STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**





September 17, 2024

Mr. Todd Langevin Superintendent of Hatcheries 41 State House Station Augusta, ME. 04333

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001058 Maine Waste Discharge License (WDL) Application #W0002036-6F-G-R **Proposed Draft MEPDES Permit**

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

AUGUSTA 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017 (207) 287-7688 FAX: (207) 287-7826 (207) 941-4570 FAX: (207) 941-4584

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401

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

PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769 (207) 764-0477 FAX: (207) 760-3143

If you have any questions regarding the matter, please feel free to call me at (207) 592-6871 or email me at <u>Benjamin.S.Pendleton@maine.gov</u>

Sincerely,

Benjamin S. Pendleton

Benjamin Pendleton Division of Water Quality Management Bureau of Water Quality

Enc.

cc: James Knight, DEP/CMRO Bradley Kelso, DEP/CMRO Wendy Garland, DEP/CMRO Lori Mitchell, DEP/CMRO Elizabeth Latti, MEDIFW Lynne Jennings, USEPA Ellen Weitzler, USEPA Michael Cobb, USEPA Alex Rosenberg, USEPA Richard Carvalho, USEPA Environmental Review, MEDIFW Environmental Review, MEDMR Sean Mahoney, CLF



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

DEPARTMENT ORDER

IN THE MATTER OF

ME. DEPT. OF INLAND FISHERIES & WILDLIFE)			MAINE POLLUTANT DISCHARGE
PHILLIPS FISH HATCH	IERY)	ELIMINATION SYSTEM PERMIT
PHILLIPS HATCHERY	, FRANKLIN COUNTY,)	AND
MAINE)	
#ME0001058)	WASTE DISCHARGE LICENSE
#W002036-6F-G-R	APPROVAL)	RENEWAL

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

APPLICATION SUMMARY

On February 16, 2024, the Department accepted as complete for processing, an application from MDIFW for the renewal of combination of Waste Discharge License (WDL) #W002036-6F-F-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001058, which was issued January 30, 2021, for a five-year term. The January 30, 2021, MEPDES permit authorized MDIFW to discharge a monthly of 0.36 million gallons per day (MGD) of treated fish hatchery wastewater to Meadow Brook, Class A, from the MDIFW Phillips Hatchery in Phillips, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permit except that this permitting action is:

- 1. Reestablishing a concentration limit for total phosphorus that was erroneously eliminated in the May 4, 2015 permitting action.
- 2. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to include using sufficiently sensitive methods.
- 3. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements* footnote 2, *Composite Samples,* to be consistent with the Departments most current language.
- 4. Establishing footnote 4 *Twice per Month Monitoring* to be consistent with MEPDES permit language for land-based fish hatcheries/rearing facilities requiring twice per month monitoring.

PERMIT SUMMARY

- 5. Updating Special Condition B(3), Narrative Effluent Limitations, to be consistent with the Department's most current language.
- 6. Updating Special Condition E *Monitoring and Reporting* to the Department's most current requirements.
- 7. Removing Section 6 from Special Condition F, *Operations and Maintenance Plan*, as this facility has no formal wastewater treatment.
- 8. 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.
- 9. Removing Special Condition J *Practical Alternatives Analysis*, to be consistent with MEPDES permit language for land-based fish hatcheries/rearing facilities.
- 10. Establishing Special Condition J *Resuming Operations*, to dictate the permittee's responsibilities if the facility is to become active again.

CONCLUSIONS

Based on the findings in the attached 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 natural resource, that water quality will be maintained and protected;
 - (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 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 *Classification of Maine Waters*, 38 M.R.S. § 464(4)(A)(l)(a) for the direct discharge of pollutants to waters having a drainage area of less than 10 square miles.

DRAFT PERMIT

ACTION

THEREFORE, the Department APPROVES the application of the MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE to discharge a monthly average of 0.36 MGD of fish hatchery wastewater via Outfall #005A to Meadow Brook, Class A, in Phillips, Maine, SUBJECT TO ALL APPLICABALE 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 and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 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, 2024Date of application acceptance:February 16, 2024

Date filed with Board of Environmental Protection

This Order prepared by Benjamin Pendleton, Bureau of Water Quality

ME0001058 DRAFT PERMT W002036-6F-G-R SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **fish hatchery wastewater from** <u>Outfall #005A (fish hatchery and rearing station)</u> to Meadow Brook. Such discharges must be limited and monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic		Discharge Limitations					Minimum Monitoring Requirements	
	Monthly	Daily	Monthly	Daily	Daily	Measurement	Sample	
	Average	Maximum	Average	Maximum	Minimum	Frequency	Туре	
Flow	0.36 MGD					Daily	Measured	
[50050]	[03]					[01/01]	[MS]	
TSS	5 lbs./day	30 lbs./day	6 mg/L	10 mg/L		1/Month	Composite ⁽²⁾	
[00530]	[26]	[26]	[19]	[19]		[01/30]	[CP]	
Dissolved Oxygen (June 1 st – September 30 th) [00300]			Report mg/L [19]	Report mg/L [19]	7.5 mg/L <i>[19]</i>	1/Week [01/07]	Measured [MS]	
Total Phosphorus ⁽³⁾ (June 1 st – September 30 th) [00665]	0.07 lbs./day [26]	Report lbs./day [26]	0.037 mg/L <i>[19]</i>	Report mg/L [19]		2/Month ⁽⁴⁾ [02/30]	Composite ⁽²⁾ [CP]	
Fish on Hand [45604]	Report lbs./day [26]	Report lbs./day [26]				1/Month [01/30]	Calculated [CA]	
Formalin ⁽⁵⁾ 24-Hour Treatment Maximum [51064]	Report lbs./day [26]	33 lbs./day [26]				1/Occurrence [01/OC]	Calculated [CA]	
Formalin ⁽⁵⁾ 1-Hour Treatment Maximum [51064]	Report lbs./hour [26]	12.5 lbs./hour <i>[2R]</i>				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 6 and 7 of this permit for applicable footnotes

