



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

AVERY T. DAY
ACTING COMMISSIONER

October 21, 2015

Mr. Greg Lambert
Cooke Aquaculture USA Inc.
P.O. Box 528
Bingham, ME 04920
greg.lambert@cookeaqua.com

*Sent via electronic mail
Delivery confirmation requested*

**RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0110116
Maine Waste Discharge License (WDL) # W004701-6F-G-R
Reissued MEPDES Permit / WDL**

Dear Mr. Lambert:

Enclosed please find a copy of your reissued MEPDES permit and Maine WDL, which was approved by the Department of Environmental Protection. Please read this permit renewal and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to contact me.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

Letter to Cooke Aquaculture
October 21, 2015
Page 2 of 2

Sincerely,

A handwritten signature in black ink that reads "Bill Hinkel". The signature is written in a cursive, slightly slanted style.

Bill Hinkel
Division of Water Quality Management
Bureau of Water Quality
bill.hinkel@maine.gov
ph: 207.485.2281

Enc.

cc: Denise Behr, MDEP
Olga Vergara, USEPA
Marelyn Vega, USEPA
Sandy Mojica, USEPA



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P. 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

COOKE AQUACULTURE USA INC.)	MAINE POLLUTANT DISCHARGE
OQUOSSOC FISH HATCHERY)	ELIMINATION SYSTEM PERMIT
RANGELEY, FRANKLIN COUNTY, MAINE)	AND
#ME0110116)	WASTE DISCHARGE LICENSE
#W004701-6F-G-R)	RENEWAL
APPROVAL		

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S.A. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S.A. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the COOKE AQUACULTURE USA INC. (COOKE), with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On December 23, 2014, the Department accepted as complete for processing, a renewal application from Cooke for Waste Discharge License (WDL) #W004701-6F-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0110116, which was issued on October 15, 2010 for a five-year term. The October 15, 2010 permit authorized Atlantic Salmon of Maine LLC to discharge a monthly average of 12 million gallons per day (MGD) of treated fish hatchery wastewater from Cooke's Oquossoc Fish Hatchery to the Rangeley River, Class A, in Rangeley, Maine. The October 15, 2010 permit was transferred to Cooke on February 10, 2012 by way of WDL #W004701-6F-F-T.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the October 15, 2010 permitting action except that it is:

1. Eliminating the effluent limitations and monitoring requirements for biochemical oxygen demand (BOD₅) based on new information;
2. Eliminating the monthly average concentration limitation for total phosphorous based on new information and revising the monitoring frequency to once per month;
3. Eliminating the monthly average reporting requirement for fish on hand;
4. Eliminating the daily maximum concentration limitations for formalin based on new information;

PERMIT SUMMARY (cont'd)

5. Eliminating the pH limitation and monitoring requirements based on new information;
6. Revising Special Condition F, *Operation and Maintenance (O&M) Plan*, to include specific best practicable control technology currently available (BPT) practices pursuant to 40 CFR 451.11;
7. Eliminating previous Special Condition I, *Settling Basin Cleaning*, based on revisions to Special Condition F, *Operation and Maintenance (O&M) Plan*;
8. Restructuring and consolidating previous Special Condition J, *Disease and Pathogen Control and Reporting*, Special Condition K, *Therapeutic Agents*, and Special Condition L, *Disinfecting/Sanitizing Agents*, as new Special Condition G, *Use of Drugs for Disease Control*, and Special Condition H, *Pesticides and Other Compounds*, for consistency with the conditions established in other MEPDES permits;
9. Eliminating previous Special Condition M, *Minimum Treatment Technology Requirement*, as best practicable control technology currently available (BPT) is incorporated into the reissued permit as Special Condition F;
10. Restructuring and consolidating previous Special Condition N, *Salmon Genetic Testing and Escape Prevention*, to for consistency with the conditions established in other MEPDES permits; and
11. Consolidating previous Special Condition G, *Facility Lease Agreement and Minimum Ambient Flows* with Special Condition D of the reissued permit, *Notification Requirements*.

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CONCLUSIONS

Based on the findings summarized in the attached and incorporated Fact Sheet dated September 18, 2015, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of license*, 38 M.R.S.A. § 414-A(1)(D).
5. The applicant has objectively demonstrated to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available, as required by *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(2) and *Standards for classification of lakes and ponds*, 38 M.R.S.A. § 465-A, for the discharge to Class A and GPA waters, respectively.

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of COOKE AQUACULTURE USA INC. to discharge a monthly average of 12 MGD of treated fish hatchery wastewater via Outfall #004A, directly to the Rangeley River, Class A, and indirectly to Mooselookmeguntic Lake, Class GPA, in Rangeley, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

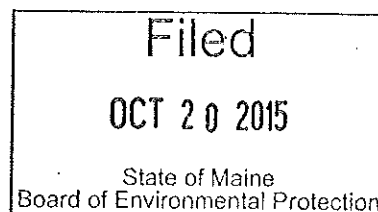
1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended August 25, 2013)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 20th DAY OF October 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Keenan
for AVERY T. DAY, Acting Commissioner



Date filed with Board of Environmental Protection _____

Date of initial receipt of application: December 22, 2014

Date of application acceptance: December 23, 2014

This Order prepared by Bill Hinkel, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **fish hatchery wastewater from Outfall #004A (fish hatchery and rearing station)** to the Rangeley River in Rangeley, Maine. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	12 MGD [03]	---	---	---	Daily [01/01]	Estimated [ES]
TSS [00530]	249 lbs./day [26]	285 lbs./day [26]	6 mg/L [19]	10 mg/L [19]	2/Month [02/30]	Composite ⁽²⁾ [CP]
Fish on Hand [45604]	---	Report lbs./day [26]	---	---	1/Week [01/07]	Calculate [CA]
Formalin ⁽³⁾ [51064]	Report lbs./day [26]	49 lbs./day [26]	---	---	1/Occurrence [01/OC]	Calculate [CA]
Total Phosphorus ⁽⁴⁾ [00665]	Report total lbs./month [76]	Annual Maximum 660 lbs./year [50]	Report mg/L [26]	Report mg/L [26]	1/Month [01/30]	Composite ⁽²⁾ [CP]

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Pages 6-7 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES

1. **Sampling** – All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process, as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. The permittee shall conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a publicly owned treatment works (POTW) licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (effective date April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR).
2. **Composite Samples** – Samples must consist of 24-hour composites collected with an automatic composite sampler. Alternatively, when weather conditions and/or equipment prevents automatic compositing and upon Department approval, the permittee may manually composite a minimum of four grab samples collected at two-hour intervals during the working day at the facility. The permittee shall indicate the type of sample collected on the DMR.
3. **Formalin** – Formalin monitoring must be conducted when in use at the facility and must consist of a calculated effluent mass value. Therefore, the following calculation must be applied to assess the total mass of formalin discharged per day (lbs./day):
$$\text{Formalin applied (gallons)} \times 9.03^1 \text{ (lbs./gallon)} = \text{Total formalin in effluent (lbs./day)}$$

The permittee shall provide this information and calculations to the Department in a document accompanying the monthly DMR. The formalin limit corresponds to two types of treatments:

1. One hour per day treatment typical of hatchery and rearing facility discharges; and
2. Maximum of up to 24 hours of treatment and discharge for addressing emergency conditions at the facility.

Formalin discharges lasting longer than 1-hour in duration must be conducted no more frequently than once every four days. The permittee shall provide a list of dates on which treatments greater than 1-hour were performed, and the length of time of each such treatment, with each monthly DMR.

For instances when a permittee has not used formalin for an entire reporting period, the permittee shall report "NODI-9" for this parameter on the monthly DMR or "N9" if the submittal is an electronic DMR.

