⁵ Efficiency of Fish Feed Used = [Wet Weight of Fish Gained (lbs)/Dry Weight of Feed Applied (lbs)] x 100

3.2 Requirements for Discharges from Fish Hatcheries in the Lake Champlain Watershed

Pittsford National Fish Hatchery is subject to Total Phosphorus load limits consistent with the 2009 individual permit (NPDES No. VT0000451) and the Lake Champlain TMDL. During the period beginning on the effective date of the written notice of authorization from EPA and lasting through expiration, the Permittee is authorized to discharge nutrients resulting from facility processes, waste streams, and operations that have been clearly identified in the NOI. Such discharges shall be limited and monitored by the Permittee as specified below.

Effluent Characteristic	Units	Discharge Limitations			Monitoring Requirements	
		Average Monthly	Maximum Daily	Annual Total	Measurement Frequency	Sample Type
Pittsford Total Phosphorus ²	mg/L	0.8	Report	--	2/Month	Composite ¹
	lbs/day	Report	Report	--	2/Month	Calculate
	lbs/year	--	--	1,523 ²	1/Year	Calculate ²

Footnotes

- ¹ The composite samples shall consist of at least eight (8) grab samples collected at approximately equal intervals during the day.
- ² The phosphorus limitation necessary to protect downstream waters is 1,523 pounds per year. The total annual phosphorus load discharged by the facility shall be reported on the January DMR each year by adding the pounds of phosphorus discharged per month for January through December of the previous year. One composite sample shall be taken for phosphorus every 2 weeks (biweekly). The pounds per month shall be determined using the average monthly phosphorus concentration and the total monthly flow. The composite samples for phosphorus shall be taken at appropriate times to approximate the actual average phosphorus concentration over the sampling day (neither overweighting nor underweighting times of cleaning operations or other operational changes).

3.3 Other Permit Conditions

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The effluent shall not contain floating or settleable solids.
- c. The discharge shall not cause objectionable discoloration, color, turbidity, foam, or a visible sheen in the receiving waters.
- d. The discharge shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
- e. No components of the effluent shall result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this General Permit may be revised or amended in accordance with such standards, with the Permittee being so notified.
- f. The maximum daily and average monthly concentration of total residual chlorine allowed in the effluent are based on the appropriate water quality criterion and the available dilution in the receiving water. This is expressed in the following equation:

$$\text{Effluent Limit} = (\text{Dilution Factor}) \times (\text{Water Quality Criteria})$$

Note that the Permittee's provided total residual chlorine effluent limits will be no greater than 1.0 mg/L, regardless of the dilution factor of the receiving water (see section 3.12 of the fact sheet). The appropriate water quality criteria for the calculation are shown below:

- Freshwater acute = 19 µg/L (0.019 mg/L); use for daily maximum
- Freshwater chronic = 11 µg/L (0.011 mg/L); use for average monthly

The available dilution shall be determined by EPA using the equations found in Appendix 10 of the Permit. Both the dilution factor and applicable chlorine limits will be reviewed by EPA during review of the facility's NOI. The Permittee will be provided with the appropriately determined limits when notified of permit coverage.

- g. The Permittee shall notify EPA and the State within 24-hours upon the occurrence of a water quality induced mortality of greater than 25 percent in any aquatic species under culture at the facility (excluding larval fish and eggs) during a single mortality event.
- h. In accordance with 40 CFR § 122.42, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - i. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR § 122.44(f) and applicable State regulations.
 - ii. That any activity has occurred or will occur which would result in the discharge, on a nonroutine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 CFR § 122.44(f) and applicable State regulations.
 - iii. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- i. This General Permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (d), 304(b)(2), and 307(a)(2) of the CWA, if the effluent standard or limitation so issued or approved:
 - i. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - ii. Controls any pollutants not limited in the permit. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.
- j. The Permittee shall inform the EPA and State in writing at least ninety (90) days before any change in the fish species to be raised or development stage to be attained at this facility, and before any increase in annual fish biomass greater than 20 percent.
- k. The Permittee shall use only those aquaculture drugs and chemicals approved by the U.S. Food and Drug Administration (USFDA) and in accordance with labeling instructions or as allowed in Part 5.1 (Drug Use).