ME0001058 W002036-6F-G-R

SPECIAL CONDITIONS

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

FOOTNOTES

1. Sampling – All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process, as to be representative of end-of-pipe. 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 (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a 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 C.M.R. ch. 263 (Amended March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 C.M.R. ch. 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. 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.
- 3. 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.

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

FOOTNOTES

- 4. 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.
- **5.** 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 or lbs./hr.):

Formalin applied (gallons) $x 9.03^{1}$ (lbs./gallon) = Total formalin in effluent

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.

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

- 1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
- 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 usages designated for the classification of the receiving waters.
- 3. The permittee must not discharge effluent that imparts color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their classification.
- 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 16, 2024; 2) the terms and conditions of this permit; and 3) only from Outfall #005A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty four-hour reporting* D(1)(f), 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 or quantity of wastewater introduced to the wastewater collection and treatment system; and
 - b. Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

E. MONITORING AND REPORTING (con't)

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.

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. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR submittal will suffice. 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. OPERATIONS AND MAINTENANCE (O&M) 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.

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

c. Procedure for removal and disposal of mortalities to prevent discharge to waters of the State, unless so authorized by the Department and in order to benefit the aquatic environment.

2. Materials Storage

- a. Ensure proper storage of drugs¹, pesticides², feed, chemicals 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. Keep 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, <u>Use of Drugs for Disease Control</u>, and Special Condition H, <u>Use of Pesticides and Other Compounds</u>.

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.

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

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

F. OPERATIONS AND MAINTENANCE (O&M) 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.

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.

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 medicated feeds, drugs and other fish or mammal therapeutants must be registered with US Environmental Protection Agency (USEPA) as appropriate, approved by the US Food and Drug Administration (USFDA), and applied according to USFDA accepted guidelines. Further, records of all such materials used must be maintained at the facility for a period of five years. Records must contain the date applied, concentration, and mass of therapeutic agents applied each day.
- 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 Phillips Fish Hatchery during the term of the permit, which was provided by the permittee on Form DEPLW1999-18 included with its February 16, 2024, General Application for Waste Discharge Permit, is included as Attachment B of this permit.

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

Name	Frequency of Use	Concentration	Quantity Used/Year
Parasite-S (formalin)	As Needed	1667 mg/L (15 min)	+/- 20 gal
		175-200 mg/L (1-hr)	
Tricane-	As Needed	15-330 mg/L	<200 grams
Methanesulfonate			
(Tricaine-S, MS 222)			
Halamid Aqua	As Needed	12-20 mg/L	< 5 lbs

- c. Drugs not identified in the permittee's application. When the need to treat or control diseases requires the use of a FDA-approved drug not identified in an application, the permittee 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 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.

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

- 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.
- 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 characterize the environmental fate of the INAD and its metabolite(s) may be proposed for consideration in determinations of environmental monitoring and evaluation programs required by the Department pursuant to this section.
 - c. Notification. The permittee 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 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	25-40 mg/L	<1 Liter

H. PESTICIDES AND OTHER COMPOUNDS

- 1. General requirements. All pesticides used at the facility must be applied in compliance with federal labeling restrictions and in compliance with applicable statute, Board of Pesticides Control rules and best management practices (BMPs). Chemicals or compounds not registered as pesticides and proposed for use at the facility must be identified in the permittee's application and may only be discharged to waters of the State with express approval in this permitting action. 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 Standard Condition D, and 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 in use:

Name	Frequency of Use	Concentration	Quantity Used/Year
Virkon Aquatic	As needed	1% solution (1.3	+/- 10 lbs
		oz/gal H ₂ O)	

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

Name	Frequency of Use	Concentration	Quantity Used/Year
Argentyne or	As needed	100 mg/L (37.8/	+/- 3 gal
Ovadine		ml/gal H ₂ O)	
Sodium Chloride	As needed	1-2%	<1000 lbs

I. SPILLS

In the event of a spill of drugs, pesticides, or feed that results in a discharge to waters of the State of Maine, the permittee must provide an oral report of the spill to 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.

J. RESUMING OPERATIONS

At a minimum of thirty (30) days prior to the planned resumption of operations or within 24 hours of an emergency resumption of operations, the permittee must notify the Department's permitting and compliance inspection staff. Upon resuming operations all effluent limitations, monitoring, and reporting requirements will come into effect.

K. REOPENING OF PERMIT FOR MODIFICATION

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

L. SEVERABILITY

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

PERMIT 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.