¹ Per Material Safety Data Sheet, Parasite-S has a specific gravity of 1.0775-1.0865 giving it an average density of 9.03 lbs./gallon.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES

4. **Total Phosphorus** – Total phosphorus monitoring must be performed in accordance with **Attachment A** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – May, 2014*, unless otherwise specified by the Department.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee shall not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated for the classification of the receiving waters.
2. The permittee shall not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.
3. The permittee shall not discharge effluent that causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.
4. The permittee shall not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the permittee's General Application for Waste Discharge Permit, accepted for processing on December 23, 2014 and the terms and conditions of this permit; and only from Outfall #004A (treated fish hatchery wastewater). Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

D. NOTIFICATION REQUIREMENTS

In accordance with Standard Condition D, the permittee shall notify the Department of the following:

1. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system.
2. For the purposes of this section, adequate notice must include information on:
 - a. The quality or quantity of wastewater introduced to the wastewater collection and treatment system; and
 - b. Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.
3. Any change in the agreement between the permittee and the owner of the Rangeley Lake Dam which results in a minimum flow in the Rangeley River at the point of discharge to be less than 15,667 gallons per minute (22.56 MGD).

SPECIAL CONDITIONS

E. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate DMR forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

Alternatively, if the permittee submits an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the **15th day of the month** following the completed reporting period. Hard copy documentation submitted in support of the eDMR must be postmarked on or before the **thirteenth (13th) day of the month or hand-delivered** to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15th day of the month following the completed reporting period.

F. OPERATIONS AND MAINTENANCE (O&M) PLAN

The permittee shall have a current written Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. An acceptable O&M plan must ensure the following items are adequately addressed:

1. Solids Control
 - a. Methods and practices to ensure 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 to waters of the State.
 - b. In order to minimize the discharge of accumulated solids from the settling basin, settling tanks, 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.

SPECIAL CONDITIONS

F. OPERATIONS AND MAINTENANCE (O&M) PLAN (cont'd)

- c. Procedure for removal and disposal of mortalities to prevent discharge to waters of the State.
2. Materials Storage
 - a. Ensure proper storage of drugs¹, pesticides², feed, and any petroleum and/or hazardous waste products in a manner designed to prevent spills that may result in the discharge of drugs, pesticides, or feed to waters of the State.
 - b. Implement procedures for properly containing, cleaning, and disposing of any spilled material that has the potential to enter waters of the State.
3. Structural Maintenance
 - a. Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage.
 - b. Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning.
4. Recordkeeping
 - a. Maintain records for fish rearing units documenting the feed amounts and estimates of the numbers and weight of fish.
 - b. Maintain records that document the frequency of cleaning, inspections, repairs and maintenance made to ensure the proper operation of the treatment system.
5. Training
 - a. In order to ensure the proper clean-up and disposal of spilled material adequately, train all relevant personnel in spill prevention and how to respond in the event of a spill.
 - b. Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment to prevent unauthorized discharges.

¹ **Drug.** "Drug" means any substance defined as a drug in section 201(g)(1) of the *Federal Food, Drug and Cosmetic Act* [21 U.S.C. § 321].

² **Pesticide.** "Pesticide" means any substance defined as a "pesticide" in section 2(u) of the *Federal Insecticide, Fungicide, and Rodenticide Act* [7 U.S.C. § 136 (u)].

SPECIAL CONDITIONS

F. OPERATIONS AND MAINTENANCE (O&M) PLAN (cont'd)

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan must be kept on-site at all times and made available to Department and USEPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

G. USE OF DRUGS FOR DISEASE CONTROL

1. **General requirements.** All drugs used for disease prevention or control must be approved or authorized by the U.S. Food and Drug Administration (FDA), and all applications must comply with applicable FDA requirements.
2. **FDA-approved drugs.** Drugs approved by the FDA for fish culture purposes may be used in accordance with label instructions.
 - a. **Preventative treatments.** The discharge of any approved drug administered as a preventative measure is not authorized by this permit, unless the following conditions are met: the drug must be approved by FDA, and the treatment and route of administration must be consistent with the drug's intended use. Discharges may occur through direct application of a drug or indirectly through feed, injection, ingestion, or immersion at the facility.
 - b. **FDA-approved drugs identified in the permittee's application that may be used in accordance with label at the Oquossoc Fish Hatchery during the term of the permit.**
 1. Formalin (Parasite-S®) – In accordance with label, up to 250 ppm for 1-hour bath, and up to 2,000 ppm on a charged flow-through treatment.
 2. Tricaine methanesulfonate (Finquel® or Tricane-S) – In accordance with label, maximum of 330 ppm in a static bath solution.
 3. Hydrogen Peroxide (35% Perox-Aid®) – In accordance with label, up to 100 ppm on fish in a bath or flow-through setting; up to 1,000 ppm on eggs on a charged flow-through treatment.
 4. Chloramine-T (Halamid® Aqua) – In accordance with label, up to 20 ppm in a static bath solution.
 5. Oxytetracycline Dihydrate (Terramycin® 200 for Fish) – In accordance with label, maximum of 3.75 g/100 lb fish/day as an in-feed treatment.
 6. Oxytetracycline Hydrochloride for Skeletal Marking (Pennox® 343, Oxytetracycline HCL Soluble Powder-343, Terramycin-343, Tetroxy® Aquatic Soluble Powder.) – In accordance with label, up to 700 ppm as a static bath treatment.
 7. Florfenicol (Aquaflor®) – Maximum of 15 mg/kg fish/day as needed in feed.
 8. Sulfadimethoxine & Ormetoprim (Romet® 30 & Romet® TC) – In accordance with label, 50 mg/kg fish as an in feed treatment.

SPECIAL CONDITIONS

G. USE OF DRUGS FOR DISEASE CONTROL (cont'd)

- c. Drugs not identified in the permittee's application. When the need to treat or control diseases requires the use of a FDA-approved drug not identified in an application, the permittee shall notify the Department orally or by electronic mail prior to initial use of the drug.
 1. The notification must include a description of the drug, its intended purpose, the method of application, the amount, the concentration, the duration of the use, and information on aquatic toxicity.
 2. *Within seven (7) days of* the initial notification the permittee shall submit a written report that includes all of the information outlined in Section G.2.c)1) above.
 3. The Department may require submission of an application for permit modification, including public notice requirements, if the drug is to be used for more than a 30 consecutive day period.
 4. If, upon review of information regarding the use of a drug pursuant to this section, the Department determines that significant adverse effects are likely to occur, it may restrict or limit use of the drug.
3. **Extralabel drug use.** Extralabel drug use is not authorized by this permit, unless in accordance with a specific prescription written for that use by a licensed veterinarian.
 - a. Notification. The permittee shall notify the Department orally or by e-mail prior to initial extralabel use of a drug.
 1. The notification must include a description of the drug, its intended purpose, the method of application, the amount, concentration, and duration of the use, information on aquatic toxicity, and a description of how and why the use qualifies as an extralabel drug use under FDA requirements.
 2. *Within seven (7) days of* the initial notification the permittee shall submit a written report that includes all of the information outlined in Section G.3.a) 1) above. Notice must include documentation that a veterinarian has prescribed the drug for the proposed use. A copy of the veterinarian's prescription must be maintained on-site during treatment for Department review.
 3. If, upon review of information regarding the extralabel use of a drug pursuant to this section, the Department determines that significant adverse effects are likely to occur, it may deny, restrict or limit use of the drug.