EPA will defer to the USFDA regarding whether or not a particular drug and/or chemical is used in accordance with appropriate USFDA requirements. Each year as an attachment to the December DMR, the Permittee shall certify in writing that all aquaculture drugs and chemicals used at the facility during that calendar year were drugs approved by the USFDA and were used in accordance with USFDA labeling or as allowed under Part 5.1.
- l. The discharge of any chemical or additive, including chemical substitution, which was not

reported in the NOI submitted to EPA and the State or provided through a subsequent written notification submitted to EPA and the State, other than additives used in accordance with Part 5.1, is prohibited. Upon the effective date of this permit, chemicals and/or additives which have been disclosed to EPA and the State or used in accordance with Part 5.1 may be discharged up to the frequency and level disclosed, provided that such discharge does not violate § 307 or 311 of the CWA or applicable State water quality standards. With the exception of additives used in accordance with Part 5.1, discharges of a new chemical or additive are authorized under this permit 30 days following written notification to EPA and the State unless otherwise notified by EPA and/or the State. To request authorization to discharge a new chemical or additive, the Permittee must submit a written notification to EPA and the State in accordance with Part 8.1 of this permit. The written notification must include the following information at a minimum:

- i. The following information for each new chemical and/or additive that will be discharged:
 - (1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
 - (2) Purpose or use of the chemical/additive;
 - (3) Safety Data Sheet (SDS), Chemical Abstracts Service (CAS) Registry number, and EPA registration number, if applicable, for each chemical/additive;
 - (4) The frequency (e.g. daily, monthly, etc.), magnitude (i.e. maximum application concentration), duration (e.g. hours), and method of application for the chemical/additive;
 - (5) The maximum discharge concentration; and
 - (6) The vendor's reported aquatic toxicity, if available (i.e. NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
 - ii. Written rationale which demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) add any pollutants in concentrations which exceed any permit effluent limitation; and 2) will not add any pollutants that would justify the application of permit conditions different from, or in addition to those currently in this permit.
- m. There shall be no discharge of untreated wastewaters resulting from cleaning accumulated solids in raceways, culture tanks, screens, and associated equipment.
 - n. Any hypochlorite solution applied to the surface of any rearing equipment exposed to culture water must be neutralized prior to that equipment being exposed to culture water.
 - o. There shall be no discharge of iodine and/or phosphoric acid solution(s) to the receiving water.
 - p. The Permittee shall notify EPA and the State in writing of any changes in the operations, including the use of chemical additives, at the facility that may have an effect on the permitted discharge of wastewater from the facility.

NOTE: The following Parts 4 through 8 are common elements of the Massachusetts, New Hampshire, and Vermont General Permits.

PART 4. ELIGIBILITY AND COVERAGE UNDER THE AQUAGP

4.1 Eligible Discharges

All land-based CAAP facilities and other, similar facilities that contain, grow, or hold aquatic animals in ponds, raceways, or other similar structures in Massachusetts, New Hampshire, and Vermont (federal facilities only) are eligible for coverage under these permits. A land-based CAAP facility is a hatchery, fish farm, or other facility which contains, grows, or holds aquatic animals in a land-based facility in either of the following categories:

- a. Cold water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:
 - i. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
 - ii. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
- b. Warm water fish species or other warm water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:
 - i. Closed ponds which discharge only during periods of excess runoff; or
 - ii. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

The Director may elect to provide coverage to a facility not meeting the above criteria upon a determination that the facility is a significant contributor of pollution to waters of the United States. In making such a determination, the Director will consider the following factors:

- a. The location and quality of the receiving waters of the United States;
- b. The holding, feeding, and production capacities of the facility;
- c. The quantity and nature of the pollutants reaching waters of the United States; and
- d. Other relevant factors.

4.2 Geographic Coverage Area

- a. Massachusetts: Facilities authorized by the Massachusetts General Permit (MAG13XXXX) for discharges in the Commonwealth of Massachusetts are allowed into all waters of the Commonwealth, except as limited in Part 4.3 and/or restricted by the Massachusetts Surface Water Quality Standards at 314 CMR 4.00.
- b. New Hampshire: Facilities authorized by the New Hampshire General Permit (NHG13XXXX)

may discharge into Class B waters of the State of New Hampshire, except as provided in Part 4.3, or otherwise restricted by the State Water Quality Standards: New Hampshire 50 RSA 485-A:8 (or as revised) and/or the New Hampshire Code of Administrative Rules, Chapter Env-Wq 1700-1709 (or as revised).

- c. Vermont: Federal facilities authorized by the Vermont General Permit (VTG13XXXX) may discharge into Class B waters of the State of Vermont, except as provided in Part 4.3, unless otherwise restricted by the State Water Quality Standards: Vermont Water Quality Standards Environmental Protection Rule Chapter 29(a).