PERMIT ATTACHMENT B

DISINFECTANTS:		Phillips Hatchery Disinfec	tants/Drugs/Theraputic Agents	MEPDES #:	ME0001058	
PRODUCT NAME		INGREDIENTS	FREQ. OF USE	CONCE	NTRATION	POTENTIAL USE
Virkon Aquatic	Potassium perox Sodium chloride Other ingredients	vmonosulfate21.41%	As needed for disinfection of nets, utensils, boots, stocking trucks,etc.		(1.3 oz/gal H2O)	+/- 10 lbs
Argentyne or Ovadine		Complex10% 90% 1%	As needed for disinfection of eggs, nets, utensils, boots, stocking trucks,etc.) ppm ; Il/gal H2O)	+/- 3 gal
DRUGS/THERAPEUTIC AGENTS:						
PRODUCT NAME		INGREDIENTS	FREQ. OF USE	CONCE	NTRATION	POTENTIAL USE
Parasite-S/ Formalin	Formaldehyde Methanol Water & Inert	6-14%	As needed for fungus control on eggs and parasite control on fish.	15 mi 175-	07 ppm n duration 250 mg/l duration	+/- 20 gals
Tricaine-S (MS 222)	Tricaine methan	esulfonate	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.	25-	40 mg/l	Annual anticipated use = 0 Potential use < 1 liter
Sodium Chloride blocks or crystals	NaCl		As needed as a fish stress reduction/osmoregulatory aid post handling/post parasitization	1	- 2%	<1000 lbs
Halamid Aqua	Chloramine-T		Control of bacterial gill disease Used in hatchery for fry		20 mg/l r label	Annual anticipated use = 0 Potential use < 5 lbs

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: September 17, 2024

PERMIT NUMBER: #ME0001058

WASTE DISCHARGE LICENSE: #W002036-6F-G-R

NAME AND ADDRESS OF APPLICANT:

MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE 284 STATE STREET, 41 STATE HOUSE STATION AUGUSTA, MAINE 04333

COUNTY:

FRANKLIN

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S): MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE PHILLIPS FISH HATCHERY 147 FISH HATCHERY ROAD PHILLIPS, MAINE 04966

RECEIVING WATER CLASSIFICATION: MEADOW BROOK/CLASS A

COGNIZANT OFFICIAL CONTACT INFORMATION:

TODD LANGEVIN, SUPERINTENDENT (207) 287-5262 Todd.Langevin@maine.gov

1. APPLICATION SUMMARY

- a. <u>Application</u>: On February 16, 2024, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from the Maine Department of Inland Fisheries and Wildlife (MDIFW Phillips) for Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001058/ Waste Discharge License (WDL) #W002036-6F-F-R, which was issued on January 30, 2021, for a five-year term. The January 30, 2021 permit authorized MDIFW to discharge a monthly of 0.36 million gallons per day (MGD) of fish hatchery wastewater from the MDIFW Phillips Hatchery to Meadow Brook, Class A, in Phillips, Maine. Although the facility is not currently operational, the February 16, 2024 permit application requests to carry the same discharge.
- b. <u>Source Description</u>: The MDIFW Phillips State Fish Hatchery was constructed in 1931 as a state aquaculture facility and is located on a 38.4-acre parcel of state-owned land. MDIFW Phillips was originally established as a brook trout rearing station and was converted to a broodstock hatchery in 1965. MDIFW Phillips is a flow-through facility with flows through its hatchery and rearing facilities discharged to Meadow Brook (Class A, less than 10 square mile watershed). A map showing the location of the facility is included as **Fact Sheet Attachment A**.

MDIFW Phillips consists of a hatchery building, covered raceways for fish rearing, a concrete effluent linear clarifier, an earthen effluent settlement lagoon, and associated structures including a residence, barn, generator building, tool shed, and solar warming collector for hatchery well water.

- c. <u>Influent Water</u>: MDIFW Phillips' influent water is supplied by one well, a spring, and a storage reservoir within Meadow Brook.
- d. <u>Groundwater</u>: Water for the hatchery building is supplied by a well (average flow 11 gpm) and an upstream spring (average flow 233 gpm). The well and spring are connected to a solar warming collector to raise the water temperatures for fry and spring yearling fish in the hatchery building. Influent water to the hatchery facility is injected with oxygen and water sources are blended as necessary to achieve optimal hatching and initial rearing conditions. The hatchery building headbox utilizes a sealed aeration/degassing column to reduce high dissolved nitrogen gas concentrations and increase the dissolved oxygen.
- e. <u>Reservoir Water</u>: Water for the rearing facility raceways is supplied by the Meadow Brook storage reservoir (maximum flow 400 gpm, average flow 243 gpm) and the flow-through water from the hatchery facility. The reservoir intake contains a coarse screen to exclude large debris and wild fish from entering the facility. Water is supplied from the reservoir to the rearing facility via a 10-inch diameter pipe. Influent water is made to "spill over" at the head of the raceway system to provide aeration. Bulk liquid oxygen tanks (LOX) and low head oxygenators (LHO) are used to aerate and provide oxygen at every third raceway pool. Flow-through water from the hatchery facility is piped to the head of the raceways via a 4-inch diameter pipe that passes through two 700-gallon settlement tanks prior to entering the rearing structures. An additional surface water supply pond (capacity 30 gpm) is connected to the fifth raceway pool via a 3-inch diameter pipe for use to insure adequate rearing flows during cleaning operations. This surface water pond is also available for supplementing facility flows in the event of extreme drought conditions. MDIFW Phillips has been a broodstock facility designed to produce eggs as described above. MDIFW Phillips does not produce fish for a stocking program of its own but produces enough fish to meet its

1. APPLICATION SUMMARY (con't)

described purpose. Thus, all fish maintained at MDIFW Phillips are broodstock trout of varying degrees

f. <u>Hatchery Facilities</u>: MDIFW Phillips was historically a brook trout hatchery and broodstock rearing facility that supplied Kennebago strain brook trout eggs to other MDIFW facilities. MDIFW Phillips has also supplied brook trout eggs to other states and countries for establishment of broodstock supplies. MDIFW Phillips obtains eggs from broodstock maintained on site in the fall, incubates them, and supplies "eyed" eggs to facilities as needed each spring.