SPECIAL CONDITIONS

G. USE OF DRUGS FOR DISEASE CONTROL (cont'd)

4. **Investigational New Animal Drug (INAD).** The discharge of drugs authorized by the FDA for use during studies conducted under the INAD program is not authorized by this permit, unless in accordance with specific prior consent given in writing by the Department.
 - a. Initial report. The permittee shall provide a written report to the Department for the proposed 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, dosage, and disease or condition the INAD is intended to treat.
 - b. Evaluation and monitoring. *At least ninety (90) days prior to initial use* of an INAD at a facility, the permittee shall submit for Department review and approval a study plan for the use of the drug that:
 1. Indicates the date the facility agreed or signed up to participate in the INAD study.
 2. Demonstrates that the minimum amount of drug necessary to evaluate its safety, efficacy, and possible environmental impacts will be used.
 3. Includes an environmental monitoring and evaluation program that at a minimum describes sampling strategies, analytical procedures, evaluation techniques and a timetable for completion of the program. Currently available data or literature that adequately characterize the environmental fate of the INAD and its metabolite(s) may be proposed for consideration in determinations of environmental monitoring and evaluation programs required by the Department pursuant to this section.
 - c. Notification. The permittee shall notify the Department orally or by electronic mail *no more than forty-eight (48) hours after* beginning the first use of the INAD under the approved plan.
 - d. INADs identified in the permittee's application proposed for use at the Oquossoc Fish Hatchery during the term of the permit subject to all approval terms and conditions specified in this section.
 1. Emamectin benzoate (Slice®) – Maximum of 0.05 mg/kg fish body mass as needed in feed.
 2. Diquat (Reward®) – In accordance with label, up to 28 ppm as a static bath solution.
 3. Oxytetracycline immersion (Pennox 343) – Maximum of 20 ppm as a static bath.
 4. AQUI-S® 20E – Maximum of 100 ppm as a static batch for sedation purposes.

SPECIAL CONDITIONS

H. PESTICIDES AND OTHER COMPOUNDS

1. **General requirements.** All pesticides used at the facility must be applied in compliance with federal labeling restrictions and in compliance with applicable statute, Board of Pesticides Control rules and best management practices (BMPs). Chemicals or compounds not registered as pesticides and proposed for use at the facility must be identified in the permittee's application and may only be discharged to waters of the State with express approval in this permitting action. In accordance with Special Condition D of this permit, the permittee shall notify the Department of any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system.

- a. Pesticides identified in the permittee's application. The following pesticides were identified in the permittee's application as currently being or potentially being in use:

Name	Freq. of Use	Concentration	Qty. Used/Year
Virkon Aquatic	Daily	2% solution	100 lbs.

- b. Other compounds identified in the permittee's application. The following compounds were identified in the permittee's application as currently being or potentially being in use. The permittee is authorized to discharge the following compounds. It is the Department's Best Professional Judgment (BPJ) that the incidental discharge of these chemicals will not cause or contribute to non-attainment of applicable water quality standards.

Name	Freq. of Use	Concentration	Qty. Used/Year
Ovadine Iodine	12 times/Year	100 – 200 ppm	15 gallons
Sodium Chloride	As needed	3 ppm	60,000 kg
Calcium Carbonate	Daily	75 ppm	1,000 kg
Calcium Chloride	As needed	75 ppm	Minimal, if needed
Magnesium Chloride	As needed	75 ppm	Minimal, if needed

I. PROTECTION OF ATLANTIC SALMON

The permittee is required to employ a fully functional Containment Management System (CMS) designed, constructed, operated, and audited so as to prevent the accidental or consequential escape of fish from the facility.

Each CMS plan must include:

1. a site plan or schematic;
2. site plan description;
3. procedures for inventory control, predator control, escape response; unusual event management, and severe weather;
4. provisions for employee training, auditing methods, and record keeping requirements; and the CMS must identify critical control points where escapes could potentially occur, specific control mechanisms for each of these points, and monitoring procedures to verify the effectiveness of controls.

SPECIAL CONDITIONS

I. PROTECTION OF ATLANTIC SALMON (cont'd)

The CMS site specific plan must also describe the use of effective containment barriers appropriate to the life history of the fish. The facility must have in place both a three-barrier system for fish up to 5 grams in size and a two barrier system for fish 5 grams in size or larger. The three-barrier system must include one barrier at the incubation/rearing unit, one barrier at the effluent from the hatch house/fry rearing area and a third barrier placed in line with the entire effluent from the facility. Each barrier must be appropriate to the size of fish being contained. The two-barrier system must include one barrier at the individual rearing unit drain and one barrier in line with the total effluent from the facility. Each barrier must be appropriate to the size of fish being contained. Barriers installed in the system may be of the screen type or some other similarly effective device used to contain fish of a specific size in a designated area. Barriers installed in the system for compliance with these requirements must be monitored daily.

Facility personnel responsible for routine operation must be properly trained and qualified to implement the CMS. Prior to any containment system assessment associated with this permit, the permittee shall provide to the Department documentation of the contractor's demonstrated capabilities to conduct such work.

The permittee shall submit the CMS plan to the Department for review and approval **on or before six months following the effective date of this permit [ICIS code 53799]** and must maintain a current copy of the plan at the facility.

The CMS must be audited at least once per year and within 30 days of a reportable escape (more than 50 fish) by a party other than the facility operator or owner qualified to conduct such audits and approved by the Department. A written report of these audits must be provided to the facility and the Department for review and approval within 30 days of the audit being conducted **[ICIS code 43699]**. Any time that a CMS audit identifies deficiencies, the written report must contain a corrective action plan, including a timetable for implementation and provisions for re-auditing, unless waived by the Department, to verify completion of all corrective actions.

Additional third party audits to verify correction of deficiencies must be conducted in accordance with the corrective action plan or upon request of the Department. The facility must notify the Department upon completion of corrective actions.

The permittee shall maintain for a period of at least five (5) years complete records, logs, reports of internal and third party audits and documents related to the CMS for each facility.

Escape reporting. The permittee shall notify by electronic mail (e-mail) the Escape Reporting Contact List provided in this subsection of any known or suspected escape of more than 50 fish within 24 hours of becoming aware of the known or suspected loss to the following persons listed under "Escape Reporting Contact List."

SPECIAL CONDITIONS

I. PROTECTION OF ATLANTIC SALMON (cont'd)

The permittee shall include in its e-mail notification the following information: 1) site location (town and waterbody); 2) date of event (or window of possible dates if exact date is unknown); 3) time of event (if known or specify "unknown"); 4) species (including strain); 5) estimated average weight; 6) age of escaped fish; 7) number of escaped fish (or if exact number is not possible, an estimate); 8) medication profile; 9) details of the escape; 10) corrective action(s) taken or planned; 11) and a contact person (including phone number) for the facility which is subject of the known or suspected escape.

Escape Reporting Contact List:

The agency contacts on this list may be revised by the state and/or federal agencies by provision of written notification to the permittee and the other agencies. Upon notice of any such change the permittee shall notify all persons on the revised list in the same manner as provided in this protocol.

Army Corps of Engineers

Maine Project Office; Jay Clement; Jay.L.Clement@usace.army.mil

Maine Department of Environmental Protection

Acting Commissioner, Avery T. Day; Avery.Day@maine.gov, or current Commissioner

Maine Department of Marine Resources

Policy Development Specialist; Chris Vonderweidt; Chris.vonderweidt@maine.gov

Secretary to the Commissioner; Jessica McKay; Jessica.mckay@maine.gov

Sea-Run Fisheries and Habitat Division Director; Oliver Cox; Oliver.n.cox@maine.gov

Maine Department of Inland Fisheries and Wildlife

Commissioner, Chandler Woodcock; Chandler.Woodcock@maine.gov, or current Commissioner

National Marine Fisheries Service

Maine Field Station; David Bean; David.bean@noaa.gov

United States Fish & Wildlife Service

Maine Field Office; Wende Mahaney; Wende_mahaney@fws.gov

Personnel from the Department, the MeDMR, the USEPA, and the Services, may inspect the facility during normal operation hours. Upon request by the permittee, government officials will provide credentials attesting to their position and will follow the facility's biosecurity procedures. Operational records regarding compliance with this condition must be made available to personnel from the Department, the MeDMR, the USEPA, and the Services for inspection upon request.

