STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JANET T. MILLS
GOVERNOR

MELANIE LOYZIM
COMMISSIONER

September 17, 2024

Mr. Langevin
Superintendent of Hatcheries
Maine Dept. of Inland Fisheries & Wildlife
SHS #41
Augusta, ME. 04333
Todd.Langevin@maine.gov

Sent via electronic mail
Delivery confirmation requested

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001104*
Maine Waste Discharge License (WDL) Application #W00002032-6F-G-R
Proposed Draft MEPDES Permit Renewal

Dear Mr. Langevin:

Attached is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft permit and its special and standard conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins today, Tuesday, September 17, 2024, and ends on Thursday, October 17, 2024. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business **Thursday, October 17, 2024.** Failure to submit comments in a timely fashion may result in the proposed draft/license permit document being issued as drafted.

Comments in writing should be submitted to my attention at the following address:

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

If you have any questions regarding the matter, please feel free to call me at 615-6711 or e-mail me at laura.crossley@maine.gov

Sincerely,

Laura Crossley
Division of Water Quality Management
Bureau of Water Quality

Ec: *Elizabeth Latti, MDIFW*
Ellen Weitzler, USEPA
Lynne Jennings, USEPA
Michael Cobb, USEPA
Alex Rosenberg, USEPA
Richard Carvalho, USEPA
Sean Mahoney, CLF
Erin Wilson, MEDACF
Gary Brooks, MEDEP
John Adamo, MEDEP
Lori Mitchell, MEDEP
Environmental Review, MEDMR
IFW Environmental Review, MDIFW

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

DEPARTMENT ORDER

IN THE MATTER OF

ME. DEPT. INLAND FISHERIES & WILDLIFE	)	MAINE POLLUTANT DISCHARGE
ENFIELD, PENOBSCOT COUNTY, ME	)	ELIMINATION SYSTEM PERMIT
COBB FISH HATCHERY	)	AND
ME0001104	)	WASTE DISCHARGE LICENSE
W-002032-6F-G-R **APPROVAL**	)	**RENEWAL**

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424, *Water Classification Program*, 38 M.R.S. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251-1387, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE Cobb Fish Hatchery (MDIFW Enfield, permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On February 14, 2024, the Department of Environmental Protection (Department) accepted as complete for processing an application from MDIFW for the renewal of combination Waste Discharge License (WDL) W-002032-6F-F-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit ME0001104, which was issued on March 15, 2019, for a five-year term. The March 15, 2019 permit authorized a monthly average discharge of 5.0 million gallons per day (MGD) of fish hatchery wastewater to Cold Stream, Class A, from a state fish hatchery and rearing facility in Enfield, Maine.

PERMIT SUMMARY

This permitting action is carrying forward the terms and conditions of the March 19, 2019 permit except that it:

1. Reestablishes a concentration limit for total phosphorus that was erroneously removed in the previous permit, this time utilizing the same data for calculating the previous permit's mass limit.

2. Corrects the Special Condition A, *Effluent Limitation and Monitoring Requirements,* table for total phosphorus daily maximum mass limits reporting to lbs/day.

3. Updates Special Condition A, *Effluent Limitations and Monitoring Requirements,* footnote 1*, Sampling* to use sufficiently sensitive methods.

2. PERMIT SUMMARY (cont'd)

4. Updates Special Condition E *Monitoring and Reporting* to the Department's most current requirements.

5. Amends Special Condition F, *Operation and Maintenance Plan* to include a section specifically applicable to wastewater operations and updates recordkeeping requirements.

6. Modifies Special Condition G, *Uses of Drugs for Disease Control* to be consistent with Department updates to MEPDES permit language for land-based fish hatcheries, regarding the application of preventative treatments

CONCLUSIONS

BASED on the findings in the attached and incorporated Fact Sheet dated September 17, 2024, and subject to the Conditions listed below, 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. § 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 national resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;

   (d) Where the actual quality of any classified receiving waterbody 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 waterbody, 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 discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S. § 414-A(1)(D).

5. The applicant has objectively demonstrated to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available, as required by *Standards for classification of fresh surface waters,* 38 M.R.S. § 465(2)(C).

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ACTION

THEREFORE, the Department APPROVES the application of the MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE to discharge 5.0 MGD of fish hatchery wastewater to Cold Stream, Class A, in Enfield, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

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 becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent 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. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matter*s, 06-096 C.M.R. ch. 2 § (21)(A) (amended June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____ 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
For: Melanie Loyzim, Commissioner

Date of initial receipt of application February 7, 2024
Date of application acceptance February 14, 2024

Date filed with Board of Environmental Protection _____

This Order prepared by Laura Crossley, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **fish hatchery wastewater from Outfall #005A** to Cold 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]*	5.0 MGD *[03]*	---	---	---	---	Daily *[01/01]*	Measure *[MS]*
TSS *[00530]*	79 lbs./day *[26]*	402 lbs./day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/Month *[01/30]*	Composite[(2)] *[CP]*
Dissolved Oxygen *(June 1 – September 30th) [00300]*	---	---	Report mg/L *[19]*	Report mg/L *[19]*	7.5 mg/L *[19]*	2/Month[(4)] *[2/30]*	Measured *[MS]*
Total Phosphorus[(3)] *(June 1st – September 30th) [00665]*	2.1 lbs./day *[26]*	Report lbs./day *[26]*	0.05 mg/L *[19]*	Report mg/L *[19]*	---	2/Month[(4)] *[02/30]*	Composite[(2)] *[CP]*
Fish on Hand *[45604]*	---	Report lbs./day *[26]*	---	---	---	1/Month *[1/30]*	Calculated *[CA]*
Formalin[(5)] *[51064]*	Report lbs./day *[26]*	104 lbs./day *[26]*	---	---	---	1/Occurrence *[01/OC]*	Calculated *[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 Pages 7-8 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 Outfall #005A following the last treatment unit, prior to discharging to the receiving water. All monitoring must be conducted so 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 must 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 testing. Samples that are sent to a laboratory operated by a waste discharge facility licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR ch. 263 (effective date March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR ch. 263. 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).

   In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the licensee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers either to the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in the following ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.

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 notification to the Department's compliance inspector, the permittee may manually composite a minimum of eight grab samples collected at one-hour intervals during the working day at the facility. The permittee must indicate the type of sample collected on the DMR.

SPECIAL CONDITIONS

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

2. **Total Phosphorus** – Total phosphorus monitoring must be performed in accordance with **Attachment A** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – May, 2014*, unless otherwise specified by the Department. Phosphorus mass and concentration monitoring requirements and limits are seasonal and in effect from June 1 through September 30 of each year.

3. **Twice per Month Monitoring –** Monitoring required at a minimum frequency of 2/month must be collected no less than 14 days between sampling events, unless specifically authorized by the Department's compliance inspector.

4. **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 occurrence (lbs./day):
Formalin applied (gallons) x 9.03[1] (lbs./gallon) = Total formalin in effluent (lbs./day)

   The permittee must 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 treatments lasting longer than 1-hour in duration must be conducted no more frequently than once every four days. The permittee must 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 must report "N9" for this parameter on the monthly DMR.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must 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.

[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.