MDIFW Phillips' hatchery facility consists of two stacks of eight vertical flow incubators / egg trays (total 16 trays). Each of the egg tray / incubation units is supplied with a water flow of 1-3 gpm with a maximum flow of 10 gpm. The egg trays are used exclusively for those eggs to be supplied to other facilities.

The hatchery facility also contains four, 5-foot diameter x 18-inch operational depth (220-gallons, 2-8 gpm flow) and four 8-foot diameter x 18-inch operational depth (564-gallons, 8-10 gpm flow) indoor rearing (growout) tanks for intermittent use. Two portable LOX tanks are used to oxygenate the hatchery house water. Structures within the hatchery facility are cleaned daily and wastewater is discharged as described below. Each tank is equipped with one effluent screen to contain the fry.

Eggs develop on slightly different schedules depending on when they are taken from the broodstock. Generally, eggs "eye-up" in approximately thirty days from the time they are taken, hatch approximately 15-days after eye-up, and begin to feed approximately 15 days after hatching. Eggs are taken from broodstock in the fall (October-November).

h. <u>Rearing / Broodstock Facilities</u>: MDIFW Phillips' rearing facilities consist of one line of eight covered, concrete raceway pools. The raceway pools are 75-feet x 5-feet x 18-inches deep (operational depth) (4,210 gallons). A ninth uncovered raceway pool (linear clarifier), 100-feet x 8-feet x 3-feet deep (17,950 gallons) acts as a settling basin for flow-through water. Fish are distributed within the raceways from youngest at the top to oldest at the bottom. Raceways are cleaned and wastewater discharged as described in paragraph 2(k) Wastewater Treatment. of maturity. All eggs hatched and reared at MDIFW Phillips are obtained from on-site broodstock. Additional supplies are obtained to supplement MDIFW Phillips stocks when necessary to maintain genetic integrity. MDIFW Phillips maintains age classes from one to four years, breeding four-year old females with three-year old males each year. Each age class is only bred once and is retired and stocked out to various waters following breeding.

MDIFW Phillips maintains an isolation shed that consists of two, four-foot diameter polypropylene tanks for rearing wild egg strains and conducting experiments. This facility is used to isolate any new strains, including supplemental broodstock eggs, until testing is completed. The isolation shed maintains a direct discharge to Meadow Brook, however only eggs are kept in the facility and no feeding or medicating is conducted.

g. <u>Wastewater Treatment</u>: Hatchery and rearing facility flow-through and cleaning wastewaters are discharged to Meadow Brook. Hatchery flow through-water passes through two 700-gallon settlement tanks prior to reuse in the rearing structures, as described above. Hatchery cleaning water

1. APPLICATION SUMMARY (con't)

is routed directly to a common wastewater ditch that runs parallel to the raceway line to a 100-foot x 25-foot x 2-foot deep (37,400-gallons) earthen settlement lagoon, that discharges to Meadow Brook. Raceway flow-through water is discharged in series through all of the pools in each line, to the 17,950-gallon in-line concrete linear clarifier referenced above, then to Meadow Brook. To clean the raceways, MDIFW staff has historically scrubbed 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 1.5-foot long "quiescent zone" with a covered discharge pipe routed to the common wastewater ditch and 37,400-gallon earthen settlement lagoon, that in turn discharges to Meadow Brook. 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. Alternately, instead of discharging raceway cleaning water to the earthen settlement lagoon, during summer months, MDIFW Phillips staff suction accumulated materials in each quiescent zone with a pool vacuum and discharge them to the ground surface on facility property to remove solids from the waste-stream. When this is done, MDIFW Phillips staff ensure that removed materials are not allowed to reenter the waste-stream.

MDIFW Phillips indicates that it takes approximately 20 minutes to clean each raceway pool. Only two raceway pools are cleaned each day to avoid excess stress on the fish. The linear clarifier and earthen settlement lagoon are cleaned out through suctioning approximately every two years with accumulated materials properly disposed of through land application on facility property. MDIFW is responsible for ensuring their compliance with nutrient management laws administered by the Maine Department of Agriculture, Conservation and Forestry. 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 in accordance with Standard Condition D, and Special Condition D of this permit.

A process flow diagram submitted by the permittee is included as Fact Sheet Attachment B.

2. PERMIT SUMMARY

- a. <u>Terms and Conditions</u>: This permitting action is carrying forward all the terms and conditions of the previous permitting except that this permitting action is:
 - 1. Reestablishing a concentration limit for total phosphorus that was erroneously eliminated in the May 4, 2015 permitting action.
 - 2. Establishing under Special Condition A, *Effluent Limitation and Monitoring Requirements*, once per month upstream and downstream ambient receiving water quality sampling for total phosphorus and the associated footnotes.
 - 3. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to include using sufficiently sensitive methods.
 - 4. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements* footnote 2, *Composite Samples,* to be consistent with the Departments most current language.
 - 5. Establishing footnote 4 *Twice per Month Monitoring* to be consistent with MEPDES permit language for land-based fish hatcheries/rearing facilities requiring twice per month monitoring.