SPECIAL CONDITIONS

J. ALTERNATIVE DISCHARGE STUDY

On or before six-months prior to expiration of this permit, the permittee shall submit to the Department for review, an Alternative Discharge Study (ADS) report to objectively demonstrated to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available, as required by *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(2), for the discharge to Class A waters. *[ICIS code 34099]*

K. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S.A. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

L. SEVERABILITY

In the event that any provision(s), or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit must remain in full force and effect, and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

ATTACHMENT A

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits

Approved Analytical Methods: EPA 200.7 (Rev. 44), 365.1 (Rev. 2.0), (Lachat), 365.3, 365.4; SM 3120 B, 4500-P B.5, 4500-P E, 4500-P F, 4500-P G, 4500-P H; ASTM D515-88(A), D515-88(B); USGS I-4471-97, I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56

Sample Collection: The Maine DEP is requesting that total phosphorus analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute HCL. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using H_2SO_4 to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

Note: Ideally, Total P samples are preserved as described above. However, if a facility is using a commercial laboratory then that laboratory may choose to add acid to the sample once it arrives at the laboratory. The Maine DEP will accept results that use either of these preservation methods.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

Sampling QA/QC: If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total phosphorus. Preserve this sample as described above.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE**

FACT SHEET

DATE: SEPTEMBER 18, 2015

PERMIT NUMBER: #ME0110116
WASTE DISCHARGE LICENSE: #W004701-6F-G-R

NAME AND ADDRESS OF APPLICANT:
COOKE AQUACULTURE USA INC.
OQUOSSOC FISH HATCHERY
P.O. BOX 528
BINGHAM, MAINE 04920

COUNTY: FRANKLIN

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):
COOKE AQUACULTURE USA INC.
OQUOSSOC FISH HATCHERY
57 HATCHERY ROAD
OQUOSSOC, MAINE 04920

RECEIVING WATER CLASSIFICATION: RANGELEY RIVER/CLASS A

COGNIZANT OFFICIAL CONTACT INFORMATION:
GREG LAMBERT
207-446-6295
greg.lambert@cookeaqua.com

1. APPLICATION SUMMARY

Application: On December 23, 2014, the Maine Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from the Cooke Aquaculture USA Inc. (Cooke) Waste Discharge License (WDL) #W004701-6F-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0110116, which was issued on October 15, 2010 for a five-year term. The October 15, 2010 permit authorized Atlantic Salmon of Maine LLC to discharge a monthly average of 12 million gallons per day (MGD) of treated fish hatchery wastewater from Cooke's Oquossoc Fish Hatchery to the Rangeley River, Class A, in Rangeley, Maine. The October 15, 2010 permit was transferred to Cooke on February 10, 2012 by way of WDL #W004701-6F-F-T.

2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the October 15, 2010 permitting action except that it is:
1. Eliminating the effluent limitations and monitoring requirements for biochemical oxygen demand (BOD₅) based on new information;
 2. Eliminating the monthly average concentration limitation for total phosphorous based on new information and revising the monitoring frequency to once per month;
 3. Eliminating the monthly average reporting requirement for fish on hand;
 4. Eliminating the daily maximum concentration limitations for formalin based on new information;
 5. Eliminating the pH limitation and monitoring requirements based on new information;
 6. Revising Special Condition F, *Operation and Maintenance (O&M) Plan*, to include specific best practicable control technology currently available (BPT) practices pursuant to 40 CFR 451.11;
 7. Eliminating previous Special Condition I, *Settling Basin Cleaning*, based on revisions to Special Condition F, *Operation and Maintenance (O&M) Plan*;
 8. Restructuring and consolidating previous Special Condition J, *Disease and Pathogen Control and Reporting*, Special Condition K, *Therapeutic Agents*, and Special Condition L, *Disinfecting/Sanitizing Agents*, as new Special Condition G, *Use of Drugs for Disease Control*, and Special Condition H, *Pesticides and Other Compounds*, for consistency with the conditions established in other MEPDES permits;
 9. Eliminating previous Special Condition M, *Minimum Treatment Technology Requirement*, as best practicable control technology currently available (BPT) is incorporated into the reissued permit as Special Condition F;
 10. Restructuring and consolidating previous Special Condition N, *Salmon Genetic Testing and Escape Prevention*, to for consistency with the conditions established in other MEPDES permits;
 11. Consolidating previous Special Condition G, *Facility Lease Agreement and Minimum Ambient Flows* with Special Condition D of the reissued permit, *Notification Requirements*.
- b. History: This section provides a summary of recent/significant licensing and permitting actions and other significant regulatory actions completed for the Oquossoc Fish Hatchery. The fact sheet associated with the October 15, 2010 permit contains additional history for this facility.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0110116 has been utilized for this facility.

October 15, 2010 – The Department issued WDL #W004701-6F-E-R to Atlantic Salmon of Maine LLC for a five-year term. The October 15, 2010 permit superseded WDL #W004701-5Q-B-R issued to Atlantic Salmon of Maine LLC on December 30, 2005; WDL #W004701-41-A-R issued to Downeast Aquaculture on December 12, 1986; and WDL #4701 issued by the Maine Board of Environmental Protection to Steve Swartz and Sam Hutchinson on July 27, 1983. It is noted the Department issued several WDL transfers and modifications of WDLs issued prior to October 15, 2010.

February 10, 2012 – The Department issued WDL #W004701-6F-F-T thereby transferring the October 15, 2010 permit from Atlantic Salmon of Maine LLC to Cooke Aquaculture USA Inc.

December 22, 2014 – Cooke submitted a timely and complete General Application to the Department for renewal of the October 15, 2010 permit (including the subsequent transfer). The application was accepted for processing on December 23, 2014 and was assigned WDL #W004701-6F-G-R / MEPDES #ME0110116.

- c. Source Description: The following is a general description of the Oquossoc Fish Hatchery provided by Cooke as part of its December 23, 2014 General Application for Waste Discharge Permit. A map showing the location of the treatment facility is included as Fact Sheet Attachment A.

Influent Water: The Oquossoc Fish Hatchery obtains influent water from pipes built into the dam situated at the outlet of Rangeley Lake. The facility relies on gravity flow to bring up to 10 million gallons of water per day to the hatchery head tank for the culture of Atlantic salmon. Water temperature of the lake is seasonal at between 0.2 and 25 degrees Celsius depending on time of year and wind direction. Small amounts of water can be heated to further the development of egg incubation but for the most part, the hatchery uses the abundant cold water as an advantage to slow egg development to a desired rate. Water flows via gravity from the head tank to both the upper and lower tank fields as well as to either of the two egg incubation facilities on site.

Hatchery Operations: The Oquossoc Fish Hatchery is broken up into several clusters which are used for different rearing operations and life stages of the salmon cultured at the facility. The following describes each section of the hatchery beginning with the upper and lower tank fields and end with the egg incubation facilities.

2. PERMIT SUMMARY (cont'd)

Meter Tank Fields- The hatchery contains thirty-six 20-foot diameter round fiberglass tanks with an operational depth of approximately 1.75meters for a total of 12,500 gallons. The tank field is split into 2 separate fields with 20 tanks comprising the upper field closest to the head tank and an additional 16 tanks comprising the lower tank field. Each field utilizes separate oxygen injection systems to keep oxygen levels at optimum levels and allow for increased biomass in each tank. Each tank utilizes flows between 45-120 gpm depending on density, temperature and size of the fish.

Hatch House- The Hatch House is comprised of 92 EWOS troughs each containing 4 baskets capable of egg incubation and hatching. Since the collapse of the Start Feed Building in 2008, Oquossoc no longer has first feeding capabilities at current and as such only houses eggs in this building. In addition to the 92 EWOS troughs, the Hatch House contains 20 stacks of Heath Trays. Each Heath Stack contains 16 individual trays arranged in a vertical fashion. Both the EWOS trays and Heath Trays are capable of holding approximately 2 liters of eggs. All trays in this building have the capability of receiving either ambient temperature water or heated water via the 3 oil fired boilers at the hatchery. EWOS troughs are typically run at 2 gpm while the Heath Stacks each receive 3 gpm. Water from the hatch house is run through GAF style bag filters ranging from 600 to 10 micron prior to being UV disinfected and ultimately contacting the eggs.

Coldwater Egg Room- The Cold Water Egg Room was built after the collapse of the Start Feed Building in 2008. It contains 29 stacks of 16 trays. Water to the cold water egg room is also filtered through the GAF bag filters and UV disinfection prior to egg contact. Water to this building is not heated and each stack is generally run at 3 gpm.