B. NARRATIVE EFFLUENT LIMITATIONS (cont'd)

2. The permittee must 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 must not discharge effluent that causes visible discoloration, taste, turbidity, radioactivity or other properties in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

4. The permittee must 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: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 14, 2024; 2) the terms and conditions of this permit; and 3) only from Outfall #005A. Discharges of wastewater from any other point source 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 must 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 and quantity of wastewater introduced to the wastewater collection and treatment system; and

    b. Any anticipated change in the quality and quantity of the wastewater to be discharged from the treatment system.MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

SPECIAL CONDITIONS

D. NOTIFICATION REQUIREMENT (cont'd)

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA NetDMR system, must be:

1. Submitted by a facility authorized signatory; and
2. Submitted no later than **midnight on the 15th day of the month** following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

F. OPERATION & MAINTENANCE PLAN

The permittee must have a current written Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee must 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.

c. Procedure for removal and disposal of mortalities to prevent discharge to waters of the State.

SPECIAL CONDITIONS

F. OPERATION & MAINTENANCE PLAN (cont'd)

2. Materials Storage

a. Ensure proper storage of drugs[2], pesticides[3], 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.

c. Maintain records that document drug/pesticide/other compound use as indicated under Special Condition G, *Use of Drugs for Disease Control,* and Special Condition H, *Use of Pesticides and Other Compounds*.

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.

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[2] **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].

[3] **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. OPERATION & MAINTENANCE PLAN (cont'd)

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.

6. **Wastewater Operations**

a. Provide a flow chart for the wastewater treatment process, the sludge and solids dewatering and removal process, and effluent discharge system.

b. Identify and develop operational and maintenance standard operating procedures for the treatment system components used to treat clean water, sludge water from cleaning mechanical filters, sludge water from backflushing biological treatment filters, and other wastewaters, as applicable:

i. Belt/drum filters and thickeners;
ii. Use of flocculants/coagulants;
iii. Clarifiers/settling tanks;
iv. Fish exclusion barriers;
v. Centrifuges;
vi. UV disinfection/sterilization;
vii. Chemical storage and disposal;
viii. Intake/outfall maintenance;
ix. Other

c. Define each of the following wastewater treatment responsibilities:
i. Operations Manager qualifications and duties;
ii. Staff duties;
iii. Sample collection and analysis;
iv. Regulatory reporting:
1. Discharge monitoring reports
2. Spill/release reports;
v. Any other wastewater operations responsibilities not listed.

By December 31 of each year, **or within 90 days of any process changes or minor equipment upgrades,** the permittee must 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.

SPECIAL CONDITIONS

F. OPERATION & MAINTENANCE PLAN (cont'd)

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee must 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: A list of drugs, pesticides and other compounds proposed for use at Maine Department of Inland Fisheries and Wildlife Enfield Fish Rearing Station during the term of the permit, which was provided by the permittee on Form DEPLW1999-18 included with its February 14, 2024, General Application for Waste Discharge Permit, is included as **Attachment B** of this permit.

Name	Frequency of Use	Concentration	Quantity Used/Year
Parasite-S (formalin)	As Needed	1:4000	<220gallons
Tricane-Methanesulfonate (Tricaine-S, MS 222)	As Needed	15 – 330 ppm	<200 grams
Chloramine-T (Halamid Aqua)[2]	As Needed	645 grams/day*; 102 grams/hour*	< 10 lbs

*Dosing either hourly or per day at this rate will ensure that the aquatic life threshold of 0.13 mg/L will not be exceeded.

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 the application, or **Attachment B** of the permit. The permittee must 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 must 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 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.

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 must 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 must 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 must 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 must 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 characterizes 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 must 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. The following INAD was identified by the permittee (see **Attachment B**) and is authorized to be used in accordance with the INAD program:

Name	**Frequency of Use**	**Concentration**	**Quantity Used/Year**
AQUI-S ® 20E	As needed	<100 mg/L	<1 Liter

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SPECIAL CONDITIONS

H. PESTICIDES AND OTHER COMPOUNDS

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

Name	**Frequency of Use**	**Concentration**	**Quantity Used/Year**
Virkon Aquatic	As needed	1.3 oz/gal H_20	~10 lbs.

b. Other compounds identified in the permittee's application. The following compounds were identified in the permittee's application as currently being or potentially being in use. The permittee is authorized to discharge the following compounds.

Name	**Frequency of Use**	**Concentration**	**Quantity Used/Year**
Argentyne or Ovadine Iodine	As needed	100 ppm	~2 gallons
Sodium Chloride(NaCl) blocks or crystals	As needed	1 - 2%	<2000 lbs.

I. SPILLS

In the event of a spill of drugs, pesticides, or feed, that results in a discharge to waters of the State, the permittee must provide an oral report of the spill to the Department within 24 hours of its occurrence and a written report within 5 days to the Department. The report must identify and quantify the amount of material spilled.

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SPECIAL CONDITIONS

J. 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
5) 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.

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. 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 must provide to the Department documentation of the employee's or contractor's demonstrated capabilities to conduct such work ***[ICIS code 21599]***.

The permittee must 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.

SPECIAL CONDITIONS

J. PROTECTION OF ATLANTIC SALMON (cont'd)

The CMS must be audited at least once per year and within 30 days of a reportable escape (a reportable escape is more than 50 fish) by a third party qualified to conduct CMS audits and approved by the Department ***[ICIS code 63899]***. 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 must 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 must 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."

The permittee must 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.

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SPECIAL CONDITIONS

J. PROTECTION OF ATLANTIC SALMON (cont'd)

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 must notify all persons on the revised list in the same manner as provided in this protocol.

Army Corps of Engineers
Maine Project Office; Zach Normile; Zachary.Normile@usace.army.mil

Maine Department of Environmental Protection
Regional Compliance Inspector; John Adamo, John.Adamo@maine.gov &
Regional Compliance Supervisor; Gary Brooks, Gary.R.Brooks@maine.gov

Maine Department Marine Resources
Director, Bureau of Health; Kohl Kanwitt, Kohl.Kanwitt@maine.gov
Secretary to the Commissioner; Charlene Beringer; Charlene.L.Beringer@maine.gov
Director, Bureau of Sea-Run Fisheries; Sean Ledwin; Sean.M.Ledwin@maine.gov

Maine Department of Inland Fisheries and Wildlife
Commissioner, Judy A. Camuso, Judy.Camuso@maine.gov or current Commissioner

National Marine Fisheries Service and National Oceanic and Atmospheric Administration
Maine Field Station; David Bean, David.bean@noaa.gov

United States Fish & Wildlife Service
Maine Field Office; Wende Mahaney; Wende_mahaney@fws.gov

K. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the tests results in the 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.

SPECIAL CONDITIONS

L. SEVERABILITY

In the event that any provision 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.

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ATTACHMENT A

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

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

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

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

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

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

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

ATTACHMENT B

Facility Name: Enfield Hatchery **NPDES #: ME 0001104**

DISINFECTANTS:

PRODUCT NAME	INGREDIENTS	FREQ. OF USE	CONCENTRATION	TOTAL USED/YR
Virkon Aquatic	Potassium peroxymonosulfate----- --21.41% Sodium chloride----------1.50% Other ingredients----------77.09%	As needed for disinfection of nets, utensils, boots, stocking trucks, etc.	1% solution (1.3 oz/gal H2O)	+/- 10 lbs
Argentyne or Ovadine	Polymeric or Povidone Iodine Complex----10% Inert Ingredients----------90% Available iodine----------1%	As needed for disinfection of eggs, nets, utensils, boots, stocking trucks,etc.	100 ppm ; (37.8 ml/gal H2O)	+/- 2 gals.

