STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

AVERY T. DAY
ACTING COMMISSIONER

November 16, 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 #ME0110086
Maine Waste Discharge License (WDL) # W007149-6F-J-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

web site: www.maine.gov/dep

Sincerely,

Bill Hinkel

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

Enc.

ec: Clarissa Trasko, MDEP
Lori Mitchell, 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
GARDNER LAKE FISH HATCHERY	)	ELIMINATION SYSTEM PERMIT
EAST MACHIAS, WASHINGTON CTY., MAINE	)	AND
#ME0110086	)	WASTE DISCHARGE LICENSE
#W007149-6F-J-R **APPROVAL**	)	**RENEWAL**

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 *et seq.*, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of 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 May 7, 2014, the Department accepted as complete for processing, a renewal application from Cooke for Waste Discharge License (WDL) #W007149-6F-I-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0110086, which was issued on March 4, 2010 for a five-year term. The March 4, 2010 MEPDES permit authorized Cooke to discharge a monthly average of 10 million gallons per day (MGD) of fish hatchery wastewater via Outfall #001A from the Gardner Lake Fish Hatchery to Chase Mills Stream, Class B, in East Machias, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the March 4, 2010 permitting action except that it is:

1. Eliminating the effluent limitations and monitoring requirements for biochemical oxygen demand (BOD_5) based on new information;

2. Revising the monthly average mass limitation for total suspended solids (TSS);

3. Eliminating the monthly average concentration and mass limitations for total phosphorous based on new information;

4. Eliminating the monthly average reporting requirement for fish on hand;

5. Eliminating the daily maximum concentration limitations for formalin based on new information;

PERMIT SUMMARY (cont'd)

6. Eliminating the pH limitation and monitoring requirements based on new information;

7. Eliminating the dissolved oxygen limitation and monitoring requirements based on new information;

8. Eliminating the stream flow monitoring requirement based on new information;

9. 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;

10. Eliminating previous Special Condition G, *Settling Basin Cleaning*, based on revisions to Special Condition F, *Operation and Maintenance (O&M) Plan*;

11. Restructuring and consolidating previous Special Condition H, *Disease and Pathogen Control and Reporting*, Special Condition I, *Therapeutic Agents*, and Special Condition J, *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;

12. Eliminating previous Special Condition K, *Minimum Treatment Technology Requirement*, as best practicable control technology currently available (BPT) is incorporated into the reissued permit as Special Condition F; and

13. Restructuring and consolidating previous Special Condition L, *Salmon Genetic Testing and Escape Prevention*, to for consistency with the conditions established in other MEPDES permits.

CONCLUSIONS

Based on the findings summarized in the attached and incorporated Fact Sheet dated October 14, 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 licenses,* 38 M.R.S.A. § 414-A(1)(D).

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 10 MGD of treated fish hatchery wastewater via Outfall #001A from the Gardner Lake Hatchery to Chase Mills Stream, Class B, in East Machias, 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 October 19, 2015)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 13th DAY OF November 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Filed
NOV 13 2015
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

Date of initial receipt of application: May 7, 2014
Date of application acceptance: May 7, 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 **treated fish hatchery wastewater from Outfall #001A** to Chase Mills Stream. 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	Daily Minimum	Measurement Frequency	Sample Type
Flow *[50050]*	10 MGD *[03]*	---	---	---	---	Daily *[01/01]*	Measured *[MS]*
TSS *[00530]*	167 lbs./day *[26]*	834 lbs./day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/Month *[01/30]*	Composite[2] *[CP]*
Fish on Hand *[45604]*	---	Report lbs./day *[26]*	---	---	---	1/Month *[01/30]*	Calculate *[CA]*
Formalin[3] *[51064]*	Report lbs./day *[26]*	100 lbs./day *[26]*	---	---	---	1/Occurrence *[01/OC]*	Calculate *[CA]*

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 Page 6 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):

   Formalin applied (gallons) x 9.03[1] (lbs./gallon) = 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

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 May 7, 2014 and the terms and conditions of this permit; and only from Outfall #001A (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 REQUIREMENT

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.

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
106 Hogan Road
Bangor, Maine 04401

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 drugs[1], pesticides[2], 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.

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[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) Drugs identified in the permittee's application. The following drugs were identified in the permittee's application as currently being in use:

      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 Gardner Lake Fish Hatchery during the term of the permit subject to all approval terms and conditions specified in this section.
      1. Emmamectin 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 Standard Condition D, and 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 in use:

Name	Freq. of Use	Concentration	Qty. Used/Year
Virkon Aquatic	Daily	2% solution	60 lbs.

   b) Other compounds identified in the permittee's application. The following compounds were identified in the permittee's application as currently 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	20 gallons
Sodium Chloride	As needed	3 ppm	1,000 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
Ovadine Iodine	12 times/Year	100 – 200 ppm	20 gallons

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. 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.

