

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DRAFT GENERAL PERMITS FOR HYDROELECTRIC GENERATING FACILITIES

MAG360000 AND NHG360000

TABLE OF CONTENTS

NOTE: The hydroelectric generating facility General Permits (HYDROGP) for the Commonwealth of Massachusetts and the State of New Hampshire are combined herein. Part 1 contains the General Permit provisions for discharges in the Commonwealth of Massachusetts; Part 2 contains the General Permit provisions for discharges in the State of New Hampshire; and Parts 3 through 8 are General Permit provisions common to both General Permits.

<b>Part 1. MASSACHUSETTS GENERAL PERMIT, Permit No. MAG360000 .....</b>	<b>3</b>
1.1 Equipment-Related Cooling Water .....	4
1.2 Equipment and Floor Drain Water .....	5
1.3 Maintenance-Related Water .....	6
1.4 Equipment-Related Backwash Strainer Water .....	7
1.5 Facility Maintenance-Related Water during Flood/High Water Events .....	8
1.6 Requirements for Any Combination of Discharges .....	9
1.7 Other Permit Conditions .....	11
1.8 State Permit Conditions .....	13
<b>Part 2. NEW HAMPSHIRE GENERAL PERMIT, Permit No. NHG360000 .....</b>	<b>14</b>
2.1 Equipment-Related Cooling Water .....	15
2.2 Equipment and Floor Drain Water .....	16
2.3 Maintenance-Related Water .....	17
2.4 Equipment-Related Backwash Strainer Water .....	18
2.5 Facility Maintenance-Related Water during Flood/High Water Events .....	19
2.6 Requirements for Any Combination of Discharges .....	20
2.7 Other Permit Conditions .....	22
2.8 State Permit Conditions .....	24
<b>Part 3. Eligibility and Coverage under the HYDROGP .....</b>	<b>25</b>
3.1 Eligible Discharges .....	25
3.2 Geographic Coverage Area .....	25
3.3 Limitations on Coverage .....	25
3.4 Special Eligibility Requirements .....	27
<b>Part 4. CWA § 316(b) Requirements for the Design and Operation of Cooling Water Intake Structures (CWIS) .....</b>	<b>27</b>
4.1 Facilities That Must Comply with CWIS Requirements .....	28
4.2 General BTA Requirements .....	28
4.3 Additional Information Required for Site-Specific BTA Requirements .....	28
<b>Part 5. Best Management Practices (BMP) Plan .....</b>	<b>29</b>
<b>Part 6. Obtaining Authorization to Discharge .....</b>	<b>30</b>
6.1 How to Obtain Authorization to Discharge .....	30
6.2 NOI Submittal .....	31
6.3 NOI Submittal Time Frames .....	31
6.4 NOI Requirements .....	31
6.5 Certification and Signature .....	32

6.6	Submission of NOIs.....	32
6.7	Submission of State Applications.....	32
6.8	When the Director May Require an Application for an Individual Permit ....	33
6.9	When a Permittee May Request that an Individual Permit Be Issued.....	33
6.10	EPA Determination of Coverage .....	34
6.11	NOIs on the EPA NPDES HYDROGP website .....	34
<b>Part 7</b>	<b>Monitoring, Recordkeeping and Reporting Requirements .....</b>	<b>34</b>
7.1	NetDMR .....	34
7.2	Hard Copy Reports for Facilities in New Hampshire.....	36
7.3	Hard Copy Reports for Facilities in Massachusetts.....	36
<b>Part 8</b>	<b>Administrative Requirements.....</b>	<b>36</b>
8.1	Notice of Change (NOC).....	36
8.2	Notice of Termination (NOT) of Discharge .....	37
8.3	Continuation of this General Permit after its Expiration.....	37
Appendix 1	Summary of Marine Essential Fish Habitat Designations	
Appendix 2	Endangered Species Act Guidance and Eligibility Criteria	
Appendix 3	National Historic Preservation Act Review	
Appendix 4	Suggested Notice of Intent (NOI) Format and Instructions	
Appendix 5	Notice of Termination (NOT) Instructions and Suggested Format	
Appendix 6	General Conditions	
Appendix 7	Best Management Practices (BMP) Plan	
Appendix 8	Notice of Change (NOC) Instructions and Suggested Format	

**PART 1. MASSACHUSETTS GENERAL PERMIT, PERMIT NO. MAG360000**

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 hydroelectric generating facilities located in Massachusetts which discharge equipment cooling waters, equipment and floor drain water, equipment backwash strainer water, and specific maintenance waters from the facility 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 supersedes the General Permit that was issued on November 10, 2009 and that expired on December 7, 2014. This permit shall become effective on the date specified in the notice of availability published in the Federal Register. This General Permit will expire at midnight, five (5) years from the effective date.

Signed this            day of            , 2018

Ken Moraff, Director  
Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
Boston, MA 02109-3912

Lealdon Langley, Director  
Massachusetts Wetlands and Wastewater Programs  
Department of Environmental Protection  
Commonwealth of Massachusetts,  
Boston, MA 02108

## 1.1 Equipment-Related Cooling Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment-related cooling water that is characterized as non-contact cooling water (NCCW) and contact cooling water. Each outfall discharging equipment-related cooling water shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring for each outfall is to be conducted and reported in accordance with Part 1.7.a. and Part 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	Gallons per day	Report	1/Quarter	Estimate or Recorder
pH Range for Class A and B Waters <sup>2</sup>	Standard Units	6.5 to 8.3	1/Quarter	Grab
pH Range for Class SA and SB Waters <sup>3</sup>	Standard Units	6.5 to 8.5	1/Quarter	Grab
Temperature, Effluent <sup>4</sup>	°F	Report	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>4</sup> Effluent temperature shall be measured prior to the point of confluence with the tailrace or receiving water.