DRUGS/THERAPEUTIC AGENTS:

PRODUCT NAME	INGREDIENTS	FREQ. OF USE	CONCENTRATION	TOTAL USED/YR
Tricaine-S (MS 222)	Tricaine methanesulfonate	As needed for anestheizing fish during sampling, fish health/ quality exams, fish marking, etc	15 to 330 mg/l	< 200 grams
Aqui-S 20 E	10% Eugenol	Same as MS 222, but for when stocking of legal sized fish will take place soon after use	<100 mg/l	< 1 liter
Parasite-S (Formalin)	Formaldehyde----------37% Methanol----------6-14% Water & Inert----------49-57%	As needed for control of external parasites on fish	1:4000 1 hr duration	<220 gallons anticipated
Sodium Chloride blocks or crystals	NaCl	As needed as a fish stress reduction/osmoregulatory aid post handling/post parasitization	1 - 2%	<2000 lbs anticipated
Halamid Aqua	Chloramine-T	Control of bacterial gill disease	<20 mg/l	Annual anticipated use = 0 Max use of 10 lbs/year

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

DRAFT FACT SHEET

DATE:	**September 17, 2024**
MEPDES PERMIT:	**ME0001104**
WASTE DISCHARGE LICENSE:	**W002032-6F-G-R**
NAME AND ADDRESS OF APPLICANT:	**MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE** **284 STATE STREET, 41 STATE HOUSE STATION** **AUGUSTA, MAINE 04333**
COUNTY:	**PENOBSCOT**
NAME AND ADDRESS WHERE DISCHARGE OCCURS:	**MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE** **IFW COBB REARING STATION** **45 COBB ROAD** **ENFIELD, MAINE 04493**
RECEIVING WATER / CLASSIFICATION:	**COLD STREAM, CLASS A**
COGNIZANT OFFICIAL AND CONTACT INFORMATION:	**Todd Langevin** **Todd.Langevin@maine.gov** **(207) 287-5262**

1. APPLICATION SUMMARY

a. Application: February 14, 2024, the Department of Environmental Protection (Department) accepted as complete for processing an application from the Maine Department of Inland Fisheries and Wildlife (MDIFW) for the renewal of combination Waste Discharge License (WDL) W-002032-6F-F-R/ Maine Pollutant Discharge Elimination System (MEPDES) permit ME0001104, which was issued on March 15, 2019, for a five-year term. The March 15, 2019 permit authorized a monthly average discharge of 5.0 million gallons per day (MGD) of fish hatchery wastewater to Cold Stream, a Class A waterbody, from a state fish rearing facility in Enfield, Maine.

Source Description: The MDIFW Enfield facility, or Cobb State Fish Hatchery, was constructed in 1958 as a state aquaculture facility to replace both a rearing station and fish hatchery previously located in Enfield. In 2005, the MDIFW Enfield hatchery and rearing station underwent significant upgrades. The MDIFW Enfield facility raises brook trout, splake, lake trout, landlocked Atlantic salmon, and lake whitefish obtained from this facility, other MDIFW hatchery facilities, and wild stocks to appropriate sizes for stocking in Maine waters.

MDIFW Enfield is a flow-through facility with flows through its hatchery facility and each of two parallel raceway lines to Cold Stream (Class A), which in turn flows to the Passadumkeag (Class AA) and Penobscot (Class B) Rivers. A location map with the facility is included as **Fact Sheet Attachment A.**

Influent Water: Source water for the MDIFW Enfield facility is obtained from Cold Stream Pond, which consists of two main basins; the 704-acre North Basin and 2,934-acre South Basin. MDIFW Enfield has two intake pipes on the southwest shore of the South Basin, a deep water (46-feet deep) 24-inch diameter iron pipe and a shallow water (12-feet deep) 18-inch diameter iron pipe. Both intake pipes are fitted with coarse screens on the lake ends of the pipes.

Significant upgrades to the influent microscreen drum filters and ultraviolet disinfection units were made in 2011. Each of the two influent water sources is passed through a 60µm microscreen drum filter to prevent fish or debris from entering the facility; then subjected to an ultraviolet disinfection unit to address potential pathogens in the source water. The ultraviolet disinfection unit consists of nine four-lamp modules for the deep line and five four-lamp modules for the shallow line. The facility hatchery building also incorporates nylon stockings on each tank inlet for additional filtration. The filtering and disinfection process also serves to prevent any other fish eggs from being imported into the facility and accidentally raised and stocked in pristine trout waters.

Excess influent water and influent filter backwash are discharged to Cold Stream at the head of the facility prior to contact with any raised fish or eggs. MDIFW Enfield then passes deep, shallow, or blended source water to its hatchery and raceway systems as needed to meet temperature requirements (50-55 degrees Fahrenheit for most species, 65-70º F for salmon) for its fish.

1. APPLICATION SUMMARY (cont'd)

a) Hatchery Facilities: MDIFW Enfield's hatchery facilities consist of aluminum egg/fry troughs, plastic egg/fry troughs, combi-tanks, and hatching jars. Eggs are placed in hatching baskets and inserted into the aluminum egg/fry troughs, which are arranged in 12 lines of two 10-foot long by 16-inch wide by 12-inch deep (operational depth) (100-gallons) troughs for a total of 24 aluminum troughs. The flow-through rate for these units is 4 gpm for eggs and 6 gpm for fry per line or 72 gpm if all lines are in use. Eggs are also placed in hatching baskets in either of one 20-foot long by 29-inch wide by 18-inch deep (operational depth) (540-gallons) and one 30-foot long by 29-inch wide by 18-inch deep (operational depth) (810-gallons) plastic troughs. The flow-through rate for these units is 6-10 gpm per unit or 12-20 gpm if both are in use. Egg/fry troughs are used for egg hatching and initial rearing of fry until they are transferred to facility raceways for rearing.

MDIFW Enfield has five, 6-inch diameter by 12-inch deep (1.5-gallons) circular hatching jars and sixty, 6-inch diameter by 18-inch deep (2.2 gallons) hatching jars. Hatching jars are used to raise brook trout and whitefish eggs from acquisition in mid-November to the "eyed" stage in the end of December. Eyed brook trout eggs are transferred to aluminum troughs and eyed whitefish eggs are then transferred to combi- tanks for hatching and initial rearing. MDIFW Enfield also has five, 5-foot diameter by 3-feet deep (440-gallon) combi-tanks with a flow-through rate of 2-10 gpm through each tank for a total of 50 gpm for all combi- tanks. Combi-tanks are used for egg hatching and initial rearing of fry until they are transferred to facility raceways for rearing. MDIFW reports that currently all 24 of the aluminum egg/fry troughs, none of the plastic egg/fry troughs, and 1-5 of the combi-tanks depending on need are used.