4.3 Limitations on Coverage

The following discharges are excluded from coverage under this General Permit:

- a. Discharges to Outstanding Resource Waters (ORWs) in Massachusetts, New Hampshire, and Vermont:
 - i. as defined in Massachusetts by 314 CMR 4.06(1)(d)2, including Public Water Supplies (314 CMR 4.06(1)(d)1), unless an authorization is granted by the MassDEP, under 314 CMR 4.04(5).
 - ii. as defined in New Hampshire under Env-Wq 1708.04(a), unless allowed by the NHDES under Env-Wq 1708.04(c).
 - iii. as designated in Vermont by Secretary of the Agency of Natural Resources under 10 V.S.A. § 1424a.
- b. Discharges to Class A waters in New Hampshire, in accordance with RSA 485-A:8, I. To determine if the proposed receiving water is a Class A waterbody, contact the NHDES at the address listed in Appendix 4 of this General Permit.
- c. Discharges to Class A waters in Vermont, in accordance with Section 1-04.A.4 of the Vermont Water Quality Standards and 10 V.S.A. §1259. To determine if the proposed receiving water is a Class A waterbody, contact the Vermont DEC at the address listed in Appendix 4 of this General Permit.
- d. New or increased discharges to a river designated as a Wild and Scenic River, except in accordance with 16 U.S.C. 1271 et seq. See <http://www.rivers.gov/> for more information.
- e. New or increased discharges of industrial or commercial waste to Ocean Sanctuaries in Massachusetts in accordance with Massachusetts General Law 132A: The Massachusetts Ocean Sanctuary Act. The boundaries of the five ocean sanctuaries can be found in MGL 132A Section 13: <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter132A/Section13>.
- f. Discharges of pollutants identified as the cause of an impairment to receiving water segments identified on the Commonwealth of Massachusetts, the State of New Hampshire, or the State of

Vermont approved 303(d) lists, unless the pollutant concentration is at or below a concentration that meets water quality standards. A discharge is eligible if a segment is impaired for a pollutant that will not be present in the discharge. Permittees must include information in their NOI about impairments to receiving waterbodies. Upon review of the NOI, EPA may require the Permittee to conduct additional effluent sampling to determine if any of the facility discharges are contributing to the receiving waterbody impairment.

Massachusetts 2016 list of impaired waters available at:

<https://www.mass.gov/doc/final-massachusetts-year-2016-integrated-list-of-waters/download>

New Hampshire 2016 list of impaired waters available at:

<https://www.des.nh.gov/organization/divisions/water/wmb/swqa/2016/index.htm>

Vermont 2018 list of impaired waters available at:

https://dec.vermont.gov/sites/dec/files/documents/mp_PriorityWatersList_PartA_303d_2018.pdf

- g. Any facility whose new or increased discharge is not in compliance with the appropriate state's antidegradation policy or the New Hampshire Water Conservation Rules (Env-Wq 2101, or as amended).
- h. Discharges to lakes or ponds in New Hampshire as CAAP facilities are known to contain nutrients whose discharge is prohibited in accordance with Env-Wq 1703.14 (d). In addition, there shall be no new or increased discharges to tributaries of lakes or ponds that would contribute to cultural eutrophication or growth of weeds or algae in such lakes or ponds in accordance with Env-Wq 1703.14 (e).
- i. Any facility whose discharge(s) are likely to adversely affect any species listed as threatened or endangered and/or designated critical habitat under the Endangered Species Act (ESA).
- j. Discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places under the National Historic Preservation Act of 1966 (NHPA), 16 U.S.C. § 470 et seq. See Appendix 3 of this General Permit for additional NHPA requirements.
- k. Discharges to a Publicly Owned Treatment Works (POTW) which are permitted under § 402 of the CWA (NPDES).
- l. "New Source" dischargers, as defined in 40 CFR § 122.2. "New Sources" must comply with New Source Performance Standards (NSPS) and are subject to the National Environmental Policy Act (NEPA) Environmental Review Procedures in 40 CFR 6.2. Consequently, EPA has determined that it would be more appropriate to address "New Sources" through the individual permit process.
- m. Discharges from net pen aquaculture production. Net pens are defined as floating structures in which nets are suspended into the water column in coastal water and the open ocean.

- n. Discharges of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operations of CAAP facilities and other similar facilities as described in the Permittee's NOI, or any pollutants that are not normally present in waste streams.

4.4 Special Eligibility Requirements

Facilities located in Massachusetts, New Hampshire, and Vermont seeking coverage under this General Permit must certify permit eligibility related to endangered species and historic properties.

- a. **Endangered Species Act Requirements:** Discharges to areas which include the presence of species listed and/or critical habitat designated under the ESA are not automatically covered under this General Permit. Prior to obtaining coverage under this General Permit, all NOI applicants must certify compliance with one of the criteria found in **Appendix 2** regarding ESA species. The NOI shall include documentation supporting the eligibility determination with regard to federally listed Endangered and Threatened Species and Critical Habitat.
- b. **National Historic Preservation Act Requirements:** Discharges which adversely affect properties listed or eligible for listing in the National Registry of Historic Places under the NHPA of 1966, 16 USC §§ 470 et seq. are not authorized under this General Permit. Prior to obtaining coverage under this General Permit, all applicants must certify eligibility regarding historic properties in the NOI based on the criteria in **Appendix 3**. The NOI shall include documentation supporting the eligibility determination with regard to Historic Properties Preservation.