- d. Wastewater Treatment: All wastewater from the Oquossoc Fish Hatchery flows via gravity to a series of two 60-micron rotary drum filters located in a 22' x 16' building. The drum filters are automatically backwashed with water from the main headbox, sending accumulated sludge to a 1,500-gallon holding tank. Sludge tank supernatant is continually pumped back to the drum filters for further treatment and to maintain sludge tank space. The sludge tank is monitored and pumped out as needed and sent to a local municipal wastewater treatment center and sprayed over fields. Treated facility wastewater is discharged to the Rangeley River, which is a tributary to Mooselookmeguntic Lake.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S.A. § 467(1)(C), classifies the Rangeley River within the Androscoggin River Basin, specifically that portion within the State lying above the Androscoggin River's most upstream crossing of the Maine-New Hampshire boundary, as Class A. The Rangeley River is the a tributary inlet to Mooselookmeguntic Lake. *Standards for classification of lakes and ponds*, 38 M.R.S.A. § 465-A, classifies Mooselookmeguntic Lake as Class GPA. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(2) prescribes the standards for Class A waters and 38 M.R.S.A. § 465-A prescribes the standards for Class GPA.

- Designated Uses. Class GPA and Class A waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing; agriculture, recreation in and on the water, industrial process and cooling water supply, hydroelectric power recreation, and as habitat for aquatic life.
- Water Quality Criteria. The dissolved oxygen content of Class A waters may be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs.

Class GPA waters shall have a stable or decreasing trophic state subject only to natural fluctuations as measured by chlorophyll "a" content, Secchi disk transparency, total phosphorus content and other appropriate criteria.

- Antidegradation Policy. State waters are protected by the State's antidegradation policy which provides that certain existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected. 38 M.R.S.A. § 464(4)(F).

Except as provided at 38 M.R.S.A. § 465(2)(C), direct discharges to Class A waters licensed after January 1, 1986 are permitted only if, in addition to satisfying all the requirements of the Water Classification Program, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the Department shall require the applicant to objectively demonstrate to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available.

In addition, 38 M.R.S.A. § 465-A specifies that discharges into Class GPA waters licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist. The discharge from the Oquossoc Fish Hatchery is directly to the Rangeley River and in close proximity to (*i.e.*, indirect discharge to) Mooselookmeguntic Lake.

The classification of the Rangeley River was upgraded from Class B-1 to Class A by the Maine Legislature in 1989 (effective date of change was September 30, 1989), several years after the initial 1983 license was issued by the Maine Board of Environmental Protection for the discharge from the Oquossoc Fish Hatchery. In a letter from the Department to the Maine Department of Inland Fisheries and Wildlife, dated January 24, 1996, the Department addressed the issue of the discharge from the Oquossoc Fish Hatchery to the Class A reach of the Rangeley River. In the January 24, 1996 letter, the Department states that its interpretation of the Legislature's intent

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

was to "grandfather" the discharge existing at that time from the Class A requirement that the effluent be of equal to or better than the existing water quality of the receiving waters. The requirement to objectively demonstrate to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available stands.

Cooke included with its December 23, 2014 General Application for Waste Discharge Permit "*Alternative Discharge Study Oquossoc Hatchery November 21, 2014*" to comply with Special Condition H of the October 15, 2010 permit and the governing statutes at 38 M.R.S.A. § 465(2)(C) and 38 M.R.S.A. § 465-A. Cooke evaluated 1) piping effluent to a receiving water classified as Class B or C; 2) use of an existing publicly owned treatment works; 3) retrofitting the current facility into a recirculation facility; 4) land application via spray irrigation; and 5) additional wastewater filtration/treatment.

The Department concludes that there are no other reasonable alternatives to eliminate the discharge from the Oquossoc Fish Hatchery to the Rangeley River or Mooselookmeguntic Lake due to impracticability of cost, technical limitations, and availability of resources. The Department concludes that Cooke has objectively demonstrated to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives.

The Department must make a finding that the discharge is necessary and that there are no other reasonable alternatives for each permit renewal. Therefore, this permitting action is carrying forward a requirement to submit an alternative discharge study on or before six months prior to the expiration date of this permit. The permittee may utilize the November 21, 2014 study after making any applicable revisions to make the information current and to account for any new options not previously evaluated and discussed. See Special Condition J of the permit.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the *Federal Water Pollution Control Act*, lists Rangeley River from the Rangeley Lake Dam to Mooselookmeguntic Lake (Segment ID ME0104000101_403R_01) as "Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)." The Report states that monitoring is scheduled for calendar year 2016. The Report lists Mooselookmeguntic Lake (HUC 0104000101) as "Category 1: Lake Waters Fully Attaining All Designated Uses."

The Report lists all of Maine's fresh waters as, "Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources."

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Applicability of National Effluent Guidelines: The USEPA has promulgated national effluent guidelines for the *Concentrated Aquatic Animal Production Point Source Category* at 40 CFR 451 Subpart A, *Flow-Through and Recirculating Systems Subcategory*. This subpart is applicable to discharges from a concentrated aquatic animal production facility that produces 100,000 pounds or more per year of aquatic animals in a flow-through or recirculating system. The Oquossoc Fish Hatchery produces 100,000 pounds or more per year of aquatic animals in a flow-through or recirculating system and is therefore subject to regulation under this subpart.

40 CFR 451.11 states that any existing point source subject to the *Flow-Through and Recirculating Systems Subcategory* must meet the following requirements, expressed as practices, representing the application of best practicable control technology currently available (BPT): 1) solids control; 2) materials storage; 3) structural maintenance; 4) recordkeeping; and 5) training. While 40 CFR 451.11 does not establish numeric technology-based effluent limitation guidelines for this subcategory, it does provide that the permitting authority may require any modification to the BPT guidelines based on its exercise of its best professional judgment. The BPT requirement identified in #1-5 on this paragraph are incorporated into the permit as Special Condition F. The basis statement for all other effluent limitations and monitoring requirements is explained in this section of this fact sheet.

The previous permitting action established Special Condition M, *Minimum Treatment Technology Requirement*, to specify that the permittee must provide treatment equal to or better than 60-micron microscreen filtration. The Department is not prescribing the type of treatment that the permittee must provide. The permittee is responsible for ensuring compliance with the technology-based and water quality-based effluent limitations established in this permit. Therefore, the Department concludes that previous Special Condition M is not necessary and it is being eliminated in this permitting action.

- b. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limitation of 12 million gallons per day (MGD). The following table summarizes effluent data reported on Discharge Monitoring Reports (DMRs) for the period of November 2010 through May 2015.

Flow (DMRs=55) Outfall #004A

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	12	1.30– 6.71	4.58

- b. Dilution Factors: The flow in the Rangeley River is controlled by a dam on the outlet of Rangeley Lake. The permittee and the owner of the dam, Florida Power and Light Company, maintain a lease agreement to operate the dam such that a minimum flow of 15,667 gallons per minute (22.56 MGD) is passed to the Rangeley River at the point of discharge at all times.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Acute, chronic and harmonic mean dilution factors associated with the permitted discharge flow of 12 MGD from the Oquossoc Fish Hatchery were derived in accordance with 06-096 CMR 530(4)(A) and the regulated flow to the Rangeley River as stated above as follows:

$$22.56 \text{ MGD} + 12 \text{ MGD} / 12 \text{ MGD} = 2.9:1$$

06-096 CMR 530(4)(B)(1) states,

Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.

The Oquossoc Fish Hatchery discharges to the bank of the Rangeley River. The Department is making a best professional judgment that this discharge does not achieve complete and rapid mixing of the effluent with the receiving waters. Therefore, the Department is utilizing the default stream flow of 1/4 of the 1Q10 in acute evaluations pursuant to 06-096 CMR 530, which was calculated as follows:

$$5.64 \text{ MGD (Mod. Acute } 1/4 \text{ 1Q10)} + 12 \text{ MGD} / 12 \text{ MGD} = 1.47:1$$

The previous permit contained Special Condition G, *Facility Lease Agreement and Minimum Ambient Flows*. The intention of this condition was to require notification to the Department of any changes in the lease agreement that would affect the minimum flow in the Rangeley River that were used to evaluate water quality impacts related to the discharge. The Department is consolidating this notification requirement in Special Condition D of the reissued permit, *Notification Requirements*.