## 1.2 Equipment and Floor Drain Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment and floor drain water from the following operations: floor drains, trench drains, station sumps, oil/water separators, wheel pit drains or sumps, compressor blowdowns, equipment and seal leakage, lower guide bearing drains and other bearing-related discharges, various pit drains, and miscellaneous infiltration and seepage waters collected in a sump or an oil/water separator. Each outfall discharging equipment and floor drain water shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring for each outfall is to be conducted and reported in accordance with Part 1.7.a. and Part 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range for Class A and Class B waters <sup>2</sup>	Standard Units	6.5 to 8.3	1/Quarter	Grab
pH Range for Class SA and Class SB waters <sup>3</sup>	Standard Units	6.5 to 8.5	1/Quarter	Grab
Oil and Grease for Class A and Class SA waters <sup>4</sup>	mg/L	Non-detect, See Part 1.7.h.	1/Quarter	Grab
Oil and Grease for Class B and Class SB waters <sup>4</sup>	mg/L	15	1/Quarter	Grab
Total Suspended Solids	mg/l	Report, See Part 1.7.k	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly Discharge Monitoring Report (DMR) with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>4</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. §136.

### 1.3 Maintenance-Related Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge maintenance-related water from sump dewatering. Each outfall discharging maintenance-related water shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring for each outfall is to be conducted and reported in accordance with Part 1.7.a. and Part 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range for Class A and Class B waters <sup>2</sup>	Standard Units	6.5 to 8.3	1/Quarter	Grab
pH Range for Class SA and Class SB waters <sup>3</sup>	Standard Units	6.5 to 8.5	1/Quarter	Grab
Oil and Grease for Class A and Class SA waters <sup>4</sup>	mg/L	Non-detect, See Part 1.7.h.	1/Quarter	Grab
Oil and Grease for Class B and Class SB waters <sup>4</sup>	mg/L	15	1/Quarter	Grab
Total Suspended Solids	mg/L	Report, See Part 1.7.k	1/Quarter	Grab

#### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly Discharge Monitoring Report (DMR) with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>4</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. §136.

## 1.4 Equipment-Related Backwash Strainer Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment-related backwash strainer water from the operation of the backwash strainer on the cooling water intake line. Each outfall discharging equipment-related backwash strainer water shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring for each outfall is to be conducted and reported in accordance with Part 1.7.a. and Part 7. Such discharges shall also comply with Part D.5 of Appendix 7 (BMP plan), which details specific inspection and maintenance requirements for backwash strainer operation.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range for Class A and Class B waters <sup>2</sup>	Standard Units	6.5 to 8.3	1/Quarter	Grab
pH Range for Class SA and Class SB waters <sup>3</sup>	Standard Units	6.5 to 8.5	1/Quarter	Grab
Total Suspended Solids	mg/L	Report, See Part 1.7.k	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly Discharge Monitoring Report (DMR) with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

### 1.5 Facility Maintenance-Related Water during Flood/High Water Events

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge facility maintenance-related water during flood/high water events from flood water pumps, high water sump pumps, and miscellaneous flood/high water collection devices. Monitoring and reporting requirements for facility maintenance-related water during flood/high water events are to be conducted and reported in accordance with Part 1.7.a. and Part 7 and as specified below, which are the date and approximate duration of each flood/high water discharge event. This monitoring shall be reported as an attachment to the quarterly DMR. Flood/high water discharges shall comply with the requirements in Part 5 of this permit and be consistent with the implemented flood/high water discharge practices of the BMP plan in Appendix 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Monitoring Requirement</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
Flood/high water event	Report Number of events for the Quarter	1/Occurrence	Count
Flood/high water event duration	Report Hours per event and total hours for the quarter	1/Occurrence	Estimate



## 1.6 Requirements for Any Combination of Discharges

### Equipment-Related Cooling Water, Equipment and Floor Drain Water, Maintenance-Related Water, Equipment-Related Backwash Strainer Water, and Facility Maintenance-Related Water During Flood/High Water Events

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge a combination of two or more discharges associated with operations identified in Parts 1.1 through 1.5: equipment-related cooling water, equipment and floor drain water, maintenance-related water, equipment-related backwash strainer water, and facility maintenance-related water during flood/high water events. Each outfall with these combined discharges shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring is to be conducted and reported in accordance with Part 1.7 and Part 7.

For facility maintenance-related water during flood/high water events, the date and approximate duration of each flood/high water discharge event shall be included as an attachment to the quarterly DMR. Flood/high water discharges shall comply with the requirements in Part 5 of this permit and be consistent with the implemented flood/high water discharge practices of the BMP plan in Appendix 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range for Class A and Class B waters <sup>2</sup>	Standard Units	6.5 to 8.3	1/Quarter	Grab
pH Range for Class SA and Class SB waters <sup>3</sup>	Standard Units	6.5 to 8.5	1/Quarter	Grab
Oil and Grease for Class A and SA waters <sup>4</sup>	mg/L	Non-detect, See Part 1.7.h	1/Quarter	Grab
Oil and Grease for Class B and SB waters <sup>4</sup>	mg/L	15	1/Quarter	Grab
TSS	mg/l	Report, See Part 1.7.k	1/Quarter	Grab
Temperature, Effluent <sup>5</sup>	° F	Report	1/Quarter	Grab

#### Footnotes

- <sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly Discharge Monitoring Report (DMR) with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.
- <sup>2</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.
- <sup>3</sup> This is a State certification requirement. Also see Part 1.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.
- <sup>4</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. §136. The effluent limitation for Oil and Grease applies only to combined discharges that include effluent from equipment and floor drain water or facility maintenance-related water.
- <sup>5</sup> The temperature monitoring requirements apply only to combined discharges that include equipment-related cooling water.