PART 5. NARRATIVE EFFLUENT LIMITATION REQUIREMENTS

5.1 Drug Use

Except as noted below, the Permittee must notify EPA and the applicable State agency in accordance with the following procedures of any investigational new animal drug (INAD) or extra-label drug use which may lead to a discharge of the drug to waters of the United States as stipulated below. However, reporting is not required for any INAD or extra-label drug use that has been previously approved by the USFDA for a different species or disease if the INAD or extra-label use is at or below the approved dosage and involves similar conditions of use.

- a. The Permittee must provide to EPA and the applicable State agency a written report of the impending use of an INAD within seven (7) days of agreeing or signing up to participate in an INAD study. The written report must identify the INAD to be used, method of use, the dosage, and the disease or condition the INAD is intended to treat.
- b. For INAD's and extra-label drug uses, the Permittee must provide an oral report to EPA and the applicable State agency as soon as possible, preferably in advance of use, but no later than seven (7) days after initiating use of that drug. The oral report must identify the drugs used, method of application, and the reason for using that drug.

- c. For INAD's and extra-label drug uses, the Permittee must provide a written report to EPA and the applicable State agency within thirty (30) days after initiating use of that drug. The written report must identify the drug used and include: the reason for treatment, date(s) and time(s) of the addition (including duration), method of application; and the amount added.

5.2 Structural Failure and/or Damage to Culture Units

The Permittee must notify EPA and the applicable State agency in accordance with the following procedures when there is a "reportable failure" in, or damage to, the structure of an aquatic animal containment system (i.e., culture unit) or its wastewater treatment system that results in an unanticipated material discharge of pollutants to waters of the United States.

- a. A "reportable failure" applies only to active culture units (ones that contain fish and flowing water) and their ancillary components and refers to the collapse or damage of a rearing unit or its wastewater treatment system; damage to pipes, valves, and other plumbing fixtures; and damage or malfunction to screens or physical barriers in the system, which would prevent the rearing unit from containing water, sediment (i.e., settled solids), and the aquatic animals being reared. Wastewater treatment systems include ponds or settling tanks to which cleaning water is directly discharged and culture units which are used for the temporary storage of settled solids removed from active culture units.
- b. The Permittee must provide an oral report to EPA and the applicable State agency within twenty-four (24) hours of discovery of any reportable failure as defined in Part 5.2.a. or damage that results in a material discharge of pollutants. The report shall describe the cause of the failure or damage in the containment system and identify materials that have been released to the environment as a result of that failure.
- c. The Permittee must provide a written report to EPA and the applicable State agency within seven (7) days of discovery of the failure or damage documenting the cause, an estimate of the material released as a result of the failure or damage, and steps being taken to prevent a recurrence.

5.3 Spills

In the event a spill of drugs, pesticides or feed occurs that results in a discharge to "waters" or "a water" of the United States, the Permittee must provide an oral report of the spill to EPA and the applicable State agency within twenty-four (24) hours of its occurrence and a written report within seven (7) days to EPA and the applicable State agency. The report shall include the identity and quantity of the material spilled.

5.4 Best Management Practices (BMP) Plan

The Permittee must implement and maintain a BMP Plan on site that describes how the following requirements will be achieved. The Permittee shall make the current version of the BMP Plan available to EPA and/or the applicable State agency upon request. The Permittee shall implement the intent of the BMP Plan following requirements upon the permit's effective date. The Permittee, however, has ninety (90) days following the permit's effective date to certify in writing to EPA and the applicable State agency that a written BMP Plan has been developed in accordance with requirements listed in this part

and must submit that certification with the appropriate DMR.

Further, the Permittee shall amend the BMP Plan within thirty (30) days following any change in facility design, construction, operation, or maintenance which affects the potential for the discharge of pollutants into surface waters or after the EPA and/or the applicable State agency determine certain changes are required following an event that results in non-compliance, exceedance of a benchmark concentration, a facility inspection, or review of the BMP Plan. The Permittee shall place in the BMP Plan a written documentation of each amended change along with a brief description stating the reason for the amendment, including the date of the change or monitoring event that triggered the amendment. The Permittee shall also document what date the amended BMP Plan was implemented.

For all hatcheries discharging into the Long Island Sound watershed, the BMP plan – in addition to its other functions discussed herein – is a document of the facility's efforts to optimize the removal of nitrogen in its discharges. The facility's BMPs must specifically target nitrogen removal as a goal. Part 5.4.h., below, provides additional details on implementing this requirement, including annual reporting requirements.