- 6. Updating Special Condition B(3), Narrative Effluent Limitations, to be consistent with the Department's most current language.
- 7. Updating Special Condition E *Monitoring and Reporting* to the Department's most current requirements.
- 8. Removing Section 6 from Special Condition F, *Operations and Maintenance Plan*, as this facility has no formal wastewater treatment.
- 9. 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.
- 10. Removing Special Condition J *Practical Alternatives Analysis*, to be consistent with MEPDES permit language for land-based fish hatcheries/rearing facilities.
- 11. Establishing Special Condition J *Resuming Operations*, to dictate the permittee's responsibilities if the facility is to become active again.
- b. <u>History</u>: This section provides a summary of recent, relevant licensing/permitting actions that have been completed for the MDIFW Phillips Fish Hatchery.

February 20, 1975 - The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) Permit #ME0001058 to MDIFW for the discharge of an unspecified volume of wastewater from the Phillips Rearing Station to an unnamed brook tributary to Toothaker Pond. The Permit was valid through February 15, 1980.

March 3, 1975 - The Department issued License #658 to MDIFW for the discharge of a daily average of 0.24 MGD of fish hatchery wastewater from the Phillips Rearing Station to Toothaker Pond via an unnamed stream, Class B-1. The license expired on February 12, 1978.

September 28, 1977 - The Maine Board of Environmental Protection ordered WDL #658 amended based on effluent monitoring data conducted since issuance of the WDL. In this Board action, the required minimum monitoring frequency for settleable solids was reduced to once per year, while monitoring for all other parameters was eliminated.

March 8, 1978 - The Maine Board of Environmental Protection issued WDL # 2036 to MDIFW for the discharge of a daily maximum of 0.28 MGD of hatchery wastewater from the MDIFW Phillips Rearing Station to an unnamed stream, Class B-1. The WDL was issued for a five-year term.

1979 - With the intention of improving water quality in Toothaker Pond, MDIFW diverted Meadow Brook, the receiving water for the MDIFW Phillips wastewater discharge, to bypass Toothaker Pond (some records indicate this as taking place in 1972). Reportedly, Meadow Brook was diverted into Toothaker Pond from its natural course in 1903-1904.

April 27, 1983 - The Maine Board of Environmental Protection issued WDL #2036 for the discharge of a daily maximum of 0.28 MGD of fish hatchery wastewater from the MDIFW Phillips rearing

station to unnamed stream, Class B-1. The WDL was a renewal of a previously issued license #2036, but although it contained daily average and maximum effluent limits, contained no required monitoring frequencies or sample types. The WDL was issued for a one-year term, pending receipt of results of phosphorus vulnerability testing to be done by the Department's Division of Environmental Evaluation and Lake Studies.

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-002036-5Q-A-R to the MDIFW Phillips fish hatchery for the discharge of a daily maximum of 0.28 MGD of treated fish hatchery wastewater. The WDL was issued for a five-year term. This permit contained a monthly average concentration limit of 2 mg/L for BOD₅ and TSS, as well as a monthly average concentration limit of 0.03 mg/L for total Phosphorus.

January 12, 2001 - The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0001058 has been utilized for this facility.

September 10, 2001 - The Department required monitoring for Outfall #001B, designated for effluent discharges from the facility when cleaning raceways, to be conducted by auto-compositer.

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 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-002036-5Q-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.

June 27, 2005 - The Department received a timely application from MDIFW for renewal of the WDL for the discharge of fish hatchery wastewater from the Phillips facility. The application was assigned WDL # W-002036-5Q-B-R and MEPDES permit #ME0001058.

August 1, 2006 – The Department issued WDL #W-002036-5Q-B-R / #ME0001058 for the discharge of a daily average of 0.36 MGD of fish hatchery wastewater to Meadow Brook for a five-year term. This permitting action revised the concentration limits for TSS and BOD₅ to a monthly average limit of 6 mg/L and a daily maximum of 10 mg/L, corresponding mass limits were also established. The monthly average concentration limit for total phosphorus was also adjusted to 0.037 mg/L.

June 2008-Production at Phillips Hatchery ceased due to budget cuts.

October 6, 2008 – The Department issued minor revision WDL #W-002036-5Q-C-M / #ME0001058 for the amendment of the formalin concentration limits.

April 23, 2009 – The Department issued minor revision WDL #W-002036-5Q-D-M / #ME0001058 for the amendment of the BOD₅ and TSS monitoring frequency requirements.

June 2, 2010 – The Department entered into a Consent Agreement with MDIFW for the violations incurred at several hatchery facilities including the Phillips hatchery.

June 28, 2011 – MDIFW submitted a complete and timely application for renewal of their WDL/MEPDES permit. The application was assigned WDL #W002036-6F-E-R / #ME0001058.

May 5, 2015- The Department issued combination MEPDES permit #ME0001058/WDL #W002036-6F-E-R for a five-year term.

June 2016 - Phillips Hatchery was brought back online in order to cover for loss of production at the Casco Hatchery and to hold Casco's brood stock during rebuilding of its supply pipeline.

June 2018 - Production at Phillips Hatchery ceased once remaining fish were stocked.

March 9, 2020 - MDIFW submitted a timely and complete General Application to the Department for renewal of the May 5, 2015 MEPDES permit. The application was accepted for processing on March 16, 2020 and was assigned WDL #W002036-6F-F-R/ MEPDES #ME0001058.