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): Neither the USEPA nor Department has promulgated effluent limitation guidelines for BOD₅ or TSS that are applicable to the discharge from the Oquossoc Fish Hatchery. The previous permitting action established monthly average and daily maximum concentration limitations of 6 mg/L and 10 mg/L, respectively, for BOD₅ and TSS based on best professional judgment (BPJ) of best practicable treatment (BPT). The previous permit also established monthly average mass limitations of 379 lbs./day and 415 lbs./day, respectively, for BOD₅ and 249 lbs./day and 285 lbs./day, respectively, for TSS based on BPJ.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

The Department's Division of Environmental Assessment (DEA) reviewed fish hatchery information in consideration of using TSS as a surrogate for BOD₅. It should be noted that TSS is more closely related to problems most commonly encountered at aquatic animal facilities, such as phosphorus enrichment and solids control, than is BOD₅. BOD can cause depressed dissolved oxygen in the receiving waters and increased carbon levels may create a favorable environment for nuisance bacterial/fungal growth such as *Sphaerotilus natans* that may result in non-attainment of narrative water quality standards. The Department has no information that the discharge from the Oquossoc Fish Hatchery has caused or contributed to a violation of narrative water quality standards from the presence of *Sphaerotilus natans*.

A summary of the effluent BOD₅ data as reported on the DMRs submitted to the Department for the period November 2010 through May 2015 follows.

BOD₅ Mass (DMRs=55)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	379	29 – 164	61
Daily Maximum	415	11 – 241	96

BOD₅ Concentration (DMRs=55)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	6	2 – 3.9	2.3
Daily Maximum	10	2 – 5.0	2.4

Based on the concentration of BOD₅ discharged by the permittee, and in the absence of information that the Rangeley River is not attaining applicable water quality standards as a result of the discharge, the Department concludes that Rangeley River does not exhibit BOD-related impacts as a result of the discharge from the Oquossoc Fish Hatchery.

After reviewing approximately 6 years of BOD₅ and TSS and data, the Department concluded that the results of the two parameters showed a strong correlation. Therefore, the Department concluded that TSS could be relied upon to reflect BOD₅ conditions. Whereas: 1) the Oquossoc Fish Hatchery operations and processes are not likely to change; 2) the Department has a statistically significant BOD₅ data set from this and multiple similar hatcheries; 3) neither the USEPA nor Department have promulgated numeric effluent guidelines for BOD₅ for the *Flow-Through and Recirculating Systems Subcategory*; and 4) in the best professional judgment of the Department, effluent limitations for BOD₅ are not necessary to ensure compliance with water quality standards, this permitting action is eliminating the effluent limitations and monitoring requirements for BOD₅ based on this new information that was not available at the time the previous permit was issued.

Section 402(o) of the Clean Water Act contains prohibitions for anti-backsliding. Generally, anti-backsliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. The Clean Water Act contains certain exceptions to anti-backsliding at Section 402(o)(2). In the case of Cooke's Oquossoc Fish Hatchery and the concentration and mass limitations for BOD₅, the Department has determined that these

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

limitations would not have been established at the time the previous permit was issued based on the new information that has been obtained since issuance of the previous permit. Section 402(o)(2)(B)(i) of the Clean Water Act contains an exception to anti-backsliding for information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. Therefore, this permitting action is eliminating the limitations for BOD₅. [It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules and at 40 CFR 122.44(l)(2)(i)(B)(1).]

A summary of the effluent TSS data as reported on the DMRs submitted to the Department for the period November 2010 through May 2015 follows.

TSS Mass (DMRs=55)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	249	11 – 191	42
Daily Maximum	285	11 – 284	64

TSS Concentration (DMRs=55)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	6	1 – 3.7	1.4
Daily Maximum	10	1 – 5.4	1.6

This permitting action is carrying forward the monthly average and daily maximum mass limitations of 249 lbs./day and 285 lbs./day, respectively, for TSS, and the monthly average and daily maximum concentration limits of 6 mg/L and 10 mg/L, respectively, for TSS, based on best professional judgment of limitations that are technologically achievable and protective of receiving water quality. This permitting action is carrying forward the minimum monitoring frequency requirement of twice per month for TSS based on Department BPJ.

- d. Total Phosphorus: The previous permitting action established a seasonal (June 1 – September 30, of each year) monthly average concentration limitation of 0.102 mg/L which was derived based on the Department's best professional judgment of a protective in-stream ambient water quality threshold of 0.035 mg/L for total phosphorous.

Waste Discharge License Conditions, 06-096 CMR 523 (effective January 12, 2001) specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria.¹ In addition, 06-096 CMR 523 specifies that water quality-based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with

¹ *Waste Discharge License Conditions*, 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

other relevant information which may include: *EPA's Water Quality Standards Handbook, October 1983*, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current USEPA criteria documents.¹

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.05 mg/L for phosphorus for a river or stream where it enters a lake, to prevent development of biological nuisances and to control accelerated or cultural eutrophication. The use of the 0.05 mg/L Gold Book value is consistent with the requirements of 06-096 CMR 523 noted above for use in a reasonable potential (RP) calculation.

Based on the above rationale, the Department has chosen to utilize the Gold Book value of 0.05 mg/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The use of the Gold Book value of 0.05 mg/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator data, and facility data as needed to refine the establishment of site specific water quality based limits for phosphorus. This permit may be reopened during the term of the permit to modify any reasonable potential calculations, phosphorus limits, or monitoring requirements based on new site-specific data.

A summary of the effluent total phosphorus data as reported on the DMRs submitted to the Department for the seasonal monitoring period from November 2010 through May 2015 follows.

Total-P Concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.102	0.02 – 0.19	0.04
Daily Maximum	Report	0.02 – 0.80	0.06

For the background concentration in the Rangeley River, the outlet of Rangeley Lake, the Department is using ambient water quality data collected from Rangeley Lake by the Department and the Volunteer Lake Monitoring Program since 1970 for some stations and 1992 for others. A Water Quality Summary, revised December 2006 (<http://www.lakesofmaine.org/data/texts/3300.pdf>, viewed July 22, 2015), concludes that the average water column total phosphorous concentration at Sample Station #5, which is closest to the facility and outlet of the lake, is 0.004 mg/L. The Department's draft ambient water quality criterion for Class A waters is 0.018 mg/L for phosphorus.

Using the following calculation and criteria, the Oquossoc Fish Hatchery does not have a reasonable potential to exceed either the USEPA's Total P Ambient Water Quality Goal of 0.05 mg/L (50 ug/L) for phosphorus for a river or stream where it enters a lake, or the Department's draft ambient water quality criteria of 0.018 mg/L for phosphorus:

¹ 06-096 CMR 523(5)(d)(1)(vi)(A)

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Reasonable Potential Analysis

$$Cr = \frac{Q_e C_e + Q_s C_s}{Q_r}$$

Q _e = effluent flow	=	12 MGD
C _e = effluent pollutant concentration	=	0.04 mg/L
Q _s = 7Q10 flow of receiving water	=	22.56 MGD
C _s = upstream concentration	=	0.004 mg/L
Q _r = receiving water flow	=	22.56 MGD
Cr = receiving water concentration		

$$Cr = \frac{(12 \text{ MGD} \times 0.04 \text{ mg/L}) + (22.56 \text{ MGD} \times 0.004 \text{ mg/L})}{22.56 \text{ MGD}} = 0.03 \text{ mg/L}$$

Cr = 0.03 mg/L < 0.05 mg/L	⇒	No Reasonable Potential
Cr = 0.03 mg/L > 0.018 mg/L	⇒	Yes, Reasonable Potential

Based on this reasonable potential calculation, the Department concludes that the discharge of treated wastewater from the Oquossoc Fish Hatchery does not have a reasonable potential to exceed the USEPA's Total P Ambient Water Quality Goal of 0.05 mg/L but does have a reasonable potential to exceed the Department's draft ambient water quality criteria of 0.018 mg/L for phosphorus. Based on Department guidance memorialized in a letter to wastewater treatment facilities, dated July 1, 2014, this permitting action is eliminating the monthly average concentration limitation for phosphorous, but is carrying forward a monthly average concentration reporting requirement, which is associated with effluent monitoring for total phosphorous limits for protection of lake water quality discussed below.