The BMP Plan must address, at a minimum, the following requirements:

a. Solids Control

- i. Employ efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth in order to minimize potential discharges of uneaten feed and waste products to waters of the United States.
- ii. In order to minimize the discharge of accumulated solids from settling tanks, basins and production systems, identify and implement procedures for routine cleaning of rearing units and settling tanks, and procedures to minimize any discharge of accumulated solids during the inventorying, grading and harvesting of aquatic animals in the production system.
- iii. If any material is removed from the rearing units and/or settling tanks, describe where it is to be placed and the techniques used to prevent it from entering the surface waters from any on-site storage. If the material is removed from the site, describe who received the material and its method of disposal and/or reuse.
- iv. Remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to waters of the United States, except in cases where EPA and the applicable state agency authorizes such discharges in order to benefit the aquatic environment.

b. Biological Control

- i. Describe in detail the precautions that will be exercised by the facility to prevent aquatic organisms that are neither indigenous nor naturalized to State waters from

becoming established in the local surface waters.

- ii. Provide a description of any storage and/or treatment strategies designed to prevent biological pollution (non-indigenous organisms including fish parasites and fish pathogens and dead or dying fish) from entering the receiving water when the cultured fish population or a portion thereof are showing signs of stress.

c. Materials Storage

- i. Ensure proper storage of drugs, pesticides, and feed in a manner designed to prevent spills that may result in the discharge of drugs, pesticides, or feed to water of the United States.
- ii. Implement procedures for properly containing, cleaning, and disposing of any spilled material.

d. Structural Maintenance

- i. Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage.
- ii. Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning.

e. Recordkeeping

- i. In order to show how representative feed conversion ratios (i.e., efficiency of fish feed used) were calculated, maintain records documenting the feed amounts and estimates of the number and weight of aquatic animals for each rearing unit.
- ii. In order to show how the maximum concentration of formaldehyde in the discharge was derived, maintain records by outfall of the approach/analysis used to determine the elapsed time from its application to its maximum (peak) effluent concentration.
- iii. Keep records that document the frequency of cleaning, inspections, repairs and maintenance. In addition, records of all medicinal and chemical usage (i.e., for each occurrence) at the facility shall be recorded and filed in the BMP Plan to include the dosage concentration, frequency of application (hourly, daily, etc.) and the duration (hours, days) of treatment, and the method of application.

f. Training

- i. In order to ensure the proper clean-up and disposal of material, adequately train all relevant facility personnel in spill prevention and how to respond in the event of a spill.

- ii. Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment.

g. Aquaculture Drugs and Chemicals Used for Disease Control and/or Prevention

List in the BMP Plan all aquaculture drugs and chemicals including all INAD and extra-label drugs and for each, identify:

- i. Product name and manufacturer.
- ii. Chemical formulation.
- iii. Purpose/reason for its use.
- iv. Dosage concentration, frequency of application (hourly, daily, etc.) and the duration (hours, days) of application.
- v. The method of application.
- vi. Material Safety Data Sheets (MSDS), Chemical Abstracts Service Registry number for each active therapeutic ingredient.
- vii. The method or methods, if any, used to detoxify the wastewater prior to its discharge.
- viii. Information on the persistence and toxicity in the environment.
- ix. Information on the USFDA approval for the use of said medication or chemical on fish or fish related products used for human consumption.
- x. Available aquatic toxicity data (vendor data, literature data, etc.); Lethal Concentration to 50 percent test organisms (LC₅₀) at 48 and/or 96 hours and No Effect Level (NOEL) concentrations for typical aquatic organisms (salmon, trout, daphnia, fathead minnow, etc.).

h. Optimization of Nitrogen Removal (Long Island Sound Watershed Only)

For Facilities within the Long Island Sound watershed, the following additional requirements apply:

- i. Within one year of the effective date of the permit, the permittee shall complete an assessment of alternative BMPs or improvements to current BMPs that could be implemented at their facility to optimize the removal of nitrogen in order to minimize the annual average mass discharge of total nitrogen. The permittee shall subsequently submit a report to EPA and the applicable state agency documenting this evaluation and presenting a description of recommended operational changes. All major BMP

categories, in items a. through g. above, shall be evaluated; however, review of practices beyond those referenced is encouraged. Following the assessment, the permittee shall implement the recommended operational changes. The annual report may be combined with the permittees' annual nitrogen report described under Part 5.4.h.ii., if both reports are submitted to EPA and the applicable state agency by February 1st.

- ii. The permittee shall submit an annual report to EPA and the applicable state agency, by February 1st of each year, that summarizes activities related to optimizing nitrogen removal, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous year. If, in any year, the facilities discharge of TN on an average annual basis has increased, the annual report shall include a detailed explanation of the reasons why TN discharges have increased, including any changes in influent flows/loads and any operational changes. The report shall include all supporting data as well as their revised BMP plan.
- iii. The annual nitrogen optimization reports and supporting materials shall be kept with the BMP plan, with written documentation of their annual completion included in the plan itself.

EPA's public website, <https://www.epa.gov/eg/concentrated-aquatic-animal-production-compliance-guide-and-reporting-forms>, hosts templates to provide further guidance on creation and implementation of a BMP Plan for CAAP facilities.