January 30, 2021- The Department issued combination MEPDES permit #ME0001058/WDL # W002036-6F-F-R for a five year term.

February 7, 2024- MDIFW submitted a timely and complete General Application to the Department for renewal of the January 30, 3021 MEPDES permit. This application was accepted for processing on February 16, 2024 and assigned the WDL #W002036-6G-R/ MEPDES #ME0001058. The application was submitted ahead of the 5-year expiration in an effort to have all MDIFW permits on the same 5-year schedule.

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 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 *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (amended February 16, 2020), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S. § 467(4)(G)(2)(a) classifies tributaries to Sandy River as "All tributaries entering above the Route 142 bridge in Phillips [as] Class A" which includes Meadow Brook 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:

- 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 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

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

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;
 - (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.

The Department would like to note that Meadow Brook is not labeled in the United States Geological Survey's National Hydrography Database. Meadow Brook has not been assigned a Geographic Names Information System identifier at this time.

The Department has determined that Meadow Brook, at the point of discharge, has a watershed of approximately 0.32 square miles. *Classification of Maine waters*, 38 M.R.S. § 464(4)(A)(1) states, "...the department may not issue a water discharge license for...direct discharge of pollutants to waters

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4. RECEIVING WATER QUALITY STANDARDS (cont'd)

having a drainage area of less than 10 square miles, except that discharges into these waters that were licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist". Further, 38 M.R.S. § 465(2)(C) regarding Class A waters states "Discharges into waters of this classification licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist." An Alternative Discharge Study performed by Fishpro for multiple MDIFW facilities (including Phillips) indicate 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 conclusion that no reasonable alternatives exist.

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 limitations (TBELs) that are necessary to achieve water quality standards established under 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 (WQS), 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)(i).

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 limitations (WQBELs) for that pollutant. *See* 40 C.F.R. § 122.44(d)(1)(i).

6. RECEIVING WATER QUALITY CONDITIONS

The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act includes the receiving water in the designation *Sandy River and tributaries above Rt 145 Strong* (Integrated Report Assessment Unit ID ME0103000305_315R_01), listed in Category 2, *Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses.* The Report lists all of Maine's fresh waters as, Category 4-A: *Waters Impaired by Atmospheric Deposition of Mercury.* Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury.

However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources." 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

6. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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.

Biomonitoring conducted August 25, 2000 showed Meadow Brook attaining Class A status. This monitoring was conducted while the facility was operational.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. <u>Applicability of National Effluent Guidelines</u>: The USEPA has promulgated national effluent guidelines for the *Concentrated Aquatic Animal Production Point Source Category* at 40 C.F.R. Part 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. The last report of Fish on Hand at the facility was June 30, 2018, and totaled 783 lbs. 783 lbs is less than the 100,000 lbs. per year applicable threshold and is not subject to regulation under this subpart.
- b. <u>Flow:</u> The August 2006 permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 0.36 MGD based on the design capacity for the treatment facility.

Flow data was not summarized in this fact sheet as the facility was not operational between the period of November 2021 – December 2023.

c. <u>Dilution Factors</u>: Dilution factors associated with the permitted discharge flow of 0.36 MGD from the facility and derived in accordance with 06-096 CMR 530(4)(A) were calculated as follows:

Conversion Factor: 1cfs = 0.6464 MGD

Permitted Flow: 0.36 MGD

Mod. Acute: $\frac{1}{4}$ 1Q10 = 0.007 cfs	$\Rightarrow (0.007 \text{ cfs})(0.6464) + 0.36 \text{ MGD} = 1.01:1$ 0.36 MGD
Acute: 1Q10 = 0.026 cfs	$\Rightarrow (0.026 \text{ cfs})(0.6464) + 0.36 \text{ MGD} = 1.05:1$ 0.36 MG
Chronic: 7Q10 = 0.031 cfs	$\Rightarrow (0.031 \text{ cfs})(0.6464) + 0.36 \text{ MGD} = 1.06:1$ 0.36 MGD

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

Harmonic Mean¹ = 0.093 cfs $\Rightarrow (0.093 \text{ cfs})(0.6464) + 0.36 \text{ MGD} = 1.17:1$ 0.36 MGD

The Department's Division of Environmental Assessment (DEA) has determined the MDIFW Phillips's discharge does not achieve rapid and complete mixing. Thus, the Department is utilizing the default stream flows of ¹/₄ of the 1Q10 for acute concerns in accordance with 06-096 CMR 530(4)(B)(1).

d. <u>Total Suspended Solids (TSS)</u>: In the August 1, 2006, permit established TSS concentration limits of 6 and 10 mg/L for monthly average and daily maximum, respectively. These limits were based on recommendations included in USEPA's 2002 proposed draft National Effluent Guidelines for TSS

from fish hatchery wastewater receiving a secondary level of treatment and consideration of effluent quality from facilities utilizing the Department's best professional judgement (BPJ) of minimum treatment technology.