## 1.7 Other Permit Conditions

- a. Samples taken in compliance with the monitoring requirements specified in Parts 1.1 through 1.6 of this permit shall be taken at a location that is representative of the discharge, unless otherwise indicated in the permit. All samples shall be tested using the analytical methods found in 40 C.F.R. §136, or alternative methods approved by EPA in accordance with the procedures in 40 C.F.R. §136. Effluent sampling shall begin during the calendar quarter in which the authorization date of the permit occurs, unless such date is during the last month of the quarter. Calendar quarters are defined as the following: January through March, April through June, July through September, and October through December. All sampling results shall be recorded, including those that are above the frequency required by this permit.

If the facility contains two or more outfalls with substantially identical discharges (e.g., 2 NCCW outfalls originating from similar turbines), the permittee may sample the representative outfall once the outfalls are identified and updated as necessary in accordance with the Optional Representative Outfall Sampling provision of Part E of Appendix 7. The quarterly DMR shall include a statement listing the other outfalls with discharges covered by the representative outfall sampling results. EPA may determine that certain outfalls are not representative and require sampling for such outfalls. If the permittee seeks to change a representative outfall, it shall submit a written request to EPA. The changing of a representative outfall shall be made only after written approval by EPA has been received.

- b. Solid materials, with the exception of naturally occurring materials, shall be removed from the trash racks or intake screens and disposed of in accordance with the procedures developed in Part D.4 of Appendix 7. Installation of trash racks or other equipment to remove the solid materials is not a permit requirement.
- c. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- d. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- e. The effluent shall not contain floating or settleable solids.
- f. The discharge shall not cause objectionable discoloration, color, turbidity or a visible sheen in the receiving waters.
- g. 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.

- h. There shall be no detectable discharge of oil and grease for discharge to Class A or SA waters. The permittee shall use EPA Method 1664A or B for oil and grease analysis. Compliance with the non-detect limit shall be measured at the minimum level (ML) of detection for the EPA approved test methods. The ML for oil and grease is 5 mg/l using EPA Method 1664A or B, where the ML is the lowest point on the curve used to calibrate the test equipment for the pollutant of concern. If EPA approves a method under 40 C.F.R. § 136 for oil and grease that has a ML lower than 5 mg/l, the permittee shall be required to use the improved method.
- i. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. §136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters limited in this permit. A method is considered “sufficiently sensitive” when either (1) The method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. §136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or the pollutant parameter. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for an analyte, representative of the lowest concentration at which an analyte can be measured with a known level of confidence. When a parameter is not detected above the minimum level of detection, the Permittee must report the data qualifier signifying less than the minimum level of detection for that parameter on the DMR (i.e. <5 mg/L, if the minimum level of detection for a parameter is 5 mg/L).
- j. This permit does not allow for the addition of any chemical for any purpose to the discharges except for non-toxic neutralization (pH adjustment) chemicals or seasonal use of chemicals to prevent freezing to equipment associated with the facility’s intake structure(s). Additives used to control biological growth in cooling water are prohibited due to their inherent toxicity to aquatic life.

For each anti-freeze chemical that is requested to be used by the permittee as described above, the following data must be supplied with the Notice of Intent (NOI):

- (1) Name and manufacturer;
- (2) Maximum and average daily quantity that is proposed to be used on a monthly basis as well as the maximum and average daily expected concentrations (mg/l) in the discharge; and
- (3) Any aquatic toxicity values or other toxicological information from the vendor or other source.

Notification of any new chemicals or proposed substitutions of previously approved chemicals must be requested through the submittal of a Notice of Change (NOC) to EPA and the State. All substitution requests must contain the information required in Part I.7.j. and any substitute chemicals may not be used until allowed by EPA in writing.

- k. After at least four (4) consecutive samples for TSS that are below 30 mg/l, the permittee may request a reduction or elimination of TSS monitoring by submitting a NOC, found in Appendix 8 of this Permit. Prior to receiving written approval to reduce or eliminate TSS monitoring, the permittee must continue to monitor TSS at the frequency specified in this permit.

## 1.8 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 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 National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 C.M.R. 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 Clean Water Act, 40 C.F.R. 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 permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this 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 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 permit is declared invalid, illegal or otherwise issued in violation of Federal law, this 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. NHG360000**

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§ 1251 et seq.; the "CWA"), operators of hydroelectric generating facilities located in New Hampshire which discharge equipment cooling waters, equipment and floor drain water, equipment backwash strainer water, and specific maintenance waters from the facility are authorized to discharge to all waters, unless otherwise restricted by the New Hampshire water quality standards, 50 RSA §485-A:8 and the N.H. 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 supersedes the General Permit that was issued on December 7, 2009 and that expired on December 7, 2014. This permit shall become effective on the date specified in the notice of availability published in the Federal Register. This General Permit will expire at midnight, five (5) years from the effective date.

Signed this        day of        , 2018

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Ken Moraff, Director  
Office of Ecosystem Protection  
Environmental Protection Agency  
Boston, MA 02109-3912

## 2.1 Equipment-Related Cooling Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment-related cooling water that is characterized as non-contact cooling water (NCCW) and contact cooling water. Each outfall discharging equipment-related cooling water shall be limited and monitored by the permittee as specified below. Monitoring for each outfall is to be conducted and reported in accordance with Part 2.7.a. and Part 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	Gallons per day	Report	1/Quarter	Estimate or Recorder
pH Range <sup>2</sup>	Standard Units	6.5 to 8.0	1/Quarter	Grab
Temperature, Effluent	°F	Report	1/Quarter	Grab

### Footnotes

- <sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.
- <sup>2</sup> This is a State certification requirement. Also see Part 2.8.a of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.
- <sup>3</sup> Effluent temperature shall be measured prior to the point of confluence with the tailrace or receiving water.