K. 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **OCTOBER 14, 2015**

PERMIT NUMBER: **#ME0110086**

WASTE DISCHARGE LICENSE: **#W007149-6F-J-R**

NAME AND ADDRESS OF APPLICANT:

COOKE AQUACULTURE USA INC.
P.O. BOX 528
BINGHAM, ME 04920

COUNTY: **WASHINGTON**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

COOKE AQUACULTURE USA INC.
GARDNER LAKE FISH HATCHERY
144 CHASES MILL ROAD
EAST MACHIAS, MAINE 04630

RECEIVING WATER CLASSIFICATION: **CHASE MILLS STREAM/CLASS B**

COGNIZANT OFFICIAL CONTACT INFORMATION:

GREG LAMBERT
207-446-6295
greg.lambert@cookeaqua.com

1. APPLICATION SUMMARY

Application: On May 7, 2014, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from Cooke Aquaculture USA Inc. (Cooke) for Waste Discharge License (WDL) #W007149-6F-I-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0110086, which was issued on March 4, 2010 for a five-year term. The March 4, 2010 MEPDES permit authorized Cooke to discharge a monthly average of 10 million gallons per day (MGD) of fish hatchery wastewater via Outfall #001A from the Gardner Lake Fish Hatchery to Chase Mills Stream, Class B, in East Machias, Maine.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the March 4, 2010 permitting action except that it is:

1. Eliminating the effluent limitations and monitoring requirements for biochemical oxygen demand (BOD_5) based on new information;

2. Revising the monthly average mass limitation for total suspended solids (TSS);

3. Eliminating the monthly average concentration and mass limitations for total phosphorous;

4. Eliminating the monthly average reporting requirement for fish on hand;

5. Eliminating the daily maximum concentration limitations for formalin based on new information;

6. Eliminating the pH limitation and monitoring requirements based on new information;

7. Eliminating the dissolved oxygen limitation and monitoring requirements based on new information;

8. Eliminating the stream flow monitoring requirement based on new information;

9. 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;

10. Eliminating previous Special Condition G, *Settling Basin Cleaning*, based on revisions to Special Condition F, *Operation and Maintenance (O&M) Plan*;

11. Restructuring and consolidating previous Special Condition H, *Disease and Pathogen Control and Reporting*, Special Condition I, *Therapeutic Agents*, and Special Condition J, *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;

12. Eliminating previous Special Condition K, *Minimum Treatment Technology Requirement*, as best practicable control technology currently available (BPT) is incorporated into the reissued permit as Special Condition F; and

13. Restructuring and consolidating previous Special Condition L, *Salmon Genetic Testing and Escape Prevention*, to for consistency with the conditions established in other MEPDES permits.

b. History: This section provides a summary of recent/significant licensing and permitting actions and other significant regulatory actions completed for the Gardner Lake Fish Hatchery. The fact sheet associated with the March 4, 2010 permit contains additional history for this facility.

November 25, 1986 – The Department issued WDL #W007149-41-A-N to Ocean Products, Inc. (OPI) for the discharge of a maximum of 11.2 MGD of treated fish hatchery wastewater from the Gardner Lake hatchery/smolt production facility to Chase Mills Stream, Class B, in East Machias. The term of the WDL was 5-years from the date of issuance.

2. PERMIT SUMMARY (cont'd)

March 3, 1987 - The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0110086 to OPI for the discharge of a maximum of 11.2 MGD of treated fish hatchery wastewater from the Gardner Lake hatchery to Chase Mills Stream. The term of the NPDES permit was 5-years from the date of issuance.

September 4, 1990 – The Department issued WDL #W007149-WA-B-T, transferring the Gardner Lake hatchery WDL (#W-007149-41-A-N) from OPI to Connors Aquaculture, Inc., reflecting a change in ownership.

July 30, 1992 – The Department issued WDL #W007149-WA-C-R to Connors Aquaculture, Inc. for the discharge of a maximum of 10.08 MGD of treated fish hatchery wastewater from the Gardner Lake hatchery to Chase Mills Stream. The WDL application summary indicated it was a renewal of WDL #W007149-41-A-N, and attributed a discharge of 10.08 MGD to the original WDL, which actually approved the discharge of 11.2 MGD. The WDL cited water quality problems in the receiving water caused by the facility discharge. The term of the WDL was 5-years from the date of issuance.

August 24, 1999 – The Department issued WDL #W007149-5Q-D-R to Connors Aquaculture, Inc. for the discharge of a maximum of 10.08 MGD of treated fish hatchery wastewater from the Gardner Lake hatchery to Chase Mills Stream. The term of the WDL was 2-years from the date of issuance. Connors requested a discharge flow increase to 13 MGD. The most recent ambient monitoring data (1989) indicated that Chase Mills Stream was not attaining Class B standards and that the Gardner Lake hatchery discharge was causing or contributing to this condition. Pursuant to Maine law, no increases in pollutant discharges could be authorized.