The August 1, 2006, permitting action stated an increased discharge of pollutants was considered a new discharge and pursuant to 38 M.R.S § 464 (4)(A)(1) the department may not authorize a *"discharge of pollutants to waters having a drainage area of less than 10 square miles except that: Discharges into these waters that were licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist"*. Therefore, the monthly average mass limitation was calculated using the previously established concentration limit of 2 mg/L, and the previously licensed flow of 0.28 MGD. Prior to the 2006 licensing action there was no daily maximum concentration limit. The August 1, 2006 permitting action used the newly established limit of 10 mg/L and the updated flow of 0.36 MGD to calculate the daily maximum mass limitation. The calculations for the monthly average and daily maximum TSS mass limitations are as follows:

(0.28 MGD)(8.34 lbs/gal)(2 mg/L) = **5 lbs/day** (0.36 MGD)(8.34 lbs/gal)(10 mg/L) = **30 lbs/day**

This permit is carrying forward both the mass and concentration limits for TSS and it is also carrying forward with the previously established monitoring frequency of once per month (1/Month).

TSS data was not summarized in this fact sheet as the facility was not operational between the period of November 2021 – December 2023.

e. <u>Dissolved Oxygen</u>: This permitting action is carrying forward monthly average and daily maximum monitor requirements as well as the daily minimum limit of 7.5 mg/L, the seasonal, once per week (1/Week) reporting requirement for dissolved oxygen to ensure the discharge does not cause or contribute to non-attainment of Class A dissolved oxygen standards which are referenced in section 4 of this fact sheet.

¹ The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control*" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

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

DO data was not summarized in this fact sheet as the facility was not operational between the period of November 2021 – December 2023.

f. <u>Total Phosphorus</u>: The August 1, 2006 permit established the total phosphorus monthly average mass limitation of 0.07 lbs./day. This is a water quality-based limit and is necessary to ensure compliance with Class A water quality standards. This permitting action is also reinstating a concentration limit of 0.035 mg/L that was erroneously removed during the May 4, 2015 permitting action. 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. The 7Q10 dilution factor of 1.06 described in Fact Sheet section 7(c) <u>Dilution Factors</u> is being utilized in calculation of a water quality-based effluent concentration limit of 0.037 mg/L.

(1.06 7Q10)(0.035 mg/L) = 0.037 mg/L

The monthly average mass limitation could be recalculated using the reestablished concentration limit, and the facility's permitted flow as follows:

(0.36 MGD)(8.34 lbs/gal)(0.037 mg/L) = 0.11 lbs/day

However, the previously established mass limit of **0.07 lbs/day** is more stringent and will be carried forward. The seasonal, June 1 through September 30, monitoring frequency of two times per month is also being carried forward. This is a water quality-based limit necessary to ensure compliance with Class A water quality standards.

Phosphorus data was not summarized in this fact sheet as the facility was not operational between the period of November 2021 – December 2023.

Ambient monitoring requirements are being added to the IFW hatchery permits 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 Phillips permit because the facility is not in operation, and because of the facility's excellent compliance record and the receiving water quality standards are consistently being met.

g. <u>Fish on Hand</u>: Previous permitting action established, and this permit is carrying forward, a reporting requirement of once per month (1/Month) for fish on hand. Monthly average and daily maximum values are both required.

Fish on Hand data was not summarized in this fact sheet as no DMRs were submitted for the period November 2021 – December 2023.

h. <u>Formalin</u>: Formalin is a drug used to treat fungal infections and external parasites of finfish and finfish eggs. Since the 2006 permit, the daily maximum mass limit has been carried forward based on the following language:

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

"The daily maximum mass limit is calculated based on the permittee's projected maximum amount of formalin used per day (3.6 gallons) times the weight of formalin (9.13 lbs./gal), resulting in a value of 33 lbs./day. This method was used to provide for flexibility in management of necessary treatments and to ensure that formalin is not discharged in toxic amounts."

Based on the Department's best professional judgment of ambient water quality criteria, the 24-Hour treatment daily maximum mass limit established in the 2006 permit (and carried forward since that time) is protective of aquatic life in the receiving water. Therefore, the 24-Hour treatment daily maximum mass limit established in previous permitting actions is being carried forward in this permitting action. The June 2015 permitting action eliminated the 1-hour treatment maximum mass limit atom for the purpose of creating consistency between IFW's fish hatcheries. IFW Phillips differs however, from IFW's other hatcheries, in that the 24-Hour treatment daily maximum mass limit is greater than the 1-hour treatment daily maximum mass limitation. In this particular situation it is possible for the acute ambient water quality criteria (known as the criterion maximum concentration or CMC) of 45 mg/l for formalin to be exceeded in Meadow Brook. Therefore, this permitting action is reestablishing a 1-hour treatment maximum mass limitation. This limit is calculated using both the modified acute dilution factor of 1.01 calculated in section 6(b) of this fact sheet and a treatment dilution factor of 2.20 due to the 17,950-gallon settling basin at the end of the series of rearing pools. This treatment dilution factor is calculated as follows:

Treatment dilution factor	= (settling basin volume + 1-hour hatchery flow)/1-hour hatchery flow
	= (17,950 gallons + 15,000 gallons)/15,000 gallons
	= 32,950 gallons/15,000 gallons
	= 2.20:1

The 1-hour treatment mass limit for formalin is then determined as follows:

Formalin 1-hour

Treatment Limit = (CMC)(Discharge Flow Limit)(Treatment Dilution)(Modified Acute Dilution)(8.34)(1 day/24 hours)

= (45 mg/L)(0.36 MGD)(2.20)(1.01)(8.34)(1 day/24 hours) = 12.5 lbs./hour

Formalin data was not summarized in this fact sheet as the facility was not operational between the period of November 2021 – December 2023.