Additional combi-tanks are used as needed to provide room for "thinning" the growing whitefish. The hatchery facility is used for hatching whitefish, broodstock and three strains of brook trout eggs and initial rearing of non-feeding sacfry from November through April, followed by start-up feeding of fry in May before they are moved to facility raceways. MDIFW Enfield reports that trout are typically moved out of the hatchery by mid-June, while whitefish and salmon are typically moved out by the first week of July. Water is supplied via gravity flow in series through each line, with a discharge of 0.176 MGD of hatchery wastewater into the facility waste-stream for treatment and discharge, as described below. After fry are moved to raceways, the hatchery facility is cleaned, shut down until the next season, and the discharge is discontinued.

b) Broodstock Facilities: Broodstock eggs are hatched and initially reared in the facility hatch house as described above, then moved to facility raceways in May to June.

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1. APPLICATION SUMMARY (cont'd)

c) Rearing Facilities: MDIFW Enfield's rearing facilities consist of two lines of covered concrete raceways referred to as the "A" (north) side and "B" (south) side raceways. Both the "A" and "B" raceways consist of three sets of six raceway pools for a total of 18 pools per side and 36 raceway pools for the facility. Each of the raceway pools is 6-feet wide by 100-feet long, operated at a depth of 18-inches (6,732-gallons). Influent water is blended in the raceway headboxes enabling temperature management of individual lines of raceway pools.

MDIFW Enfield utilizes raceway space depending on fish needs, with the exception that salmon are typically housed in one dedicated raceway line on the "A" side with 4 raceway pools used and 2 pools remaining vacant. Additionally, splake (2-5 pools) and lake trout (1 pool) are housed in one raceway line on the A side. All other raceway pools and lines are used as necessary for the species raised. Fish are raised for both spring and fall stocking.

Feeding is conducted manually for large fish and automatically by touch demand for smaller fish. MDIFW Enfield's application indicates using an average of 188 pounds of food per day, a maximum of 549 lbs./day, and a period of peak feeding during July, August, September.

d) Wastewater Treatment: All flows leaving the hatchery facility, broodstock facility, and the flow-through (non-cleaning) flows from the rearing facilities (raceways) are routed to a 60-micron drum filter for filtration prior to discharge to the receiving water. Wastewater from raceway cleaning activities is treated as described below.

To clean the raceways, MDIFW staff have a two-step process involving a vacuum system and traditional scrubbing. Prior to scrubbing, the fish waste collected in the quiescent zone is removed using a vacuum. A vacuum hose is located at the bottom of each row of three raceways and each vacuum is connected to common wastewater pipeline. The vacuum pipeline connects to a pump in the effluent building. The pump moves the fish waste to the microscreen drum filter and then the facility clarifier. MDIFW Enfield indicates that it takes 15 minutes to clean a row of quiescent zones. After the quiescent zones have been vacuumed, MDIFW staff scrub the sides and bottoms from the top end of the raceway pool moving down-flow toward the bottom end. At the bottom of all raceway pools is located a screened 10-foot long "quiescent zone" with a covered discharge pipe. The screen size is dependent upon fish size, with the smaller fish needing a finer meshed screen. After a raceway is cleaned, the discharge pipe "plug" is removed, sending cleaning flows via a common wastewater pipeline to the effluent microscreen drum filter. After the raceway pool and quiescent zone screen are cleaned, the quiescent zone plug is replaced and the cleaners move to the next raceway pool. MDIFW Enfield indicates that it takes approximately 20 minutes to clean each raceway pool and approximately eight hours to clean all pools. Typically, MDIFW Enfield cleans raceway pools progressing to adjacent

1. APPLICATION SUMMARY (cont'd)

pools, then downflow. All raceway pools are cleaned twice per week during the summer and once per week during the non-summer period, or more frequently as needed.

All raceway cleaning wastewater, vacuum wastewater, and the backwash of captured solids from the microscreen filter are routed via the common wastewater pipe to an approximate

20-foot by 20-foot by 20-foot (60,000-gallon) clarifier for a 24-48 hour settling period, during which time excess clarifier water (supernatant) is routed back to the microscreen filter for filtration and discharge. After the settling period, solids in the clarifier are automatically or manually pumped to an adjoining approximately 20-foot by 20-foot by 20-foot (60,000-gallon) sludge storage/dewatering tank designed to provide a minimum of 6-months of storage capacity. During the winter of 2011, MDIFW installed a rake arm to assist in clarifier solids removal. Sludge tank supernatant is routed back to the clarifier unit for additional treatment. Accumulated sludge is removed for proper disposal as needed.

After it exits the drum filter, MDIFW Enfield's treated wastewater is discharged to a freshwater wetland approximately 75 yards from, and hydrologically connected to, Cold Stream through Outfall #005A, a 36-inch diameter iron pipe that outlets one foot below mean low water.

MDIFW Enfield has designed a bypass of the facility drum filter in the event of routine filter maintenance or in the case of unforeseen filter equipment malfunction and necessary major repairs. During such times, MDIFW Enfield will not clean the facility or feed its fish so that all effluent discharges will consist of flow-through water only. A schematic of the facility 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.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward the terms and conditions of the December 5, 2019 permit, except that it:

1. Reestablishes a concentration limit for total phosphorus that was erroneously removed in the previous permit, this time utilizing the same data for calculating the previous permit's mass limit.

2. Corrects the Special Condition A, *Effluent Limitation and Monitoring Requirements,* table for total phosphorus daily maximum mass limits reporting to lbs/day.

3. Updates Special Condition A, *Effluent Limitations and Monitoring Requirements,* footnote 1*, Sampling* to use sufficiently sensitive methods.

2. PERMIT SUMMARY (cont'd)

4. Updates Special Condition E *Monitoring and Reporting* to the Department's most current requirements.

5. Amends Special Condition F, *Operation and Maintenance Plan* to include a section specifically applicable to wastewater operations and updates recordkeeping requirements.

6. Modifies Special Condition G, *Uses of Drugs for Disease Control* to be consistent with Department updates to MEPDES permit language for land-based fish hatcheries, regarding the application of preventative treatments

b. History: This section provides a summary of recent, relevant licensing/permitting actions that have been completed for the Enfield Rearing Station wastewater facility.

March 17, 1982 – The USEPA accepted MDIFW's application for renewal of NPDES Permit #ME0001104 as complete. Department files contain no evidence of further permitting actions by USEPA for this facility.

May 11, 1983 – The Maine Board of Environmental Protection issued WDL #2032 for the discharge of a daily maximum of 7.2 MGD of treated fish hatchery wastewater from the MDIFW Enfield hatchery to Cold Stream, Class B-1. The WDL was a renewal of a previously issued license #2032 and included limits for flow, TSS, settleable solids Ammonia Nitrogen, and pH. The WDL was issued for a five-year term.

May, 1988 – The Maine Department of Environmental Protection accepted a timely renewal application to authorize the discharge of 7.2 MGD hatchery wastewater to Cold Stream, a Class B waterbody and administratively continuing the previously issued permit until a new permit is issued.

April 18, 1996 – The Maine Department of Environmental Protection issued a letter clarifying the impact of upgrading Cold Stream to a Class A waterbody. The discharge from the MDIFW Enfield hatchery would be allowed to continue only until a practical alternative exists and would be "grandfathered" from having to meet Class A standards of discharging effluent that is of an equal or better quality than the receiving water as defined in Chapter 586. However, this letter did not allow for an exemption from all Class A standards in perpetuity and the letter does not stand as a legally binding document that supersedes legislative action. Internal Department discussion over the next three years made clear that the discharges would be required to meet water quality criteria for Class A waters.