January 2001 – Connors Aquaculture, Inc. submitted to the Department a report entitled, "*2000 Biomonitoring Study, Chase Mills Stream,*" prepared by Acheron Engineering, Inc.

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 #ME0110086 has been utilized for this facility.

August, 2001 – Weston Foods Limited sold one of its subsidiaries, Connors Brothers, Inc., but retained ownership of Connors Aquaculture, Inc., the owner and license holder of the Gardner Lake facility. Subsequently, Weston Foods Ltd changed the name of Connors Aquaculture to Heritage Salmon, Inc., which entails the historical market name of its products.

October 15, 2004 – The Department issued WDL #W007149-5Q-E-R / MEPDES Permit #ME0110086 to Heritage Salmon, Inc. for the discharge of up to a monthly average of 10 MGD of fish hatchery and rearing facility wastewater to Chase Mills Stream, Class B from a commercial Atlantic salmon facility in East Machias, Maine. The permit / WDL incorporated the terms and conditions of the MEPDES permit program and was issued for a five-year term.

2. PERMIT SUMMARY (cont'd)

October 17, 2005 – The Town of East Machias and Phoenix Salmon US entered into an agreement entitled, Agreement to Modify 1987 Agreement To Operate Structures And Dams At Gardner Lake Outlet. It is noted the Gardner Lake Outlet dam is currently owned by the Town of East Machias and a like agreement was established between Ocean Products and the Town of East Machias in a document entitled Agreement To Operate Structures And Dams At Gardner Lake Outlet, dated February 26, 1987. The 10/17/05 modified agreement established a minimum instantaneous stream flow of 25.3 cfs to Chase Mill Stream above the Phoenix hatchery between June 1 and September 30 of each year. This minimum stream flow requirement is also consistent with the 1994 Gardner Lake Water Level Agreement.

March 24, 2006 – The Department issued an Order transferring the MEPDES permit / Maine WDL for the Gardner Lake facility from Heritage Salmon Inc. to Phoenix Salmon US Inc.

May 22, 2006 – The Department issued Permit Modification #W-007149-5Q-G-M / MEPDES Permit #ME01100886, which: increased monthly average phosphorus mass and concentration limits; revised effluent dilution factors based on a revised seasonal minimum ambient flow; required seasonal reporting of ambient flows; and removed the requirement for annual macroinvertebrate biomonitoring.

October 10, 2008 – The Department issued Minor Revision #W-007149-5Q-H-M / MEPDES Permit #ME0110086 to revise effluent formalin limitations based on newly obtained toxicity data and a revision of the Department's best professional judgment of ambient water quality criteria.

March 3, 2010 – The Department issued #ME0110086 / #W007149-6F-I-R for a five year term.

May 7, 2014 – Cooke submitted a timely and complete General Application to the Department for renewal of the March 3, 2010 MEPDES permit. The application was accepted for processing on May 7, 2014 and was assigned WDL #W007149-6F-J-R / MEPDES #ME0110086.

c. Source Description: Cooke's Gardner Lake Fish Hatchery obtains influent water from two intake pipes in Gardner Lake in East Machias. The deep water, 24-inch HDPE inlet is located 2,200 feet from shore at a depth of 55 feet. The shallow water, 36-inch HDPE inlet is located 900 feet from shore at a depth of 24 feet. Both inlets have coarse screens to minimize intake of large matter. A map showing the location of the facility and a site plan of the facility are included as Fact Sheet Attachments A and B, respectively.

Influent water enters the hatchery through a 6 foot x 6 foot x 14 foot deep concrete receiving tank (head tank) containing a control gate valve to ensure a steady water flow to the farm and screens to capture large debris. Water from the head tank flows by gravity to the fish rearing tanks in the hatch house and smolt field through PVC pipelines. The water supply to the smolt field is super saturated with oxygen using a mechanical (pressurized packed column) system. The hatchhouse has a separate oxygen system.

d. Wastewater Treatment: All wastewater from the hatchhouse fish rearing tanks is collected in concrete trenches which drain into a concrete sump, passing through a rotary drum filter. Solids removed by the filter are deposited in the facility sludge pit located in the filter building. The filtrate is pumped from the sump into the main wastewater drain pipe where it combines with the wastewater from the smolt field.

2. PERMIT SUMMARY (cont'd)

All wastewater from the smolt field rearing tanks flows into a concrete trench located in the center of the smolt field. The wastewater in the trench flows from the two ends to the middle, where it enters the main wastewater drain pipe. Two grates located on either side of the main drain pipe screen out any fish that escape the rearing tanks. The grates are checked daily. Any fish removed are destroyed and deposited in the sludge pit located in the filter building.