5.5 Benchmark Requirements for TSS¹

If effluent monitoring results exceed the benchmark for TSS listed in the table below, the Permittee shall implement the following tasks:

- a. Investigate the cause of the elevated effluent concentrations and implement corrective actions necessary to reduce the effluent concentration of TSS below the applicable benchmark. The corrective actions shall be implemented as soon as possible, but no later than 30 calendar days following the benchmark exceedance. If the Permittee will not be able to complete the corrective actions within this time frame, the Permittee shall document the reasoning and provide an alternative schedule for implementing the corrective actions, in writing, to EPA and the applicable State agency.
- b. Review the BMP Plan to determine if additional control measures or other changes are necessary to maintain effluent concentrations below the applicable benchmarks. If additional control measures or other changes are necessary, the Permittee shall revise the BMP Plan and submit the revised pages to EPA and the applicable State agency, including a schedule for implementing the control measures, within 30 calendar day of the benchmark exceedance.

¹ This provision applies to all Permittees, except aquariums and other facilities that hold or produce aquatic organisms for research. Such facilities in Massachusetts are subject to numeric effluent limitations for TSS in Part 1.3.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Benchmark</u>
		<u>Maximum Daily</u>
Total Suspended Solids (TSS)	mg/L	10

The benchmarks are not effluent limitations. The benchmarks are the pollutant concentrations above which EPA Region 1 has determined represent a level of concern and require further evaluation of the Permittee's BMP Plan to determine whether BMPs are effectively reducing solids concentrations in the discharge.

5.6 General Definitions

- a. Approved Dosage - the dose of a drug that has been found to be safe and effective under the conditions of a new animal drug application.
- b. Aquatic Animal Containment System - a culture or rearing unit such as a raceway, pond, tank, net or other structure used to contain, hold or produce aquatic animals. The containment system includes structures designed to hold sediments and other materials that are part of a wastewater treatment system.
- c. Drug -any substance defined as a drug in section 201(g)(2) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 321).
- d. Extra-label Drug Use - a drug approved under the Federal Food, Drug and Cosmetic Act that is not used in accordance with the approved label direction, see 21 CFR Part 530.
- e. Investigational New Animal Drug (INAD) - drug for which there is a valid exemption in effect under section 512(j) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 360b(j), to conduct experiments.
- f. New Animal Drug Application - defined in 512(b)(1) of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 360(b)(1)].
- g. Pesticide - any substance defined as a "pesticide" in section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act [7 U.S.C. 136(u)].

PART 6. OBTAINING AUTHORIZATION TO DISCHARGE

6.1 How to Obtain Authorization to Discharge

To be authorized to discharge by this General Permit, the applicant must submit a complete and accurate NOI to both EPA and the applicable State agency. The NOI must contain all the information required in Appendix 4. Applicable state application fees should be paid in full. The Permittee must confirm that their discharges meet the eligibility requirements of the AQUAGP and that the applicant is requesting coverage under the AQUAGP. However, the facility's discharge will not be authorized under this AQUAGP until the facility receives written authorization to discharge from EPA.

Any facility operating under an effective (unexpired) or an administratively continued individual NPDES permit may request that the individual permit be revoked and that coverage under the AQUAGP be granted. When the facility is granted coverage under the AQUAGP, the facility's individual permit will be terminated and cease to be in effect.

6.2 NOI Submittal

The operator of the facility is responsible for applying for the General Permit as required by 40 CFR §122.21(b). To be authorized by this General Permit, operators of facilities identified in Part 4.1 of this General Permit must submit to EPA and the appropriate State a complete, accurate, and signed NOI. For purposes of this General Permit, the NOI consists of either the suggested NOI format in **Appendix 4** of this General Permit or another format of official correspondence containing all of the information required in the NOI instructions in Appendix 4 of this General Permit. All NOIs submitted after **December 21, 2020** must be submitted electronically, consistent with the Electronic Reporting Rule. <https://www.gpo.gov/fdsys/pkg/FR-2015-10-22/pdf/2015-24954.pdf>. Prior to this date, Permittees may be required to report electronically if required to do so by law. An electronic platform for submitting NOI's is under development and is scheduled to be operational for the release of the final General Permit.

6.3 NOI Submittal Time Frames

- a. Proposed New Discharges: Facilities with proposed new discharges are not eligible for coverage under this General Permit. This exclusion does not apply to existing discharges that have never been covered under individual NPDES permits; for those, see below.
- b. Existing Discharges: Operators of existing discharges, including those facilities with individual NPDES permits that meet the eligibility criteria of this General Permit and that wish to seek authorization under this General Permit, must file an NOI to EPA and the respective State for coverage under this General Permit within sixty (60) days of the effective date of this General Permit. For enforcement purposes, a facility not currently authorized by an NPDES permit that fails to submit an NOI for an existing discharge within 60 days of the effective date of this General Permit will be considered to be discharging without a permit.