## 2.2 Equipment and Floor Drain Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment and floor drain water from the following operations: floor drains, trench drains, station sumps, oil/water separators, wheel pit drains or sumps, compressor blowdowns, equipment and seal leakage, lower guide bearing drains and other bearing-related discharges, various pit drains, and miscellaneous infiltration and seepage waters collected in a sump or oil/water separator. Each outfall discharging equipment and floor drain water shall be limited and monitored by the permittee as specified below. Monitoring for each outfall is to be conducted and reported in accordance with Parts 2.7.a. and 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range <sup>2</sup>	Standard Units	6.5 to 8.0	1/Quarter	Grab
Oil and Grease <sup>3</sup>	mg/L	15	1/Quarter	Grab
Total Suspended Solids	mg/L	Report, See Part 2.7.k	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 2.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. § 136.



## 2.3 Maintenance-Related Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge maintenance-related water from sump dewatering. Each outfall discharging maintenance-related water shall be limited and monitored by the permittee as specified below. Monitoring for each outfall is to be conducted and reported in accordance with Part 2.7.a. and Part 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
		<u>Average Monthly</u>		
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range <sup>2</sup>	Standard Units	6.5 to 8.0	1/Quarter	Grab
Oil and Grease <sup>3</sup>	mg/L	15	1/Quarter	Grab
Total Suspended Solids	mg/L	Report, See Part 2.7.k	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 2.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

<sup>3</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. §136.

## 2.4 Equipment-Related Backwash Strainer Water

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge equipment-related backwash strainer water from the operation of the backwash strainer on the cooling water intake line. Each outfall discharging equipment-related backwash strainer water shall be limited and monitored by the permittee as specified below in accordance with the receiving water classification when indicated. Monitoring for each outfall is to be conducted and reported in accordance with Part 2.7.a. and Part 7. Such discharges shall also comply with Part D.5.of Appendix 7, which details specific inspection and maintenance requirements for backwash strainer operation.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range <sup>2</sup>	Standard Units	6.5 to 8.0	1/Quarter	Grab
Total Suspended Solids	mg/L	Report, See Part 2.7.k	1/Quarter	Grab

### Footnotes

<sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.

<sup>2</sup> This is a State certification requirement. Also see Part 2.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.

## 2.5 Facility Maintenance-Related Water during Flood/High Water Events

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge facility maintenance-related water during flood/high water events from flood water pumps, high water sump pumps, and miscellaneous flood/high water collection devices. Monitoring and reporting requirements for facility maintenance-related water during flood/high water events are to be conducted and reported in accordance with Part 2.7.a. and Part 7 and as specified below, which are the date and approximate duration of each flood/high water discharge event, which shall be reported as specified below. This monitoring shall be reported as an attachment to the quarterly DMR. Flood/high water discharges shall comply with the requirements in Part 5 of this permit and be consistent with the implemented flood/high water discharge practices of the BMP plan in Appendix 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Monitoring Requirement</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
Flood/high water event	Report Number of Events for the quarter	1/Occurrence	Count
Flood/high water event duration	Report Hours per event and total hours per quarter	1/Occurrence	Estimate

## 2.6 Requirements for Any Combination of Discharges

### Equipment-Related Cooling Water, Equipment and Floor Drain Water, Maintenance-Related Water, Equipment-Related Backwash Strainer Water, and Facility Maintenance-Related Water During Flood/High Water Events

During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge a combination of two or more of the following from the associated operations identified in Parts 2.1 through 2.5: equipment-related cooling water, equipment and floor drain water, maintenance-related water, equipment-related backwash strainer water, and facility maintenance-related water during flood/high water events. Each outfall with these combined discharges shall be limited and monitored by the permittee as specified below. Monitoring for each outfall is to be conducted and reported in accordance with Part 2.7 and Part 7.

For facility maintenance-related water during flood/high water events, the date and approximate duration of each flood/high water discharge event shall be included as an attachment to the quarterly DMR. Flood/high water discharges shall comply with the requirements in Part 5 of this permit and be consistent with the implemented flood/high water discharge practices of the BMP plan in Appendix 7.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>	<u>Monitoring Requirement</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow <sup>1</sup>	gallons/day	Report	1/Quarter	Estimate or Recorder
pH Range <sup>2</sup>	Standard Units	6.5 to 8.0	1/Quarter	Grab
Oil and Grease <sup>3</sup>	mg/L	15	1/Quarter	Grab
TSS	mg/L	Report, See Part 2.7.k	1/Quarter	Grab
Temperature, Effluent <sup>4</sup>	° F	Report	1/Quarter	Grab

## Footnotes

- <sup>1</sup> For flow, calculate the average monthly flow for each of the three months of the monitoring period by dividing total estimated or recorded gallons discharged each month by number of days of discharge in that month. Report the highest of the three monthly average flows on the Discharge Monitoring Report (DMR). Flow can be measured or estimated. For those quarters when a discharge does not occur, the permittee must still submit the quarterly DMR with the appropriate no discharge (NODI) code for each parameter. Any written explanation for the NODI is also required with the DMR report.
- <sup>2</sup> This is a State certification requirement. Also see Part 2.8.a. of the Permit. An alternate pH range may be requested - See Part 8.1 of the Permit.
- <sup>3</sup> Oil and Grease shall be tested using EPA test method 1664 Revision A or B, as approved in 40 C.F.R. §136. The effluent limitation for Oil and Grease applies only to combined discharges that include effluent from equipment and floor drain water or facility maintenance-related water.
- <sup>4</sup> The temperature monitoring requirements apply only to combined discharges that include equipment-related cooling water.

## 2.7 Other Permit Conditions

- a. Samples taken in compliance with the monitoring requirements specified in Parts 2.1 through 2.6 of this permit shall be taken at a location that is representative of the discharge unless otherwise indicated in the permit. All samples shall be tested using the analytical methods found in 40 C.F.R. §136, or alternative methods approved by EPA in accordance with the procedures in 40 C.F.R. §136. Effluent sampling shall begin during the calendar quarter in which the authorization date of the permit occurs, unless such date is during the last month of the quarter. Calendar quarters are defined as the following: January through March, April through June, July through September, and October through December. All sampling results shall be recorded, including those that are above the frequency required by this permit.