July 21, 2000 – The Department issued # W-002032-5Q-A-R to MDIFW Enfield hatchery for the discharge of a daily maximum of 4.75 MGD of treated fish hatchery wastewater to Cold Stream, now designated as a Class A water. The WDL was issued for a five-year

3. **PERMIT SUMMARY (cont'd)**

term and established BOD and TSS monthly average concentration limits of 2.0 mg/L and phosphorus monthly average limits of 0.063 mg/L and 1.13 kg/day.

September 10, 2001 – The Department suspended monitoring requirements established in WDL # W-002032-5Q-A-R for Outfall #001A, designated for effluent discharges from the rearing facility when not cleaning raceways. The Department required monitoring for Outfall #001B, designated for effluent discharges from the rearing facility when cleaning raceways, to be conducted by auto-compositor and for monitoring for Outfall #003A, designated as the discharge from influent filter backwash, to continue as licensed. The Department made no mention of Outfall #002A, previously designated for a summary of the flow, mass of fish on hand, and total phosphorus values from Outfalls #001A and #001B.

November 13, 2001 – Based on a review of submitted effluent data, the Department administratively modified WDL # W-002032-5Q-A-R to suspend requirements to monitor Outfall #003A, designated for influent filter backwash discharges.

February 2002 – On behalf of MDIFW, Fishpro Inc. submitted an Alternative Discharge Study report for all nine MDIFW hatcheries and rearing stations. The study evaluated eliminating effluent discharges through piping the discharges to larger receiving waters, connecting to municipal wastewater treatment facilities, wastewater storage collection, land application of wastewater, and discharging to existing wetland areas. The study determined that none of the alternatives evaluated were economically viable options for the MDIFW facilities.

September 12, 2002 – The Department submitted a report entitled *Maine Department of Environmental Protection Water Quality Concerns and Effects from State Fish Hatchery Discharges* to the Maine Legislature's Inland Fisheries and Wildlife Subcommittee's Commission to Study the Needs and Opportunities Associated with the Production of Salmonid Sport Fish in Maine and MDIFW.

November 2002 – FishPro Inc. submitted to MDIFW its *Comprehensive Statewide Fish Hatchery System Engineering Study* addressing recommended upgrades to all MDIFW fish hatcheries and rearing facilities.

July 11, 2003 – The Department administratively modified WDL # W-002032-5Q-A-R to extend the 3-year schedule of compliance for BOD, TSS, and phosphorus effluent limits established in the WDL through the life of the WDL.

March 31, 2006 - The Department issued MEPDES Permit #ME0001104 / Maine WDL #W-002032-5Q-B-R to MDIFW Enfield for the discharge of a monthly average of 4.75 MGD and 0.072 MGD of fish rearing facility and fish hatchery wastewater, respectively to Cold Stream, Class A, in Enfield. The Permit / WDL was issued for a five-year term and established monthly average and daily maximum BOD and TSS

2. PERMIT SUMMARY (cont'd)

concentration limits at 6mg/L and 10 mg/L respectively monthly average and daily maximum mass limits for BOD and TSS for two outfalls. Also, the permit modified the monthly average phosphorus limit to 0.4 mg/L and established a minimum dissolved oxygen daily limit of 7.5 mg/L.

October 6, 2008 - The Department issued Minor Revision #W-002032-5Q-C-M / MEPDES Permit #ME0001104 to revise effluent formalin limitations based on newly obtained toxicity data and a revision of the Department's best professional judgement of ambient water quality criteria.

April 23, 2009 - The Department issued Minor Revision #W-002032-5Q-D-M / MEPDES Permit #ME0001104 to revise effluent BOD_5 and TSS minimum monitoring frequency requirements from once / 2 weeks to once / month. The Minor Revision also provided guidance for reporting analytical results below detection and/or reporting limits.

December 15, 2010 – MDIFW Enfield submitted a timely application for renewal of its MEPDES Permit / WDL. The application was assigned MEPDES Permit #ME0001104 / WDL #W-002032-6F-E-R.

December 5, 2011 – The Department issued Maine WDL #W-002032-6F-E-R / MEPDES Permit ME0001104 for a five-year term and combined Outfall #005A and #006A into one reporting outfall.

June 15, 2016 – MDIFW submitted a timely application for renewal of its MEPDES Permit/Maine WDL. The application was accepted as complete for processing on *June 17, 2016*, and was assigned Maine WDL #W-002032-6F-F-R / MEPDES Permit #ME0001104.

March 15, 2019 – The Department issued Maine WDL #W002032-6F-F-R / MEPDES Permit ME0001104 for a five-year term and eliminated BOD monitoring, continued TSS concentration and mass limits, established a monthly average mass limit of 2.1 lbs./day and went to report only for phosphorus concentration limits.

February 7, 2024 – MDIFW submitted a timely application for renewal of its WDL/MEPDES Permit. The application was accepted as complete for processing on *Fegbruary 14, 2024* and was assigned Maine WDL #W-002032-6F-G-R / MEPDES Permit #ME0001104.

DATE – The Department issued Maine WDL #W002032-6F-G-R / MEPDES Permit ME0001104 for a five-year term. Ambient monitoring requirements are being added to the IFW hatchery licenses as needed to evaluate local site conditions, potentially identify sources of phosphorus and to calculate future reasonable potential to cause or contribute to an excursion above water quality standards. However, ambient monitoring requirements were

not added to the MDIFW Enfield permit because of the facility's excellent compliance record and the receiving water quality standards are consistently being met.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the 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. § 420 and Department rule *Surface Water Toxics Control Program,* 06-096 CMR ch. 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 ch. 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

Classifications of major river basins, 38 M.R.S. § 467(7)(F)(6) classifies the Passadumkeag River as follows:

> *Passadumkeag River and its tributaries-Class A, unless otherwise specified.*
>
> *(a) Passadumkeag River from the Pumpkinhill Dam to its confluence with the Penobscot River – Class AA.*
>
> *(b) Ayers Brook – Class AA.*

Cold Brook is a tributary of the Passadumkeag River and is a Class A waterway at the point of discharge.

Standards for classification of fresh surface waters, 38 M.R.S. § 465(2) describes the standards for Class A waters as follows:

2. Class A waters. *Class A shall be the 2nd highest classification.*

A. Class A waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as natural.

B. The dissolved oxygen content of Class A 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 one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. The aquatic life and bacteria content of Class A waters must be as naturally occurs, except that the numbers of Escherichia coli bacteria in

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

these waters may not exceed a geometric mean of 64 CFU or MPN per 100 milliliters over a 90-day interval or 236 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval.

C. Except as provided in this paragraph, direct discharges to these waters licensed after January 1, 1986 are permitted only if, in addition to satisfying all the requirements of this article, the discharged effluent will be equal to or better than the existing water quality of the receiving waters. Prior to issuing a discharge license, the department shall require the applicant to objectively demonstrate to the department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. Discharges into waters of this classification licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist.

(1) This paragraph does not apply to a discharge of storm water that is in compliance with state and local requirements.