6.4 NOI Requirements

For each eligible discharge, the NOI submitted to EPA for a CAAP facility or other similar facility must include all of the information described in **Appendix 4**, Part I and required in the suggested NOI format, found in **Appendix 4** Part II, including:

- a. Facility Information;
- b. Discharge Information;
- c. Operations and Production Information;
- d. Aquaculture Drugs and Chemicals;
- e. Water Sources;
- f. Endangered Species Act Certification;
- g. National Historic Properties Act Eligibility;

- h. Supplemental Information; and
- i. Signature Requirements.

6.5 Certification and Signature

The NOI shall contain 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, to 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 have no personal knowledge that the information submitted is other than 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.

The NOI must be signed by the operator of the facility in accordance with the signatory requirements of 40 CFR § 122.22.

6.6 Submission of NOIs

Each applicant must submit a copy of the NOI to EPA and the appropriate State authority listed in **Appendix 4**.

6.7 Submission of State Applications

- a. Massachusetts: Facilities eligible for and seeking coverage under the AQUAGP require authorization from MassDEP only for authorization to discharge to an ORW and must submit the following documents to the appropriate MassDEP offices, at the addresses listed in **Appendix 4**:
 - i. a copy of the completed Suggested NOI Format found in **Appendix 4**; and
 - ii. the completed State transmittal form.

The transmittal form, instructions, and fee amount may be obtained through the MassDEP website at <https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent>.

- b. New Hampshire: There is no state application form. Facilities located in New Hampshire are encouraged to use EPA's suggested NOI format found in **Appendix 4**.
- c. Vermont: Application for coverage under this General Permit shall be made by filing an NOI on forms provided by the Secretary. The completed and signed NOI shall be filed with the Agency of Natural Resources, together with an administrative fee (\$240.00 as of November 2018; fees are established by 3 V.S.A. §2822 and may be changed by statute revisions) at the address listed in **Appendix 4**:

6.8 When the Director May Require an Application for an Individual Permit

The Director may require any operator authorized by this General Permit to apply for and obtain an individual NPDES permit. Any interested operator may petition the Director to take such action. Discharges that the Director determines require an individual NPDES permit are not authorized to discharge under the AQUAGP.

- a. Facilities that may require an individual permit based on the Director's consideration of factors including, but not limited to, the following:
 - i. The discharge(s) is/are a significant contributor of pollution or is/are in violation of State Water Quality Standards for the receiving water.
 - ii. Receiving stream or withdrawal stream characteristics, including possible or known water quality impairment.
 - iii. The discharge from the facility, when combined with other dischargers in the watershed, may represent a cumulative adverse environmental impact to the receiving water or surface water.
 - iv. Potential water quality impacts associated with aquaculture facilities.
 - v. The discharger is not in compliance with the conditions of this General Permit.
 - vi. In the opinion of the Director, the discharge is more appropriately controlled under an individual or different general permit.
 - vii. The point source(s) covered by this General Permit no longer:
 - (1) Involves the same or substantially similar types of operations;
 - (2) Discharges the same types of wastes;
 - (3) Requires the same effluent limitations or operating conditions; or
 - (4) Requires the same or similar monitoring.
- b. If the Director requires that an individual permit be issued, the Permittee will be notified in writing that an individual permit is required and will be given an explanation of the reasons for this decision.
- c. When an individual NPDES permit is issued to an operator otherwise subject to this General Permit, the operator's coverage under this General Permit will be automatically terminated on the effective date of the individual permit.

6.9 When a Permittee May Request that an Individual Permit Be Issued

Any operator may request to be excluded from the coverage of this General Permit by applying for an individual permit. The request may be made by submitting an individual NPDES permit application and documentation to support the request to EPA for consideration. Application forms and instructions are available at: <https://www.epa.gov/npdes-permits/epa-npdes-permit-forms-attachments-new-england>.

6.10 EPA Determination of Coverage

Any applicant may request coverage under this General Permit, but the final determination will be made by EPA. Coverage under the General Permit will not be effective until EPA has reviewed the NOI, made a determination that coverage under the AQUAGP is warranted, and has notified the operator in writing of its determination. The effective date of coverage will be specified in EPA's authorization letter.

6.11 NOIs on the EPA NPDES AQUAGP Website

All NOIs received by EPA that EPA proposes to authorize will be posted on EPA's NPDES AQUAGP website, <https://www.epa.gov/npdes-permits/aquaculture-general-permit>, for a minimum of thirty (30) days. Following this 30-day period, EPA will either grant authorization, request additional information, or deny authorization under this General Permit and require submission of an application for an individual NPDES permit. A facility will be authorized to discharge under the terms and conditions of this General Permit upon receipt of the written notice of authorization from EPA.

PART 7. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

The effluent monitoring requirements have been established to yield data representative of the discharge under authority of § 308 (a) of the CWA in accordance with 40 CFR §§ 122.41 (j), 122.44 (l), and 122.48.