If the facility contains two or more outfalls with substantially identical discharges (e.g., 2 NCCW outfalls originating from similar turbines), the permittee may sample the representative outfall once the outfalls are identified and updated as necessary in accordance with the Optional Representative Outfall Sampling provision of Part E of Appendix 7. The quarterly DMR shall include a statement listing the other outfalls with discharges covered by the representative outfall sampling results. EPA may determine that certain outfalls are not representative and require sampling of such outfalls. If the permittee seeks to change a representative outfall, it shall submit a written request to EPA. The changing of a representative outfall shall be made only after written approval by EPA has been received.

- b. Solid materials, with the exception of naturally occurring materials, shall be removed from the trash racks or intake screens and disposed of in accordance with the procedures developed in Part D.4 of Appendix 7. Installation of trash racks or other equipment to remove the solid materials is not a permit requirement.
- c. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- d. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- e. The effluent shall not contain floating or settleable solids.
- f. The discharge shall not cause objectionable discoloration, color, turbidity or a visible sheen in the receiving waters.
- g. 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.

- h. The permittee shall use EPA Method 1664A or B for O&G analysis. Compliance with the non-detect limit shall be measured at the minimum level (ML) of detection for the EPA approved test methods. The ML for oil and grease is 5 mg/l using EPA Method 1664A or B, where the ML is the lowest point on the curve used to calibrate the test equipment for the pollutant of concern. If EPA approves a method under 40 C.F.R. §136 for oil and grease that has a ML lower than 5 mg/l, the permittee shall be required to use the improved method.
- i. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. §136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters limited in this permit. A method is considered “sufficiently sensitive” when either (1) The method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. §136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or the pollutant parameter. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for an analyte, representative of the lowest concentration at which an analyte can be measured with a known level of confidence. When a parameter is not detected above the minimum level of detection, the Permittee must report the data qualifier signifying less than the minimum level of detection for that parameter on the DMR (i.e. <5 mg/L, if the minimum level of detection for a parameter is 5 mg/L).
- j. This permit does not allow for the addition of any chemical for any purpose to the discharges except for non-toxic neutralization chemicals or those used seasonally to prevent freezing to equipment associated with the facility’s intake structure(s). Additives used to control biological growth in cooling water are prohibited due to their inherent toxicity to aquatic life.

For each anti-freeze chemical that is requested to be used by the permittee as described above, the following data must be supplied with the Notice of Intent (NOI):

- (1) Name and manufacturer,
- (2) Maximum and average daily quantity that is proposed to be used on a monthly basis as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and
- (3) Any aquatic toxicity values or other toxicological information from the vendor or other source.

Notification of any proposed substitutions of previously approved chemicals must be requested through the submittal of a Notice of Change (NOC) to EPA and the State. These substitution notifications must contain the information required in Part 2.7.j. and any substitute chemicals may not be used until allowed by EPA in writing.

- k. After at least four (4) consecutive samples for TSS that are below 30 mg/l, the permittee may request a reduction or elimination of TSS monitoring by submitting a NOC, found in Appendix 8 of this Permit. Prior to receiving written approval to reduce or eliminate TSS monitoring, the permittee must continue to monitor TSS at the frequency specified in this permit.

## 2.8 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 permittee can 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 prior to commencing. 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. 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 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 Permit. Any modification, suspension or revocation of this 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.



**NOTE: The following Parts 3 through 7 are common elements of both the Massachusetts and New Hampshire General Permits.**

## **PART 3. ELIGIBILITY AND COVERAGE UNDER THE HYDROGP**

### **3.1 Eligible Discharges**

All hydroelectric generating facilities in Massachusetts and New Hampshire which discharge pollutants from the specified operations covered by these General Permits are eligible for coverage under these permits. However, pump storage projects may be excluded from coverage, on a case by case basis, as noted in Part 3.3.1 below.

There are operations at hydroelectric generating facilities that produce similar discharges from a combination of facility sources. These general permits categorize the following similar operations contributing flow as: (1) equipment-related cooling water, (2) equipment and floor drain water, (3) maintenance-related water from sump dewatering, (4) discharges from flood/high water events and (5) equipment-related backwash strainer waters. While each generating facility is unique in its location, physical layout, and operational pattern, all facilities contain one or more of the discharges listed above. The effluent limitations proposed by the Draft General Permits are organized using these categories.

### **3.2 Geographic Coverage Area**

- a. Massachusetts: Facilities authorized by the Massachusetts General Permit (MAG360000) for discharges in the Commonwealth of Massachusetts are allowed into all waters of the Commonwealth, except as limited in Part 3.3 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 (NHG360000) may discharge into all waters of the State of New Hampshire, except as provided in Part 3.3, immediately below, unless 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).

### **3.3 Limitations on Coverage**

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

- a. Discharges from new or existing facilities, as defined in 40 C.F.R §125.83, that withdraw cooling water from an intake with a design flow greater than two (2) million gallons per day and which use at least twenty- five (25) percent of the water withdrawn exclusively for cooling purposes.

- b. Discharges to Outstanding Resource Waters in Massachusetts and New Hampshire:
1. 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); or,
  2. as defined in New Hampshire under Env-Wq 1708.05(a), unless allowed by the NHDES under Env-Wq 1708.05(b).
- c. 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.
- 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 commercial waste (including cooling water) 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 or the State of New Hampshire 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 2014 list of impaired waters available at:  
<http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf>
- New Hampshire 2014 list of impaired waters available at:  
<http://des.nh.gov/organization/divisions/water/wmb/swqa/2014/index.htm>
- g. Any facility whose new or increased discharge is not in compliance with the appropriate state's antidegradation policy or the NH Water Conservation Rules (Env-Wq 2101, or as amended).
- h. Any facility whose discharge(s) or intake(s) are likely to adversely affect any species listed as threatened or endangered and/or designated critical habitat under the Endangered Species Act (ESA).