Elimination of these limitations based on new information regarding characterization of the effluent based on recent data is an allowable exception to anti-backsliding at 40 CFR 122.44(l)(2)(i)(B)(1). The permittee must notify the Department of any substantial change in the volume or character of pollutants, including but not limited to an increase in the phosphorous content in the effluent, being introduced into the wastewater collection and treatment system.

The previous permitting action also established an annual maximum total phosphorous mass limitation of 660 lbs./year to ensure the discharge does not cause or contribute to failure of Mooselookmeguntic Lake to meet Class GPA standards. The fact sheet associated with the previous permit discussed derivation of the annual load limit as follows:

According to the Department's Division of Watershed Management at the time of development of the previous permitting action, Mooselookmeguntic Lake is a large, mesotrophic, coldwater fishery lake. Its upper basin, also known as Cupsuptic Lake has a higher trophic state than the main basin. Recent Kendall Tau trend analysis of both basins indicate a trend of

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

increasing trophic state expressed by a declining trend of secchi [sic] disc transparency. The trend in the main, lower basin is significant at the 95% level. The water quality category of the lake is moderate/sensitive and the level of protection high, resulting in an acceptable increase in lake phosphorus concentration of 0.75 ppb. The allowable increase in phosphorus load to the lake is 962.3 kg. Growth rate in the watershed as a whole is low, although it is comparatively high in the town of Rangeley. The watershed growth rate as a whole is low so the point source allocation is 20% and the resulting allocated load is 0.20×962.3 kg/yr or 192.4 kg/yr (424 lbs/year). Discharge data from the hatchery indicates substantially higher phosphorus loading than this limit would allow, so significant reduction in phosphorus discharge will be required.

The Department recognizes that the water source, the Rangeley River, contains ambient levels of phosphorus that would naturally enter Mooselookmeguntic Lake. The Department calculated ASM Rangeley's total allowable phosphorus discharge, including background levels of phosphorus in the source waters, to be 660 lbs/yr (299.5 kg/yr). These limits became effective on January 1, 2009 (see Fact Sheet Section 2c) and are being carried forward in this permitting action.

The annual maximum total phosphorous mass discharged for calendar years 2010 through 2014 is:

2010: 630.9 lbs.	2013: 634.3 lbs.
2011: 693.4 lbs.	2014: 773.7
2012: 529 lbs.	

Based on these annual total data, the permittee has exceeded the water quality-based limitation of 660 lbs./day twice during the five-year term of the previous permit. Therefore, this permitting action is carrying forward the annual maximum mass limitation of 660 lbs. and the monthly total mass reporting requirement. The Department is identifying that effluent total phosphorous concentration data are valuable in evaluating compliance with the annual maximum mass limitation. Therefore, this permitting action is carrying forward monthly average and daily maximum concentration reporting requirements and is revising the minimum monitoring frequency requirement from once per week to once per month based on professional judgment.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- e. Fish on Hand: The previous permitting action established daily maximum and monthly average fish on hand mass reporting requirements. The fact sheet associated with the previous permit states, that the fish on hand monitoring and reporting requirement "is intended to enable both the Department and the permittee in evaluating management practices at the facility and trends in effluent quality and receiving water impacts."

A summary of the fish on hand data as reported on the DMRs submitted to the Department for the period November 2010 through May 2015 follows.

Fish on Hand Mass (DMRs=55)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	Report	5,034 – 142,338	78,827
Daily Maximum	Report	6,548 – 146,377	85,876

The permittee is required to maintain records for fish rearing units documenting the feed amounts and estimates of the numbers and weight of fish pursuant to Special Condition F of the permit. The Department considers direct reporting of fish on hand data on monthly Discharge Monitoring Reports valuable for purposes of assisting in the diagnosis of operational/effluent problems and ultimately to effectively and efficiently respond to compliance problems at fish hatcheries, when they occur. However, after review of the data, the Department believes that a once per month daily maximum mass reporting requirement is sufficient for purposes of assisting in compliance evaluations. Therefore, the daily maximum fish on hand mass reporting requirement is being carried forward in this permitting action and the monthly average reporting requirement is being eliminated.

- f. Formalin: Formalin is a drug used to treat fungal infections and external parasites of finfish and finfish eggs. The previous permitting action established daily maximum concentration and mass effluent limitations of 66 mg/L and 49 lbs./day, respectively, for 1-hour formalin treatments and 37 mg/L and 49 lbs./day, respectively, for 24-hour formalin treatments.

Neither the Department nor USEPA have promulgated ambient water quality criteria for formalin. Using best professional judgment, the Department has established water quality-based thresholds for formalin based on Whole Effluent Toxicity (WET) testing on the water flea (*Ceriodaphnia dubia*) for 48-hour acute toxicity. For one-hour treatments, which are typical of most hatchery and rearing facility operations, the Department has established an ambient water quality threshold of 45 mg/L. Rarely, certain circumstances require use of formalin to control disease on additional rearing structures which results in the discharge of formalin for periods longer than the typical one-hour period for normal disease treatment. To ensure water quality standards are met and that formalin is not discharged at levels that would be toxic to aquatic life in the receiving water, the Department has established an ambient water quality threshold of 25 mg/L based on best professional judgment for a maximum 24-hour treatment period.

Water quality-based effluent limitations for formalin were calculated as follows:

$$45 \text{ mg/L (1-hour acute criteria)} \times 1.47 \text{ (effluent dilution)} = 66 \text{ mg/L formalin limit}$$
$$25 \text{ mg/L (24-hour acute criteria)} \times 1.47 \text{ (effluent dilution)} = 37 \text{ mg/L formalin limit}$$

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

The fact sheet associated with the April 6, 2005 MEPDES permit issued for this facility states that the previously established daily maximum formalin mass limit of 49 lbs./day was developed pursuant to Chapter 523(6)(f) and was based on projected use at the fish hatchery.

This permitting action is carrying forward the daily maximum mass limitation of 49 lbs./day for formalin to ensure the discharge does not violate receiving water quality standards. The Department is identifying in this permitting action that the concentration limitations are not necessary to ensure water quality standards are achieved and has determined that these limitations would not have been established at the time the previous permit was issued based on the new information that has been obtained since issuance of the previous permit. 40 CFR 122.44(l)(2)(i)(B)(1) contains an exception to anti-backsliding for information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. Therefore, this permitting action is eliminating the concentration limitations for formalin.

This permitting action is carrying forward the minimum monitoring frequency requirement of once per occurrence for formalin.

The effluent quantity of formalin, as reported on the DMRs submitted to the Department for the period November 2010 through May 2015, ranged from 9.9 lbs./day to 48.4 lbs./day with a mean of 37.3 lbs./day (n = 33).

- g. pH: The previous permitting action established a pH range limitation of 6.0 – 8.5 standard units (SU), pursuant to 38 M.R.S.A. § 464(4)(A)(5), which states that the Department may not issue a waste discharge permit for a discharge that causes the pH of fresh waters to fall outside of the 6.0 to 8.5 range.

The effluent pH, as reported on the DMRs submitted to the Department for the period November 2010 through May 2015, ranged from 5.8 SU to 7.3 SU (n = 55). The Rangeley Fish Hatchery does not actively control the pH of wastewater through chemical addition or other methods.

Based on the recent pH data summarized above, the Department is making a best professional judgment determination that the discharge does not exhibit a reasonable potential to exceed the pH range established by 38 M.R.S.A. § 464(4)(A)(5). Whereas the Oquossoc Fish Hatchery does not actively control the pH of wastewater, this permitting action is eliminating the pH limitation and monitoring requirements based on this new information (recent compliance data). This action complies with the anti-backsliding provision at 40 CFR 122.44(l)(2)(i)(B)(1).