7.1 Electronic Reporting

Beginning on the permit's effective date, Permittees in all three states shall electronically submit DMRs to EPA using NetDMR

a. Submittal of Reports Using NetDMR

NetDMR is accessed from: <http://www.epa.gov/netdmr>. Permittees shall submit DMRs and reports required under this General Permit electronically to EPA using NetDMR.

Monitoring results shall be summarized for each reporting period and reported electronically using NetDMR no later than the 15th day of the month following the completed reporting period. All reports required under this General Permit shall be submitted to EPA as an electronic attachment to the DMR. Permittees are no longer required to submit hard copies of DMRs to EPA and the appropriate State agency.

b. Submittal of WET Testing Reports

For Massachusetts facilities required to conduct WET tests, duplicate signed copies of all WET test reports shall be submitted to the Massachusetts Department of Environmental Protection, Division of Watershed Management, at the following address:

Massachusetts Department of Environmental Protection
Bureau of Water Resources

Division of Watershed Management
8 New Bond Street
Worcester, Massachusetts 01606

7.2 Timing of Sample Collection

Monitoring for BOD₅, TSS, pH, ammonia, total nitrogen, and total phosphorus shall be conducted during cleaning operations or other operational modes that provide the worst-case for affecting the parameter in the effluent. The Permittee shall collect samples during cleaning operations, as follows:

- a. If raceway flows are continuously discharging through a settling pond or are diverted through a settling pond during cleaning, a representative composite sample shall be taken of the settling pond overflow, during cleaning operations.
- b. If raceway flows during cleaning operations are diverted to treatment lagoons which are continually discharging, a representative composite sample shall be taken of the lagoon discharge at the time of maximum concentration or design detention time, whichever is best representative of maximum concentration.
- c. If lagoons are batch discharged, a representative composite sample shall be taken at the time of discharge.
- d. If raceway or tanks are vacuumed, a representative composite sample of discharge shall be taken during the vacuuming cycle.

In order to capture the maximum concentration of formaldehyde, sampling for formaldehyde shall occur as soon as possible after any application of formalin, after accounting for its detention time through the raceways, tanks and piping networks to the outfall. The detention time calculation shall take into account dosage, injection point, facility flow (both velocity and volume), etc. where possible. A sample for dissolved oxygen and WET, if required, shall be collected concurrently with that for formaldehyde.

PART 8. ADMINISTRATIVE REQUIREMENTS

8.1 Notice of Change (NOC)

Facilities covered under this General Permit may request a change to certain conditions through submission of a NOC to EPA and the appropriate State, when required, prepared in accordance with the instructions provided in **Appendix 7** and signed in accordance with 40 CFR §122.22. The Permittee may use the NOC format in **Appendix 7** or similar correspondence to request one or more of the following:

- a. A change to an alternate pH range.
- b. The use of a new or substitute drug(s) and/or chemical(s).
- c. A change to certain administrative information, such as a change in facility ownership.

Written approval by EPA is required for all changes to be effective, with the exception of those changes involving administrative information. Prior to receiving written approval for all changes with the exception of those involving administrative information, the Permittee must continue to comply with the associated permit condition.

8.2 Notice of Termination (NOT) of Discharge

Permittees shall notify EPA and the appropriate State agency in writing of the termination of the discharge(s) authorized by this General Permit. The NOT may be either the suggested NOT format in **Appendix 5**, or any other official correspondence that incorporates all of the information required in **Appendix 5**, Part II. Instructions for completing the NOT are found in Part I of **Appendix 5**. The NOT must be completed and submitted by e-mail within thirty (30) days of the permanent cessation of the discharge(s) authorized by the AQUAGP. Signed and completed NOTs must be submitted by e-mail to EPA and to the appropriate State agency at the addresses listed in **Appendix 5**.

8.3 Continuation of This General Permit After Its Expiration

If this General Permit is not reissued prior to its expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and in effect for discharges that were authorized prior to expiration. If a facility was granted permit authorization prior to the expiration date of this General Permit, it will automatically remain authorized by this General Permit until the earliest of:

- a. Authorization under a reissued general permit following timely and appropriate submittal of a complete and accurate NOI to discharge under the reissued permit;
- b. The Permittee's submittal of a NOT;
- c. Issuance of an individual permit for the Permittee's discharges; or
- d. A formal permit decision by the Director of EPA New England not to reissue this General Permit, at which time the Permittee must seek coverage under an alternative general permit or an individual permit.

However, once this General Permit expires, EPA cannot provide written authorization of coverage under this General Permit to any eligible discharger who submits an NOI to EPA after such expiration date.

If a facility does not submit a timely, appropriate, complete and accurate NOI requesting authorization to discharge under the reissued permit, or a timely request for authorization under an individual or alternative general permit, authorization under this General Permit will terminate on the due date for the NOI under the reissued permit unless otherwise specified in the reissued permit.