- i. 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 NPHA requirements.
- j. Discharges to a Publicly-Owned Treatment Works (POTW) which are permitted under § 402 of the CWA (NPDES).
- k. “New Source” dischargers, as defined in 40 C.F.R. § 122.2.
- l. Discharges from pump storage hydroelectric facilities, based on a case-by-case determination.

### 3.4 Special Eligibility Requirements

Facilities located in Massachusetts and New Hampshire 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 Endangered Species Act (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 National Historic Preservation Act of 1966, 16 USC §§ 470 et seq. are not authorized under this permit. Prior to obtaining coverage under this General Permit, all NOI 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 4. CWA § 316(B) REQUIREMENTS FOR THE DESIGN AND OPERATION OF COOLING WATER INTAKE STRUCTURES (CWIS)

Some facilities regulated by the HYDROGP have a small portion of intake water flow that is used to cool turbine bearings or associated equipment and are therefore subject to CWA § 316(b), which requires that the design, location, construction, and capacity of the cooling water intake structures(s) reflect the best technology available (BTA) for minimizing adverse environmental impacts from the impingement and entrainment of various life stages of aquatic organisms (e.g., eggs, larvae, juveniles, adults). See Part 4.3 below for definitions of these terms. In most cases, CWISs are simply referred to as “intakes”.

#### **4.1 Facilities That Must Comply with CWIS Requirements**

Permittees seeking authorization under this General Permit which use any portion of the water withdrawn for cooling must comply with the requirements of Part 4.2 and 4.3 of this General Permit. New and existing facilities that withdraw more than 2 MGD and which use at least twenty-five (25) percent of the water withdrawn exclusively for cooling are not eligible for coverage and must seek authorization under an individual permit. See Part 3.3 of this General Permit. Nothing in this General Permit authorizes the take, as defined at 16 U.S.C. 1532(19), of threatened or endangered species of fish or wildlife.

#### **4.2 General BTA Requirements**

The permittee must implement at least one of the following measures within ninety (90) days of receiving authorization to discharge under this permit:

- a. A physical or behavioral barrier located at the first intake encountered by fish on the upstream side of the dam. The barrier shall direct fish towards a downstream passage which safely conveys fish over the dam without being exposed to the CWIS. The permittee must provide a description of the barrier in the NOI and sufficient information to demonstrate that the downstream fish passage effectively transports live fish in a manner that minimizes the likelihood of becoming impinged or entrained at the cooling water intake.
- b. If cooling water is withdrawn directly from the penstock, the velocity at the cooling water intake shall not exceed 0.5 fps. The NOI must include a demonstration of compliance with this intake velocity through monitoring or calculation. Monitoring or calculation must be based on the maximum intake volume and minimum bypass flow.
- c. If cooling water intake is withdrawn directly from the source waterbody (*i.e.*, not from within the penstock), the cooling water intake must be equipped with a physical screen of sufficient mesh size to minimize the potential for adult and juvenile fish to become entrained. The through-screen velocity at the cooling water intake shall not exceed 0.5 fps. The NOI must include a demonstration of compliance with this intake velocity through monitoring or calculation. Monitoring or calculation must be based on the maximum intake volume and source water average summer low flow.

#### **4.3 Additional Information Required for Site-Specific BTA Requirements**

In addition to the required technologies in Part 4.2, above, facilities must submit the following information with their NOI for consideration in determining whether the cooling water intake is operated in compliance with the BTA. "Intake flow" refers to the total volume of water withdrawn for industrial use at the facility and does not include the volume of water used to generate electricity at the turbines.

- The maximum daily intake volume during the previous five years, in gallons per day (GPD);
- The date on which maximum daily intake occurred;
- The maximum monthly average intake volume during the previous five years (GPD);
- The month and year in which the maximum monthly average intake flow occurred;

- The maximum daily and average monthly volume of water withdrawn and used exclusively for cooling;
- The volume in GPD, if any, of withdrawn water that is used for cooling that is then reused at the facility prior to discharge, and if so how it was reused;
- The calculated intake velocity at the cooling water intake structure in feet per second (fps);
- The volume of water withdrawn for use in the facility as a percentage of: (i) installed capacity of the turbines; (ii) average daily flow through the penstock; and (iii) minimum flow through the penstock.
- The source water's annual mean flow and 7-day mean stream low flow with 10-year recurrence interval (7Q10) flow if the intake is located on a freshwater river or stream, in cubic feet per second (cfs) as available from USGS or other source (e.g., MassDEP or NHDES) with indication of whether river flow is managed and the parameters associated with such an arrangement; and
- A characterization of the habitat upstream of the dam, including descriptions of resident and migratory fish species, life history attributes, stocking information. As an example, the applicant may include any biological characterization of the habitat upstream of the dam completed during Federal Energy Regulatory Commission (FERC) licensing or otherwise with the assistance of state or federal agencies.

## **PART 5. BEST MANAGEMENT PRACTICES (BMP) PLAN**

- a. Each Permittee shall have a BMP plan in place that is prepared in accordance with good engineering practices, and except as provided elsewhere in this permit, shall provide for compliance with the terms of this permit. Existing permittees with a currently implemented BMP plan shall revise such plan as necessary within ninety (90) days after the permit authorization date to reflect any changes at the facility and address any new requirements of the final permit. New permittees shall develop and implement a BMP plan no later than one hundred and eighty (180) days after the permit authorization date.

The objectives of the BMP plan are to protect the designated water uses of the surrounding surface water bodies; to mitigate pollution from materials storage areas, in-plant transfers of hazardous and/or toxic materials, process and material handling areas, loading and unloading operations, and accidental spillage; and to manage the removal and disposal of solid materials, to the extent practicable, from the trash racks or intake screens.