8. ANTI-BACKSLIDING

Federal regulation 40 C.F.R. §122.44(l) contains the criteria for what is often referred to as the antibacksliding 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 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 Meadow Brook to meet standards for Class A classification.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Franklin Journal* newspaper on or about *February 16*, <u>2024</u>. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

11. DEPARTMENT CONTACTS

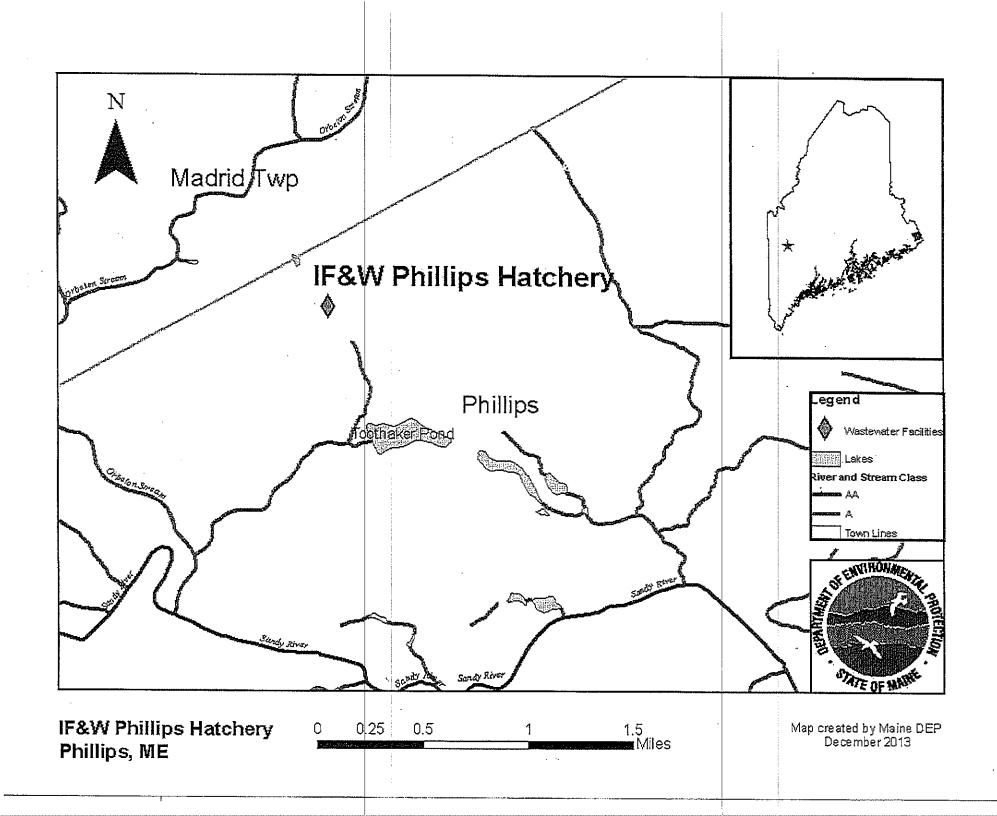
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Benjamin Pendleton Division of Water Quality Management Bureau of Water Quality Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017 Telephone: (207) 592 -6871 e-mail: <u>Benjamin.S.Pendleton@maine.gov</u>

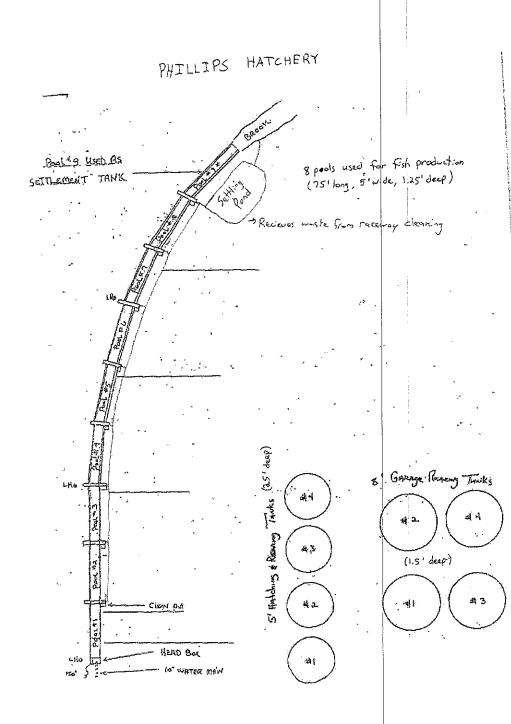
12. RESPONSE TO COMMENTS

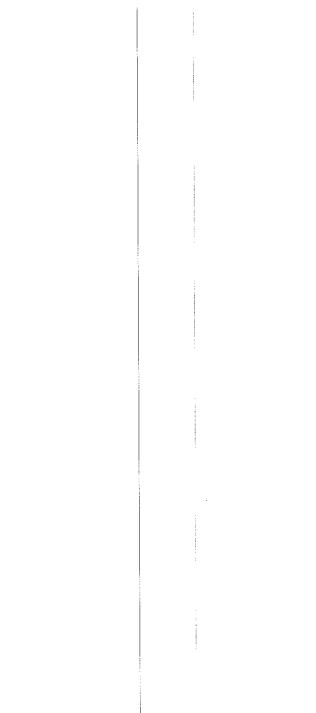
This section is reserved until the end of the formal 30-day comment period.

FACT SHEET ATTACHMENT A



FACT SHEET ATTACHMENT B





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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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or

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

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

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

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

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.