All of the wastewater flows through the main wastewater drain pipe (36" HDPE) to the drum filter array located in the filter building. The filter array consists of five self-cleaning rotary drum filters in parallel. The filter fabric is 60-microns on all filters. Each of the filters is located in a concrete sump. The filtered water flows over a weir into a common concrete drain channel and exits through a 36" concrete pipe located at one end of the channel. Each of the weirs is screened with ½" vinyl coated wire mesh as a further escape preventative. The final concrete pipe is also covered with a steel grate. The discharge pipe outlets to a rip-rapped open ditch, approximately 6'-8' wide by 95' long, which flows into Chases Mill Stream.

Solids removed from the wastewater are washed from the drum filter screens into collection troughs and flow into a belt filter for dewatering. Solids removed by the belt filter are pumped into a 7,000 gallon concrete tank ("sludge pit".) As needed, the sludge pit is emptied and the contents are disposed of by land spreading by a local contractor.

The filtrate from the belt filter (approximately 10,000 gallons per day) is pumped to a series of two 1,500 gallon concrete septic tanks for settling. A coagulant is injected into the pipe from the filter to increase settling of suspended particles. From the settling tanks the supernatant wastewater is piped to one end of an 80-foot limestone bed. The bed supports a variety of vegetation and is designed to act as an artificial wetland to remove some of the nutrient load from this portion of the waste water. The waste water enters a manifold of perforated plastic pipe and collects in a sump at the end of the bed opposite from the intake pipe whence it is pumped back into the main waste water stream before the drum filters.

In accordance with Standard Condition D, as referenced in Special Condition D of this permit, the permittee must notify the Department of any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system. A process flow diagram submitted by the permittee is included as Fact Sheet Attachment B. Use of agents for therapeutic and disinfecting/sanitizing purposes are addressed in subsequent Fact Sheet sections titled accordingly.

Solid matter removed during the process described above is stored in a 7,000-gallon sludge storage tank. When full, the sludge storage tank contents are removed for land spreading by a local contractor. A *de minimis* amount of chlorine in the form of four disinfectant pucks per week is used to maintain the filter spray bars used in cleaning the drum filters. The spray enters and is diluted in the entire facility wastewater flow.

In accordance with Standard Condition D, as referenced in Special Condition D of this permit, the permittee must notify the Department of any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system. Use of agents for therapeutic and disinfecting/sanitizing purposes are addressed in subsequent Fact Sheet sections titled accordingly.

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(3)(B)(1) in relation to the East Machias River, main stem, classifies "all tributaries entering below the Route 191 bridge in Jacksonville" as Class B unless otherwise specified, which includes Chase Mills Stream at the point of discharge. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(3) describes the standards for Class B waters.

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 "Chase Mill Stream (East Machias)" (ABD Assessment Unit ID ME0105000204_509R01) as "Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other 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 Gardner Lake 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.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

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 K, *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 K 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 limit of 10 MGD. This permitting action is also carrying forward the daily maximum monitoring requirement for flow.

The following table summarizes effluent data reported on Discharge Monitoring Reports (DMRs) for the period of April 2010 through May 2015.

Flow (DMRs=62) Outfall #001A

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	10.0	4.0 – 11.0	8.1

c. Dilution Factors: The flow in Chase Mills Stream is affected by a dam on the outlet of Gardner Lake. The Town of East Machias owns the dam and has an October 17, 2005 agreement with the owners of the Gardner Lake Fish Hatchery to operate the dam at minimum flow of 25.3 cfs at all times, except during period of extended drought. Dilution factors associated with the permitted discharge flow of 10 MGD from the Gardner Lake Fish Hatchery were derived in accordance with 06-096 CMR 530(4)(A) and the regulated flow to Chase Mill Stream as stated above as follows:

Mod. Acute: ¼ 1Q10 = 6.3 cfs $\Rightarrow \frac{(6.3 \text{ cfs})(0.6464) + 10 \text{ MGD}}{10.0 \text{ MGD}} = 1.4{:}1$

Acute: 1Q10 = 25.3 cfs $\Rightarrow \frac{(25.3 \text{ cfs})(0.6464) + 10 \text{ MGD}}{10.0 \text{ MGD}} = 2.63{:}1$

Chronic: 7Q10 = 25.3 cfs $\Rightarrow \frac{(25.3 \text{ cfs})(0.6464) + 10 \text{ MGD}}{10 \text{ MGD}} = 2.63{:}1$

Harmonic Mean = 76 cfs $\Rightarrow \frac{(76 \text{ cfs})(0.6464) + 10 \text{ MGD}}{10 \text{ MGD}} = 5.9{:}1$

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

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 Gardner Lake Fish Hatchery discharges to an approximately 6-8 foot wide by 95-foot long open ditch/conveyance system, which flows into the side of Chase Mills Stream. 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 ¼ of the 1Q10 in acute evaluations pursuant to 06-096 CMR 530.

d. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): Neither the USEPA nor Department has promulgated effluent limitation guidelines for BOD_5 or TSS that are applicable to the discharge from the Gardner Lake Fish Hatchery. The previous permitting action established monthly average and daily maximum concentration limitations of 6 mg/L and 10 mg/L, respectively, for BOD_5 and TSS based on best professional judgment (BPJ) of best practicable treatment (BPT). The previous permit also established corresponding monthly average and daily maximum mass limitations of 500 lbs./day and 834 lbs./day, respectively, for BOD_5 and TSS.