The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of discharges associated with day-to-day work activity at the facility from equipment and floor drain-related water, equipment-related cooling water, equipment and station maintenance-related water, equipment-related backwash strainer water, and facility maintenance-related water during flood/high water events. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in discharges associated with work-related operations at the facility from all of the types of discharges listed above; and to assure compliance with the terms and conditions of this permit.

The BMP plan shall describe and provide for implementing practices to remove and to dispose of solid materials, except for naturally occurring materials, from the trash racks or intake screens. The BMP plan shall require, at a minimum, quarterly inspection and maintenance procedures for any installed backwash strainer. A permittee with flood/high water discharges authorized under Parts 1.5, 1.6, 2.5 and 2.6 of this permit shall also describe and develop specific flood/high water practices and procedures in a flood/high water BMP plan for the facility. The permittee must implement the provisions of the BMP plan required under this part as a condition of this permit. The requirements for the development of this plan are contained in Appendix 7.

- b. Annually, no later than February 15th, each Permittee shall prepare an Annual Report which states that the previous calendar year's inspections and maintenance activities were conducted, results recorded, and records maintained and whether the hydroelectric generating facility is in compliance with the BMP Plan. These Annual Reports shall be retained on-site at the hydroelectric generating facility in accordance with Appendix 6.C.1.b. (Monitoring and Records) of this permit. The Annual Report shall identify any incidents of noncompliance with the permit or the BMP plan (such as oil spills, or other discharges of toxic or hazardous pollutants to the receiving waters). Where an Annual Report does not identify any incidents of noncompliance with the permit or the BMP plan, the Annual Report shall contain a certification that the facility is in compliance with the BMP plan and this permit. The Annual Report shall be signed in accordance with Appendix 6.D.2 (Signatory Requirements) of this permit.

## **PART 6. OBTAINING AUTHORIZATION TO DISCHARGE**

### **6.1 How to Obtain Authorization to Discharge**

To be authorized to discharge by this permit the applicant must submit a complete and accurate Notice of Intent (NOI), to both EPA and the appropriate State. For Massachusetts, an NOI submittal is required only if the applicant is seeking authorization from the state to discharge to an ORW. 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 HYDROGP and that the applicant is requesting coverage under the HYDROGP. However, the facility's discharge will not be authorized under this HYDROGP until the facility receives written authorization to discharge from EPA.

Facility operators must submit a NOI if they are seeking coverage under the HYDROGP for the first time or if the facility received coverage under the HYDROGP that expired on December 7, 2014.

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 HYDROGP be granted. When the facility is granted coverage under the HYDROGP, 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 C.F.R. §122.21(b). To be authorized by this General Permit, operators of facilities whose discharge or discharges are identified in Part 3.1 of this 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 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.

## 6.3 NOI Submittal Time Frames

- a. Proposed New Discharges: Facilities with proposed new discharges that are seeking coverage under this General Permit may either mail a completed NOI to the EPA and respective State address in **Appendix 4** or may e-mail an NOI to EPA at least thirty (30) days prior to the commencement of discharge to [Hydro.GeneralPermit@epa.gov](mailto:Hydro.GeneralPermit@epa.gov).
- b. Existing Discharges: Operators of existing discharges, including those facilities with coverage under the HYDROGP that expired on December 7, 2014 or 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 permit. For enforcement purposes, a facility 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 hydroelectric facility must include, in writing, all the information described in **Appendix 4**, Part II and required in the suggested NOI format, found in **Appendix 4** Part III, including:

- a. Facility Information;
- b. Discharge Information;
- c. Best Technology Available for Cooling Water Intake Structures;
- d. Chemical Additives;
- e. Endangered Species Act Certification;
- f. National Historic Properties Act Eligibility;
- g. Supplemental Information; and
- h. Signature Requirements.

For any non-toxic chemicals used for anti-freeze purposes expected to be present in any of the discharges, the applicant must include the chemical name and manufacturer; the maximum and average dosages (concentrations) used as well as the estimated maximum and average concentrations (mg/l) in the discharge, and any reported aquatic toxicity information provided by the vendor of such chemicals.

EPA will make a determination on whether the use of these chemicals is acceptable or otherwise may instruct the applicant to apply for an individual permit.

## 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 C.F.R. § 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**. For Massachusetts, an NOI submittal is required only if the applicant is seeking authorization from the state to discharge to an ORW.

## 6.7 Submission of State Applications

- a. Massachusetts: Facilities eligible for and seeking coverage under the HYDROGP 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**:
  - (1) a copy of the completed Suggested NOI Format found in **Appendix 4**; and
  - (2) the completed State transmittal form.

The transmittal form, instructions, and fee amount may be obtained through the MassDEP website at <http://www.mass.gov/eea/agencies/massdep/service/approvals/wm-15-npdes-general-permit-application.html>

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**.



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

The Director may require any operator authorized by this 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 HYDROGP.

- a. Facilities that may require an individual permit based on the Director's consideration of factors including, but not limited to, the following:
  - (1) The discharge(s) is/are a significant contributor of pollution or is/are in violation of State Water Quality Standards for the receiving water;
  - (2) Receiving stream or withdrawal stream characteristics, including possible or known water quality impairment;
  - (3) The location, capacity, design or construction of the cooling water intake structure may represent an adverse environmental impact to EFH or ESA species or their habitat;
  - (4) The discharge from or intake into the facility, when combined with other dischargers in the watershed, that may represent a cumulative adverse environmental impact to the receiving water or surface water; or
  - (5) Potential water quality impacts associated with pump storage project hydroelectric generating facilities.
  - (6) The discharger is not in compliance with the conditions of this General Permit;
  - (7) Effluent limitation guidelines are promulgated for point sources covered by this permit;
  - (8) In the opinion of the Director, the discharge is more appropriately controlled under an individual or different general permit.
  - (9) The point source(s) covered by this permit no longer:
    - i. Involves the same or substantially similar types of operations;
    - ii. Discharges the same types of wastes;
    - iii. Requires the same effluent limitations or operating conditions; or
    - iv. 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://www3.epa.gov/region1/npdes/epa\\_attach.html](https://www3.epa.gov/region1/npdes/epa_attach.html)

## 6.10 EPA Determination of Coverage

Any applicant may request coverage under this General Permit, but the final determination will be made by the EPA. Coverage under the General Permit will not be effective until EPA has reviewed the NOI, made a determination that coverage under the HYDROGP 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 HYDROGP website

All NOIs received by EPA that EPA proposes to authorize will be posted on EPA's NPDES HYDROGP website, <http://www.epa.gov/region1/npdes/hydrogp.html>, 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 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 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 C.F.R. §§122.41 (j), 122.44 (l), and 122.48.