(2) This paragraph does not apply to a discharge to Class A waters that are or once were populated by a distinct population segment of Atlantic salmon as determined pursuant to the United States Endangered Species Act of 1973, Public Law 93-205, as amended, if, in addition to satisfying all the requirements of this article, the applicant, prior to issuance of a discharge license, objectively demonstrates to the department's satisfaction that the discharge is necessary, that there are no other reasonable alternatives available and that the discharged effluent is for the purpose of and will assist in the restoration of Atlantic salmon and will return the waters to a state that is closer to historically natural chemical quality.

(3) This paragraph does not apply to aquatic pesticide or chemical discharges approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency for the purpose of restoring biological communities affected by an invasive species.

(4) For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will be equal to or better than the existing water quality of the receiving waters as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this subparagraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

(5) This paragraph does not apply to discharges of pesticides approved by the department that are:

(a) Unintended and an incidental result of the spraying of pesticides;

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

(b) Applied in compliance with federal labeling restrictions; and
(c) Applied in compliance with statute, Board of Pesticides Control rules and best management practices.

D. Storm water discharges to Class A waters must be in compliance with state and local requirements.

E. Material may not be deposited on the banks of Class A waters in any manner that makes transfer of pollutants into the waters likely.

Pursuant to 38 M.R.S. § 465 (2)(C), prior to issuing a discharge license, the Department requires the applicant to objectively demonstrate to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. An Alternative Discharge Study performed by Fishpro for multiple MDIFW facilities (including Grand Lake Stream) indicates that there are no reasonable alternatives to the current discharge. MDIFW (via email correspondence to the Department dated February 12, 2024) confirmed the 2002 Fishpro conclusions that there are no practical alternatives to the discharge is valid for purposes of this permitting action.

5. REASONABLE POTENTIAL

Pursuant to 33 U.S.C. § 1311(b)(1)(C) and 40 C.F.R. § 122.44(d)(1), NPDES permits must contain any requirements in addition to technology based effluent limits (TBELs) that are necessary to achieve water quality standards (WQS) established under § 303 of the CWA. *See also* 33 U.S.C. § 1311(b)(1)(C). In addition, limitations "must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i). To determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any WQS, EPA considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent by the receiving water. *See* 40 C.F.R. § 122.44(d)(1)(ii).

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain water quality-based effluent limits (WQBELs) for that pollutant. *See* 40 C.F.R. § 122.44(d)(1)(i).

6) RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists Cold Stream ((Enfield) downstream of the hatchery) as

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Integrated Report Assessment Unit ID ME0102000503_221R01) as, "Category 4-B, Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment." The listing identifies the impairment cause as benthic-macroinvertebrate bioassessments (Streams) for a 1.63-mile segment of Class A water. The Comment field for the Category 4-B entry states "3/18/21: Macroinvertebrates met Class A biocriteria in 2016 (S-484). Hatchery permit renewed 3/18/19." Subsequent biomonitoring in 2023 of this segment of Cold Brook demonstrated Class A attainment.

Aquatic life criteria attainment in Cold Stream downstream from the hatchery, based on macroinvertebrate sampling conducted at biomonitoring station S-484, attained class A in most sampling years except for in 2001 and 2021. Water levels and precipitation in 2021 were much lower than normal, while streams in 2023 experienced extreme high flows, the Cold Stream was above bank-full level at the time of macroinvertebrate sampling and sample nutrient concentrations were significantly lower than in 2021.

Sample Date	**Final Class Determination**
8/20/2001	Class B
8/17/2006	Class A
8/17/2011	Class A
8/16/2016	Class A
8/12/2021	Class B
8/14/2023	Class A

The State of Maine 2018/2020/2022 Integrated Water Quality Monitoring and Assessment 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 (Total Maximum Daily Load (TMDL) Completed) due to the 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." Pursuant to 38 M.R.S. § 420(1-B)(B), "a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11." However, pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury,* 06-096 CMR 519, the Department has made a best professional judgment determination to exempt fish hatcheries from applicability of the mercury rule.

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department has made a best professional judgment determination based on information gathered to date, that as permitted, the discharge will not cause or contribute the failure of the receiving water to meet the standards of its ascribed classification and the designated uses of the waterbody will continue to be maintained and protected. If future modeling determines that at full permitted discharge limits, the discharge is causing or contributing to the non-attainment, this permit will be re-opened per Special Condition K, *Reopening of The License For Modifications*, to impose more stringent limitations to meet water quality standards.

7. EFFLUENT LIMITATIONS & 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 lbs. or more per year of aquatic animals in a flow-through or recirculating system. For the MDIFW Enfield facility, the maximum pounds of fish on station as reported for the reporting period of April 2019 – December 2023, at any time consisted of a maximum of 53,417 lbs. The facility's daily maximum of 53,417 lbs./day is less than the 100,000 lbs. per year applicable threshold and is therefore not categorically subject to regulation under this subpart.

b. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average flow limitation of 5.0 MGD for Outfall #005A. This permitting action is also carrying forward the daily monitoring and reporting requirement established in the previous permit.

A summary of the discharge flow data as reported on the monthly Discharge Monitoring Reports (DMRs) for the period of April 2019 – December 2023 is as follows:

Flow in conduit (DMR=56)

Discharge Flow	Minimum	Maximum	Mean
Monthly Average	4.17 MGD	4.92 MGD	4.7 MGD

c. Dilution Factors: Dilution factors associated with wastewater discharges are derived in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 CMR ch. 530 (effective March 21, 2012), and methods for low flow calculation contained in Estimating Monthly, Annual, and Low 7-day, 10-year Stream flows for Ungauged Rivers in Maine (Scientific Investigations Report 2004-5026, US Department of Interior, US Geological Service). To calculate potential effects from a facility's effluent discharge, the Department utilizes the receiving water's available dilution during low flow conditions. The MDIFW Enfield facility discharges its treated facility effluent (Outfall #005A) to a freshwater wetland, which in turn flows approximately 75

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

yards into the side of Cold Stream. Typically, these types of discharges do not achieve rapid and complete mixing with the receiving water since initial dilution is based on mixing resulting from the momentum of a discharge as it exits a discharge pipe (jet effect) as well as the dispersion of the effluent plume as it rises to the surface of the receiving water.

MDIFW owns the dam on Cold Stream Pond, and there is no formal Water Level Order for Cold Stream Pond and no formal requirement specifying a guaranteed minimum flow that must be passed over or through the dam to Cold Stream. MDIFW Enfield reports that the pond water level sometimes falls below the height of the dam spillway. Reportedly, flow is always maintained through the dam's 8-inch by 10-inch fishway opening and the dam allows some leakage, but Cold Stream below the dam is virtually dewatered on occasion. At those times, the MDIFW Enfield discharge constitutes the largest component of the flow in that portion of Cold Stream.