The Department's Division of Environmental Assessment (DEA) reviewed fish hatchery information in consideration of using TSS as a surrogate for BOD_5. 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 BOD_5. 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 *State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report* does not list Chase Mill Stream as being in non-attainment of applicable water quality standards. Therefore, the Department concludes that Chase Mill Stream does not exhibit BOD-related impacts as a result of the discharge from the Gardner Lake Fish Hatchery.

After reviewing approximately 6 years of BOD_5 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 BOD_5 conditions. Whereas: 1) the Gardner Lake Fish Hatchery operations and processes are not likely to change; 2) the Department has a statistically significant BOD_5 data set from this and multiple similar hatcheries; 3) neither the USEPA nor Department have promulgated numeric effluent guidelines for BOD_5 for the *Flow-Through and Recirculating Systems Subcategory*; and 4) in the best professional judgment of the Department, effluent limitations for BOD_5 are not necessary to ensure compliance with water quality standards, this permitting action is eliminating the effluent limitations and monitoring requirements for BOD_5 based on this new information that was not available at the time the previous permit was issued.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

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 Gardner Lake Fish Hatchery and the concentration and mass limitations for BOD_5, the Department 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. 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 BOD_5. [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 April 2010 through May 2015 follows.

TSS mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	500	21 – 168	56
Daily Maximum	834	36 – 202	95

TSS concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	6	1 – 2	1.2
Daily Maximum	10	1 – 3	1.4

The Department's Division of Environmental Assessment (DEA) has evaluated the discharge from this facility and concludes that the current attainment of water quality standards in Chase Mills Stream is due, in part, to the low levels of TSS (<2 mg/L) that have been discharged since issuance of the previous permit in 2010. In the best professional judgment of senior staff in the DEA, the previous TSS limits would result in BOD_5 concentrations similar to those measured in years past when the stream was in non-attainment. If TSS was to be discharged at the limits previously established, Class B water quality standards would not be met. Therefore, it is the best professional judgment of the Department to revise the monthly average mass limit based on a concentration value of 2 mg/L, which the permittee has demonstrated it can consistently achieve. This permitting action is revising the monthly average mass limit from a technology-based limit of 500 lbs./day to a water quality-based limit of 167 lbs./day as follows:

Monthly average limit: (10 MGD)(2 mg/L TSS)(8.34 lbs./gal) = 167 lbs./day

The Department has made a determination that revising the daily maximum mass limitation is not necessary to ensure water quality standards are met, provided compliance with the monthly average limit. Therefore, the previously established technology-based daily maximum mass limit of 834 lbs./day is being carried forward as follows:

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Monthly average limit: (10 MGD)(10 mg/L TSS)(8.34 lbs./gal) = 834 lbs./day

d. Dissolved Oxygen (DO): The March 4, 2010 permit required effluent DO monitoring from June through September of each year and established a daily minimum limitation of 7.5 mg/L "because of the low dilution of facility effluent provided in the receiving water" and "to ensure compliance with Class B dissolved oxygen standards." (March 4, 2010 Fact Sheet, p. 19)

The Class B dissolved oxygen standard is:

> The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. 38 M.R.S.A. § 465(3)(B)

Effluent DO data for the period of 2010 through 2014 indicates that the effluent DO is consistently in compliance with the Class B water quality standards ranging from 8.1 mg/L to 10.2 mg/L with an arithmetic mean of 9.2 mg/L. Therefore, this permitting action is eliminating the DO limitation and monitoring and reporting requirements for dissolved oxygen based on this new information not available at the time of permit issuance.

e. Total Phosphorus: The previous permitting action established seasonal (June 1 – September 30, of each year) monthly average concentration and mass limitations of 0.092 mg/L and 7.7 lbs./day, respectively, for total phosphorus. These limitations were derived based on the Department's best professional judgment of the protective in-stream ambient water quality threshold of 0.035 mg/L for total phosphorous and the chronic dilution factor of 2.63:1 as follows:

Monthly average concentration: (0.035 mg/L)(2.63) = 0.092 mg/L
Monthly average mass: (0.092 mg/L)(8.34 lbs./gallon)(10.0 MGD) = 7.7 lbs./day

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 a criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criteria, supplemented with 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.[2]

[1] *Waste Discharge License Conditions,* 06-096 CMR 523(5)(d)(1)(i) (effective date January 12, 2001)
[2] 06-096 CMR 523(5)(d)(1)(vi)(A)

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.1 mg/L in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.1 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 0.1 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 0.1 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 2010 through 2014 follows.