7. OPERATIONS AND MAINTENANCE (O&M) PLAN

The previous permitting action established Special Condition F, *Operation and Maintenance (O&M) Plan*, which is contained in the majority of MEPDES permits and all fish hatchery permits. In this permitting action, the Department is revising the condition to incorporate and require inclusion of specific best practicable control technology currently available (BPT) practices pursuant to 40 CFR 451.11. In addition to the previous requirements of the O&M Plan, the revised O&M Plan must ensure the following items are adequately addressed: 1) solids control; 2) materials storage; 3) structural maintenance; 4) recordkeeping; and 5) training.

The previous permitting action established Special Condition I, *Settling Basin Cleaning*. Through inclusion of the revised O&M Plan the need for a separate condition for settling basin cleaning is redundant and is therefore being eliminated.

8. USE OF DRUGS FOR DISEASE CONTROL AND PESTICIDES AND OTHER COMPOUNDS

The previous permitting action established Special Condition J, *Disease and Pathogen Control and Reporting*, Special Condition K, *Therapeutic Agents*, and Special Condition I, *Disinfecting/Sanitizing Agents*. The Department is restructuring and consolidating conditions for drugs, pesticides, and chemicals or compounds not registered as pesticides under two new Special Conditions in the permit. Restructuring of the conditions is consistent with the conditions established in other MEPDES permits, namely *Net Pen Aquaculture General Permit #MEG130000*, April 10, 2014, which is the regulatory permit used by the majority of marine aquaculture facilities where the Atlantic salmon reared at the Oquossoc Fish Hatchery during the freshwater life stages are transferred.

Special Condition G, *Use of Drugs for Disease Control*, contains conditions for U.S. Food and Drug Administration (FDA)-approved drugs, extralabel drug use, and investigational new animal drugs (INADs).

Cooke provided, on Form DEPLW1999-18 included with its December 23, 2014 General Application for Waste Discharge Permit (amended May 21, 2015), a list of drugs, pesticides, and chemicals or compounds proposed for use at the Oquossoc Fish Hatchery during the term of the permit. The discharge of drugs associated with treatment is subject to all terms and conditions of Special Condition G of the permit. Only FDA-approved drugs that are identified in Cooke's December 23, 2014 General Application for Waste Discharge Permit may be used without additional written approval from the Department.

Special Condition H, *Pesticides and Other Compounds*, contains conditions for the use of pesticides registered with both the United States Environmental Protection Agency (USEPA) and Maine Board of Pesticides Control (BPC) and other chemicals and compounds that are neither defined as drugs nor pesticides, but are used, primarily, for cleaning and disinfection. Any chemical or compound proposed for use at the facility during the term of the permit not identified in the application or authorized in the permit must be reported to the Department in accordance with Special Condition D, *Notification Requirements* of the permit.

9. PROTECTION OF ATLANTIC SALMON

The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (collectively, the Services) issued a final rule listing Atlantic salmon populations in certain Maine rivers and streams as “endangered” under the federal Endangered Species Act. In that decision, the Gulf of Maine Distinct Population Segment (DPS) encompassed all naturally reproducing remnant populations of Atlantic salmon downstream of the former Edwards Dam site on the Kennebec River up to the Rangeley River and northward to the mouth of the St. Croix River. The watershed structure, available Atlantic salmon habitat, and abundance of Atlantic salmon at various life stages were best known for the following eight rivers: Dennys River, East Machias River, Machias River, Pleasant River, Narraguagus River, Ducktrap River, Sheepscot River, and Cove Brook. On June 15, 2009, the Services expanded the Gulf of Maine DPS to include salmon in the Penobscot River, two significant issues of concern regarding the rearing of salmon in Maine involve the genetic integrity of the salmon and escape prevention to avoid impacts on native fish.

On December 4, 2000, in regard to the Department’s pending delegation to administer the NPDES Permit Program, USEPA Region I informed the Department that “permits issued to freshwater hatcheries raising salmon will require that the facility be designed or modified to achieve zero escapement of fish from the facility.” The USEPA also stated, “The information contained in the Services’ listing documents indicates that a remnant population of wild Atlantic salmon is present in...” Maine waters “...and that salmon fish farms and hatcheries are activities having a significant impact on the...” Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon “...through, among other things, the escape of farmed and non-North American strains of salmon which may interbreed with the wild Maine strains, compete for habitat, disrupt native salmon redds, and spread disease.” “Based on this information, the Services have concluded that the escape of farm-raised salmon from fish farms and hatcheries is likely to significantly impair the growth, reproduction and habitat of wild salmon, thereby impairing the viability of the DPS.” “EPA has analyzed current information, including these findings, and based on this information believes that this remnant population constitutes an existing instream use of certain Gulf of Maine rivers and considers that the above-described impacts to the population would be inconsistent with Maine’s water quality standards. Assuming the information discussed above does not significantly change, EPA will utilize its authorities to ensure compliance with Maine water quality standards by ensuring that conditions to protect the remnant population of Atlantic salmon are included in NPDES permits for salmon fish farms and hatcheries, which are subject to regulation as concentrated aquatic animal production facilities.” “In view of the substantial danger of extinction to the DPS described by the Services, it is EPA’s view that proposed permits authorizing activities that would adversely affect the population, as described earlier in this letter, would be inconsistent with Maine’s water quality standards and objectionable under the CWA.”

The previous permitting action established Special Condition N, *Salmon Genetic Testing and Escape Prevention*. The Department is restructuring and consolidating conditions for Atlantic salmon protection in the permit as Special Condition I, *Protection of Atlantic Salmon*. Restructuring of the conditions is consistent with the conditions established in other MEPDES permits, namely *Net Pen Aquaculture General Permit* #MEG130000, April 10, 2014, which is the regulatory permit used by the majority of marine aquaculture facilities where the Atlantic salmon reared at the Oquossoc Fish Hatchery during the freshwater life stages are transferred.

10. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class A or Class GPA classifications.

11. PUBLIC COMMENTS

Public notice of this application was made in the *Sun Journal* newspaper on or about December 22, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

12. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from, and written comments sent to:

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Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
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13. RESPONSE TO COMMENTS

During the period of September 18, 2015 through the effective date of this final agency action, the Department solicited comments on the draft MEPDES permit. The Department did not receive substantive comments on the draft permit. It is noted that minor typographical and grammatical errors identified in comments were not summarized in this section, but were corrected, where necessary, in the final permit.

ATTACHMENT A

Cooke Aquaculture Oquossoc Fish Hatchery

Discharge of treated wastewater to Rangeley River Between Rangeley Lake and Mooselookmeguntic Lake

Cooke Aquaculture Oquossoc Hatchery

Oquossoc

Rangeley

Mooselookmeguntic Lake

Google earth

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

A. GENERAL PROVISIONS

1. General compliance. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. Other materials. Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

(a) They are not

- (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
- (ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

3. Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Reopener clause. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

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7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee of its obligation to comply with other applicable Federal, State or local laws and regulations.

12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

- (a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to

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maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
- (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
- (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
- (e) The permittee shall install flow measuring facilities of a design approved by the Department.
- (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

(a) Definitions.

- (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

- (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

- (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

- (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- (C) The permittee submitted notices as required under paragraph (c) of this section.

- (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;

- (ii) The permitted facility was at the time being properly operated; and

- (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f), below. (24 hour notice).

- (iv) The permittee complied with any remedial measures required under paragraph B(4).

- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

- (a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
 - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
 - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
 - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- (ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

- (A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
- (B) Any upset which exceeds any effluent limitation in the permit.
- (C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

- (iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.
- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) One hundred micrograms per liter (100 ug/l);
 - (ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- (i) Five hundred micrograms per liter (500 ug/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

- (a) All POTWs must provide adequate notice to the Department of the following:
- (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
 - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

- (a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.
- (b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminants and shall specify means of disposal and or treatment to be used.

3. Removed substances. Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. Connection to municipal sewer. (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

Continuous discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

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Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

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Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.