MDIFW reports that the facility's influent water treatment system is able to discharge excess flows to the river above the facility and maps indicate that a tributary enters Cold Stream below the dam. In 2019 the permitting action included new information regarding the gate elevation relative to the primary spillway, which has also been taken into consideration in this permitting action. There is a gate that is kept open at least 1" at all times to allow a minimum flow to Cold Stream. The gate is 60" wide and 54" below the spillway apron. With a monthly average flow limitation of 5.0 MGD and based on Department analysis conducted pursuant to the methods outlined above, the dilution factors associated with the MDIFW Enfield facility are calculated as follows:

Conversion factor: 1 cfs = 0.6464 MGD

Mod. Acute: ¼ 1Q10 = 0.98 cfs $\Rightarrow \frac{(0.98 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.13:1$

Acute: 1Q10 = 3.9 cfs $\Rightarrow \frac{(3.9 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.5:1$

Chronic: 7Q10 = 3.9 cfs $\Rightarrow \frac{(3.9 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.5:1$

Harmonic Mean = 11.7 cfs $\Rightarrow \frac{(11.7 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 2.5:1$

If MDIFW wishes to establish a different guaranteed minimum flow from the Cold Stream Pond dam in the future or can provide long term guaranteed minimum flow data, this determination may be revisited.

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

d. TSS: The 2006 permitting action established a monthly average and daily maximum concentration limits of 6 mg/L and 10 mg/L respectively for TSS.

Mass limits were determined in the 2011 permitting action when two previous outfalls (Outfall #005A and Outfall #006A) were combined to form one outfall (current Outfall #005A) as depicted below:

Outfall #005A flow = 4.75 MGD
Outfall #006A flow = 0.072 MGD

Mass Limits (TSS)

	Previous Outfall #005A	Previous Outfall #006A	Current Outfall #005A
Daily Maximum	396	6	402
Monthly Average	78	1.2	79

Mass limits for the daily maximum limits were derived from 10 mg/L. Monthly average mass limits were derived from 2 mg/L, which was established in a previous licensing action.

A summary of the TSS data as reported on the monthly DMRs for the period of April 2019 – December 2023, is as follows:

TSS Mass (DMRs = 56)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	79	<0 – 45.3	0.8
Daily Maximum	402	<36.0 – 81.9	72

TSS concentration (DMRs = 56)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	6	<1.0 – 2.0	<1.8
Daily Maximum	10	<1.0 – 2.0	<1.8

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

e. Dissolved Oxygen: The 2011 permit established, and this permitting action is carrying forward the daily minimum limit of 7.5 mg/L, monthly average and daily maximum monitoring requirements for dissolved oxygen. The 2011 permit revised, and this permit renewal is carrying forward, the minimum monitoring frequency of twice per month based on the discharge monitoring data. Data is submitted to the Department via discharge monitoring reports June through September each year. The Department reviewed 20 DMRs that were submitted for the period of April 2019 – December 2023. The data indicates the following:

Dissolved Oxygen (DMR=20)

Parameter	Limit	Range	Mean
Daily Minimum	7.5	7.8 – 9.4	8.5

Total Phosphorus: The 2019 permitting action recalculated the phosphorus concentration and mass limits based on new information regarding the receiving water and the upstream dam that increased the dilution factor. The 2019 permitting action also removed concentration limits for phosphorus. Section 402(o) of the Clean Water Act contains prohibitions for anti-backsliding. Anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules. The Department does not have sufficient documented justification for this action and is therefore reinstating concentration limits in this permit.

Based on Department research, the ambient water quality criteria (AWQC) of 0.035 mg/L corresponds to the maximum level at which algal blooms will not typically occur in a receiving river or stream under normal circumstances. Phosphorus is typically of concern under chronic discharge conditions, as impacts are generally observed after a longer exposure period than what is generally observed under acute, 1-hour impacts. Using the chronic criteria for aquatic life based on the 7Q10 stream design flow, a dilution factor of 1.5, and the instream ambient water quality threshold of 0.035 mg/L, the monthly average concentration and mass limits were calculated as follows:

Concentration: (1.5)(0.035 mg/L) = **0.05 mg/L**

Mass: 0.05 mg/L x 8.34 lbs./gal. x 5.0 MGD = **2.1 lbs./day**

The monthly average concentration limitation of 0.05 mg/L for total phosphorus is being established based on BPJ of BPT for this discharge. Monitoring remains limited to June through September, annually. This is a water quality-based limit necessary to ensure compliance with Class A water quality standards.

The Department reviewed 20 DMRs that were submitted for the period of April 2019 – December 2023. The data indicates the following:

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Phosphorus concentration (DMRs = 20)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	Report	0.02 – 0.07	0.04
Daily Maximum	Report	0.02 – 0.08	0.04

Phosphorus Mass (DMRs = 20)

Value	Limit	Range (lbs./day)	Mean (lbs./day)
Monthly Average	2.1 lbs./day	0.8 – 2.6*	1.4
Daily Maximum	Report lbs./year**	0.8 – 3.2	1.5

* There was one reported violation of the monthly average mass limit during the period of April 2019 – December 2023.
** There was an error in the 2019 permit which listed the daily maximum limit as lbs./year even though the actual limit was based on lbs./day.

g. Fish on Hand: This permitting action is reducing the 2/Month reporting requirement for fish on hand to 1/Month. A review of the DMR data for the MDIFW Enfield facility for the period of April 2019 – December 2023 indicates the following.

Fish on Hand (DMR=56)

Value	Limit lbs./day	Range lbs./day	Mean lbs./day
Daily Maximum	Report	19,037 – 53,417	36,352

h. Formalin: Formalin is a drug used to treat fungal infections and external parasites of finfish and finfish eggs. Effluent mass limits were previously and remain calculated based on the permittee's projected maximum amount of formalin used per day times the weight of formalin (9.13 lbs./gal). Utilizing the projected maximum amount of formalin used per day for the 2008 permit and combining outfalls #005A and #006A, formalin mass limits are calculated as follows:

(11.2 gal/day + 0.15 gal/day)(9.13 lbs./gal) = 103.6 lbs./day

The 2019 permitting action established and this permit is carrying forward a daily maximum mass effluent limitation of 104 lbs./day and a report only requirement for the mass monthly average. This permitting action is carrying forward the minimum monitoring frequency requirement of once per occurrence for formalin.

A review of the DMR data for the IFW Enfield facility for the period of April 2019 – December 2023 indicates the following.

Formalin Mass (DMR=38)

Value	Limit lbs./day	Range lbs./day
Monthly Average	Report	0.69 – 75.32
Daily Maximum	104	0.69 – 85.14

8. ANTI-BACKSLIDING

Federal regulation 40 C.F.R. § 122.44(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include: (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than those in the previous permit.

9. ANTI-DEGREDATION

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 Cold Stream to meet standards for Class A classification.

11. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily* newspaper on or about February 14, 2024. 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 must 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 ch. 522 (effective January 12, 2001).