Total-P Mass

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	7.7	1.3 – 6.7	2.8
Daily Maximum	Report	1.6 – 8.9	3.6

Total-P Concentration

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.092	0.03 – 0.1	0.06
Daily Maximum	Report	0.04 – 0.20	0.09

For the background concentration in Chase Mills Stream, the outlet of Gardner Lake, the Department is using ambient water quality data collected from Gardner Lake the Department and the Volunteer Lake Monitoring Program since 1977. A Water Quality Summary, revised February 2011 (http://www.lakesofmaine.org/data/texts/1358.pdf, viewed July 14, 2015), concludes that the average water column total phosphorous concentration in the lake is 0.005 mg/L. The Department's draft ambient water quality criterion for Class B waters is 0.030 mg/L for phosphorus.

Using the following calculation and criteria, Gardner Lake Fish Hatchery does not have a reasonable potential to exceed either the USEPA's Total P Ambient Water Quality Goal of 0.1 mg/L (100 ug/L) for phosphorus for rivers and streams not feeding lakes, or the Department's draft ambient water quality criteria of 0.030 mg/L for phosphorus:

Reasonable Potential Analysis

$$Cr = \frac{QeCe + QsCs}{Qr}$$

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Qe = effluent flow	=	10.0 MGD
Ce = effluent pollutant concentration	=	0.06 mg/L
Qs = 7Q10 flow of receiving water	=	16.4 MGD
Cs = upstream concentration	=	0.005 mg/L
Qr = receiving water flow (16.4 MGD + 10.0 MGD)	=	26.4 MGD
Cr = receiving water concentration		

$$Cr = \frac{(10.0\ MGD \times 0.06\ mg/L) + (26.4\ MGD \times 0.005\ mg/L)}{26.4\ MGD} = 0.027\ mg/L$$

Cr = 0.027 mg/L < 0.1 mg/L ⇒ **No Reasonable Potential**
Cr = 0.027 mg/L < 0.030 mg/L ⇒ **No Reasonable Potential**

Based on this reasonable potential calculation and conclusion that the discharge of treated wastewater from the Gardner Lake Fish Hatchery does not have a reasonable potential to exceed applicable water quality thresholds for phosphorous, this permitting action is eliminating the monthly average concentration and mass limitations of 0.092 mg/L and 7.7 lbs./day, respectively, for total phosphorus. The mean effluent mass discharged from this facility (2.8 lbs./day) is approximately one-third of the previously established limitation (7.7 lbs./day). The Department is making a best professional judgment determination that routine effluent monitoring for total phosphorous is not necessary. 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. 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).

f. 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 April 2010 through May 2015 follows:

Fish on Hand

Value	Limit (lbs.)	Range (lbs.)	Mean (lbs.)
Monthly Average	Report	3,579 – 275,054	123,102
Daily Maximum	Report	7,898 – 279,356	140,963

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.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

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.

g. 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 63 mg/L and 100 lbs./day, respectively, for 1-hour formalin treatments and 35 mg/L and 100 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 mg/L (1-hour acute criteria) x 1.4 (effluent dilution) = 63 mg/L formalin limit
25 mg/L (24-hour acute criteria) x 1.4 (effluent dilution) = 35 mg/L formalin limit

The fact sheet associated with the March 4, 2010 MEPDES permit issued for this facility provides the following basis statement for the daily maximum mass limitation:

> *Formalin mass limits in other facilities' permits issued after Gardner Lake's 2004 permit were based on the permittee's projected maximum amount of formalin used per day times the weight of formalin (9.13 lbs/gallon). This method was incorporated to provide for flexibility in management of necessary treatments and to ensure that formalin was not discharged in toxic amounts. In this permitting action, Gardner Lake's formalin mass limit is being revised accordingly. Phoenix Salmon reports that the projected maximum amount of formalin used per day corresponds to treatments twice per day at the current mass limit. This equates to 5.5 gallons of formalin times two treatments or 11 gallons per day times 9.13 lbs/gallon yielding 100 lbs/day.*

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

This permitting action is carrying forward the daily maximum mass limitation of 100 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 April 2010 through May 2015, ranged from 15 lbs./day to 97 lbs./day with a mean of 76 lbs./day (n = 25).

h. 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 April 2010 through May 2015, ranged from 5.8 SU to 6.4 SU (n = 62). The Gardner Lake 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 Gardner Lake 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).

i. Instantaneous Stream Flow: The previous permit established an instantaneous minimum ambient flow monitoring requirement, during the period of June 1 and September 30 of each year. The fact sheet associated with the previous permit did not provide a basis statement as to why this monitoring was required. The Department has not identified that the discharge from the Gardner Lake Fish Hatchery causes or contributes to non-attainment of water quality standards and finds that this this monitoring requirement is not necessary. This permitting action is eliminating the instantaneous minimum ambient flow monitoring and reporting requirement.