### 7.1 NetDMR

**Beginning on the permit's effective date**, the permittee shall submit DMRs to EPA using NetDMR, unless, in accordance with Part 7.1.b, the facility is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports ("opt-out request").

#### a. Submittal of Reports Using NetDMR

NetDMR is accessed from: <http://www.epa.gov/netdmr>. Permittees shall submit DMRs and reports required under this permit electronically to EPA using NetDMR unless the facility has applied for an "opt-out request" and received written approval by EPA in accordance with Part 7.1.b, below.

Monitoring results shall be summarized for each calendar quarter, as defined in Parts 1.7.a above and reported electronically using NetDMR no later than the 15<sup>th</sup> day of the month following the completed quarter. For example, the monitoring results for the calendar quarter running January through March shall be reported no later than April 15th. All reports required under this 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.

b. Submittal of NetDMR Opt-Out Requests

A facility may only submit an “opt-out request” if the permittee is able to demonstrate a reasonable basis for the request, including limiting factors such as technical or administrative infeasibility. Opt-out requests must be submitted in writing to EPA for approval as part of the NOI. If accepted by EPA, the permittee shall follow the instructions in Parts 7.1.c, 7.2, and 7.3 regarding the submittal of paper DMRs and reports. This demonstration shall be valid for twelve (12) months from the date of EPA approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to EPA unless the permittee submits a renewed opt-out request and such request is approved by EPA. All opt-out requests should be sent to the following addresses (not required for MassDEP):

Attn: NetDMR Coordinator  
U.S. Environmental Protection Agency, Water Technical Unit  
5 Post Office Square, Suite 100 (OES04-4)  
Boston, MA 02109-3912

Attn: Compliance Supervisor  
New Hampshire Department of Environmental Services  
Water Division - Wastewater Engineering Bureau  
29 Hazen Drive  
P.O. Box 95  
Concord, New Hampshire 03302-0095

c. Submittal of Reports in Hard Copy Form

Monitoring results shall be summarized for each calendar quarter and reported on separate hard copy DMRs postmarked no later than the 15<sup>th</sup> day of the month following the completed calendar quarter. Any reports shall be submitted as an attachment to the DMRs. Operators of facilities that discharge intermittently and have no discharge during a particular quarter must submit a hard copy DMR form to EPA for that quarter indicating that no discharge occurred with the appropriate no discharge (NODI) code. Signed and dated originals of the DMRs, and all other reports or notifications required shall be submitted to the following address:

U.S. Environmental Protection Agency  
Water Technical Unit  
5 Post Office Square, Suite 100 (OES04-SMR)  
Boston, MA 02109-3912

Duplicate signed copies of all reports or notifications required above shall be submitted to the appropriate state office pursuant to Sections 7.2 and 7.3, below.

## **7.2 Hard Copy Reports for Facilities in New Hampshire**

Facilities approved to submit hard copy monitoring results (see Parts 7.1.a. through 7.1.c.) must send duplicate copies of all reports to NHDES. Monitoring results obtained during the previous quarter must be summarized for each quarter and reported on separate DMRs, postmarked no later than the 15th day of the month following the completed quarter.

New Hampshire facilities shall submit duplicate signed copies of all reports required herein to the State at:

Attn: Compliance Supervisor  
New Hampshire Department of Environmental Services  
Water Division, Wastewater Engineering Bureau  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095

## **7.3 Hard Copy Reports for Facilities in Massachusetts**

Facilities approved to submit hard copy monitoring results (see Sections 7.1.a. through 7.1.c.) must send duplicate copies of all reports to MassDEP. Monitoring results obtained during the previous quarter must be summarized for each quarter and reported on separate DMRs, postmarked no later than the 15th day of the month following the completed quarter.

Massachusetts facilities shall submit duplicate signed copies of all reports required herein to the State at:

Massachusetts Department of Environmental Protection  
Surface Water Discharge Permit Program  
1 Winter Street, 5th Floor  
Boston, Massachusetts 02108

Massachusetts facilities must also submit copies of all DMRs to the MassDEP Regional Office where the discharge occurs. A list of regional office addresses can be found at <http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html> .

## **PART 8. ADMINISTRATIVE REQUIREMENTS**

### **8.1 Notice of Change (NOC)**

Facilities covered under this 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 8** and signed in accordance with 40 C.F.R. §122.22. The Permittee may use the NOC format in **Appendix 8** or similar correspondence to request one or more of the following:

A reduction in monitoring requirements for the parameter Total Suspended Solids (TSS), a change to an alternate pH range, the use of a new or substitute chemical(s) and/or additive(s), and 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. For example, a Permittee must continue to monitor TSS at the frequency specified in this General Permit until EPA provides a determination in writing that such frequency may be reduced or the monitoring for TSS is eliminated for a specific outfall.

## **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 Notice of Termination (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 HYDROGP. Signed and completed NOTs and attachments 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 permit, it will automatically remain authorized by this 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 Notice of Termination;
- c. Issuance of an individual permit for the permittee's discharges; or
- d. A formal permit decision by the Director of EPA-NE 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 permit will terminate on the due date for the NOI under the reissued permit unless otherwise specified in the reissued permit.