12. DEPARTMENT CONTACTS

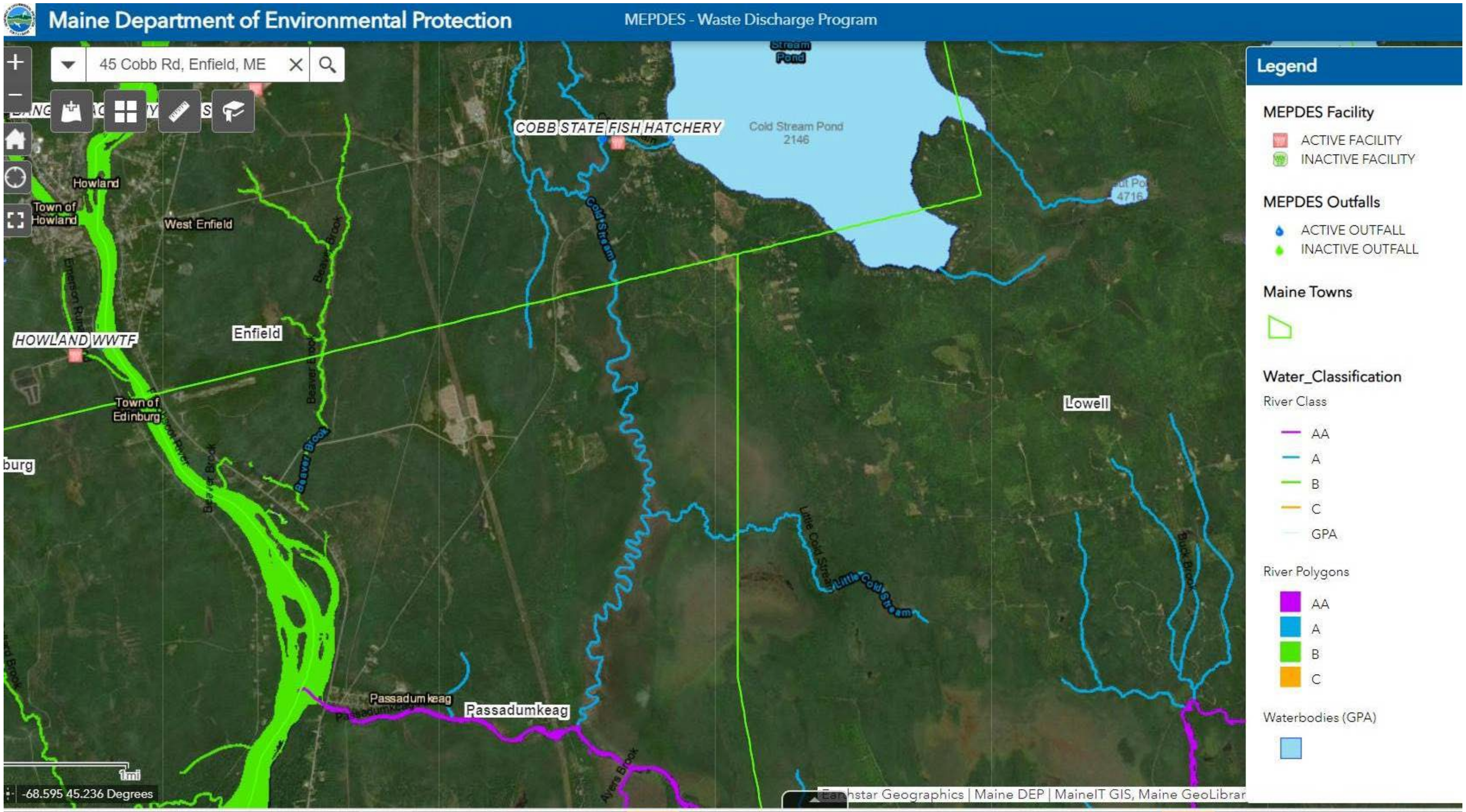
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Laura Crossley
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 615-6711
e-mail: Laura.Crossley@maine.gov

13. RESPONSE TO COMMENTS

To be updated after proposed draft period

FACT SHEET ATTACHMENT A


Maine Department of Environmental Protection
MEPDES - Waste Discharge Program
45 Cobb Rd, Enfield, ME
COBB STATE FISH HATCHERY
Cold Stream Pond
2146
Howland
Town of Howland
West Enfield
HOWLAND WWTF
Enfield
Town of Edinburg
Lowell
Passadumkeag
Cold Stream
Little Cold Stream
Legend
MEPDES Facility
ACTIVE FACILITY
INACTIVE FACILITY
MEPDES Outfalls
ACTIVE OUTFALL
INACTIVE OUTFALL
Maine Towns
Water_Classification
River Class
AA
A
B
C
GPA
River Polygons
AA
A
B
C
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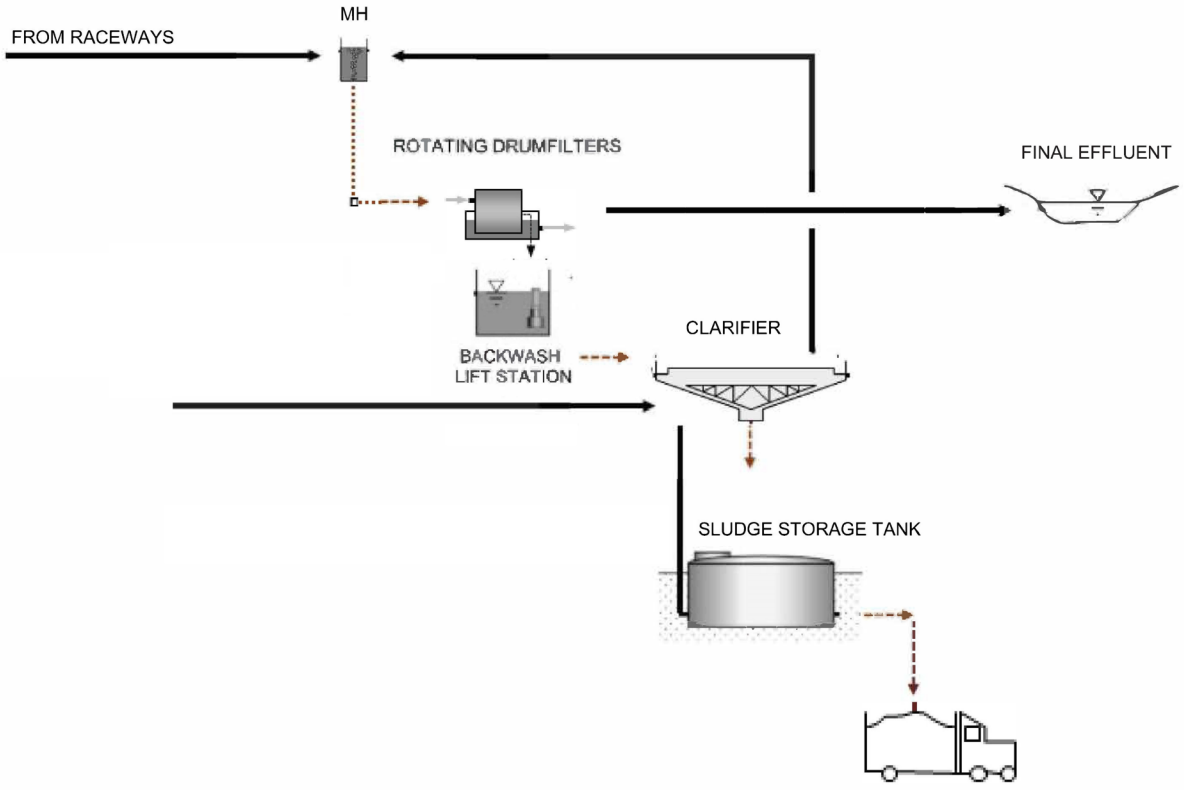
1mi

Fact Sheet Attachment B


FROM RACEWAYS
MH
ROTATING DRUMFILTERS
FINAL EFFLUENT
BACKWASH
LIFT STATION
CLARIFIER
SLUDGE STORAGE TANK

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.