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 G, *Settling Tank 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 H, *Disease and Pathogen Control and Reporting*, Special Condition I *Therapeutic Agents*, and Special Condition J, *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 Gardner Lake 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 May 7, 2014 General Application for Waste Discharge Permit, a list of drugs, pesticides, and chemicals or compounds proposed for use at the Gardner Lake 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 May 7, 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 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 L, *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 Gardner Lake 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 B classification.

11. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspaper on or about April 28, 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

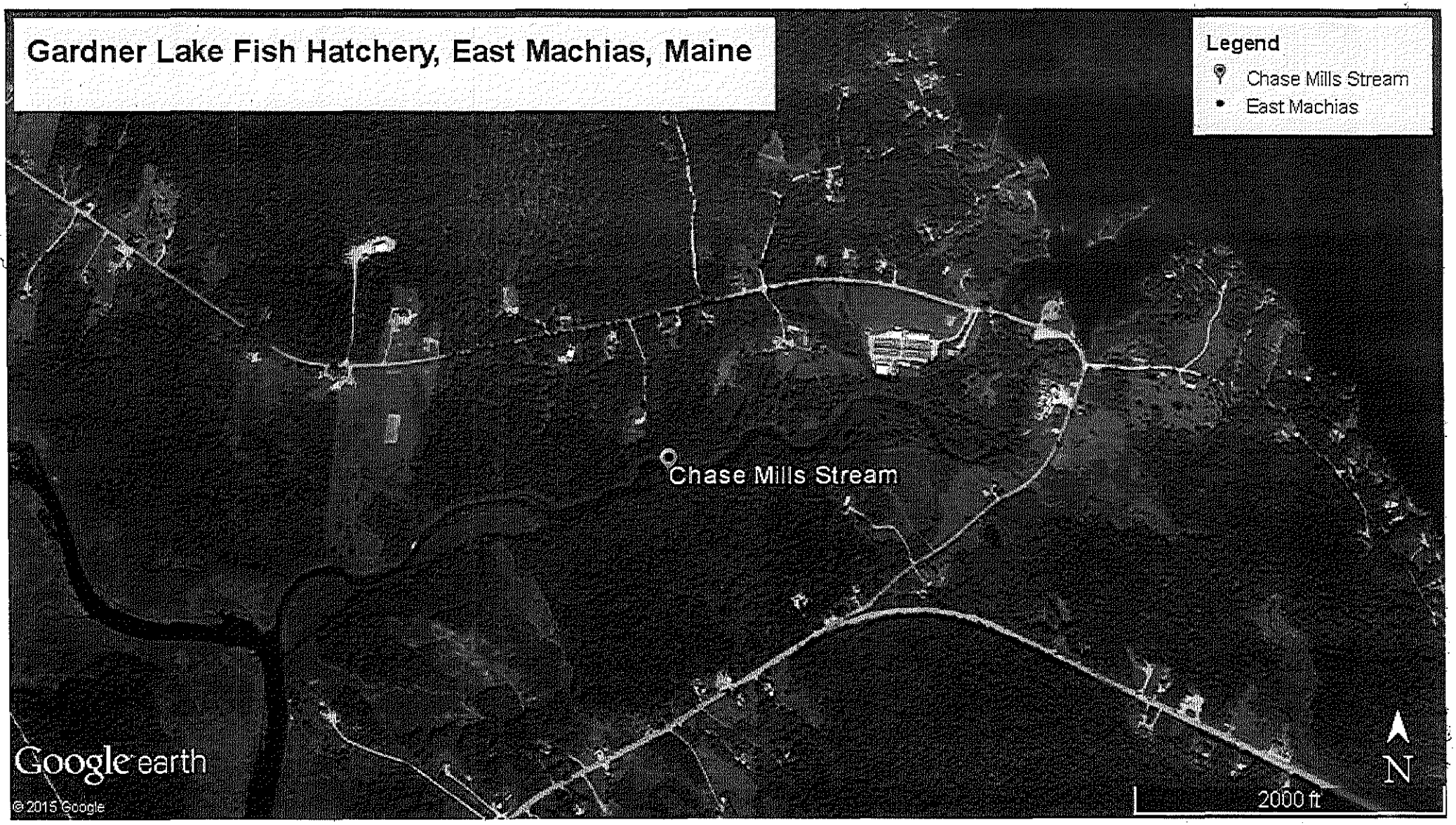
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Bill Hinkel
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 485-2281
e-mail: bill.hinkel@maine.gov

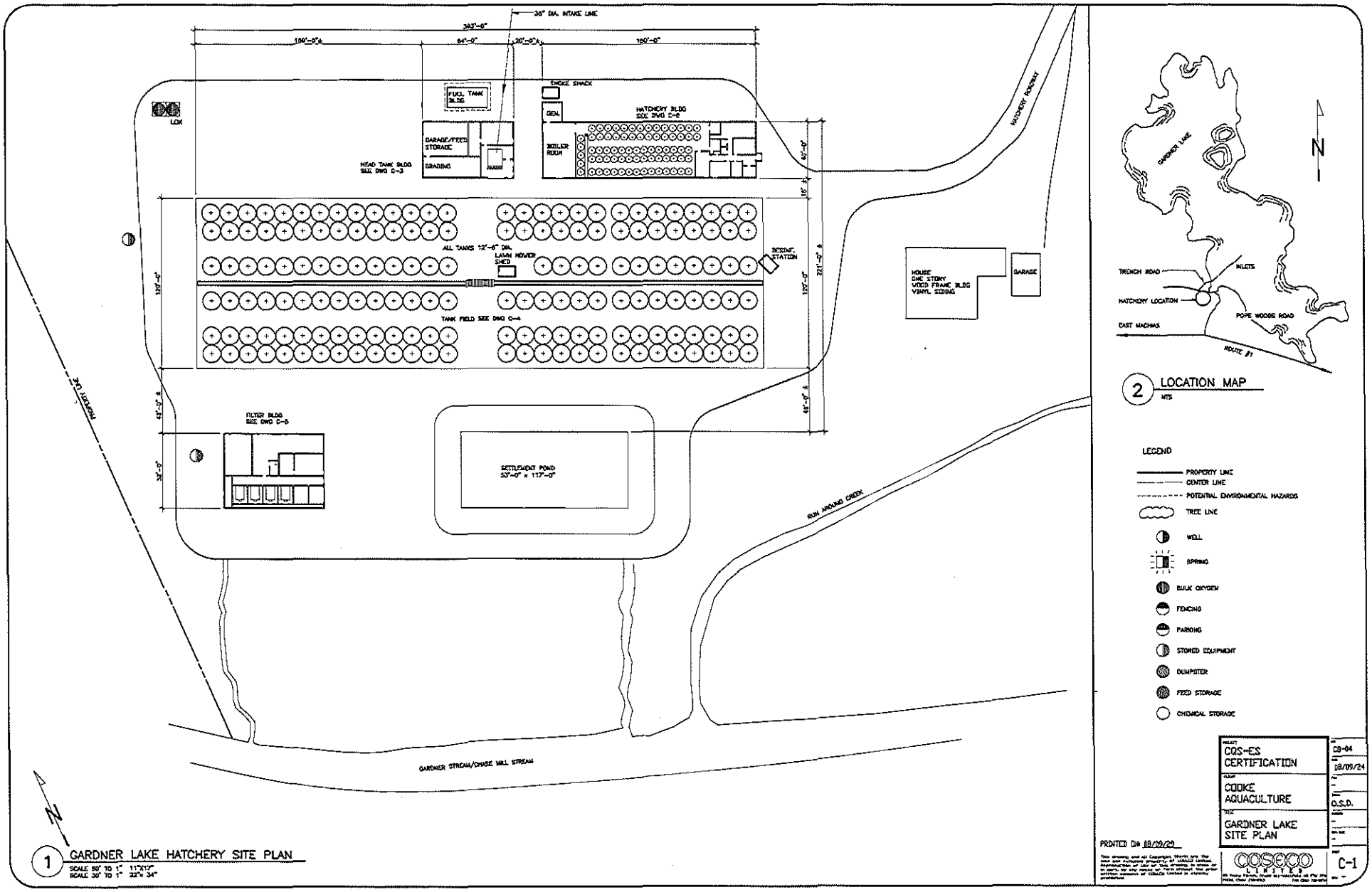
13. RESPONSE TO COMMENTS

During the period of September 14, 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


Gardner Lake Fish Hatchery, East Machias, Maine
Legend
Chase Mills Stream
East Machias
Chase Mills Stream
Google earth
© 2015 Google
N
2000 ft

ATTACHMENT B



1 GARDNER LAKE HATCHERY SITE PLAN

SCALE 80' TO 1" 11"X17"
SCALE 30' TO 1" 22"x 34"

2 LOCATION MAP

NTS

LEGEND

- PROPERTY LINE
- CENTER LINE
- POTENTIAL ENVIRONMENTAL HAZARDS
- TREE LINE
- WELL
- SPRING
- BULK OXYGEN
- FENCING
- PARKING
- STORED EQUIPMENT
- DUMPSTER
- FEED STORAGE
- CHEMICAL STORAGE

PROJECT	CQS-ES CERTIFICATION
	08-04
	08/09/24
CLIENT	COOKE AQUACULTURE
	O.S.D.
TITLE	GARDNER LAKE SITE PLAN
	C-1

PRINTED ON 08/09/24

COSECO LIMITED

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

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).

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 if 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 MAINTENACE 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

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.

(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.

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.

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

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).

(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.

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 contaminates 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.

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.

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.