



JANET T. MILLS  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



GERALD D. REID  
COMMISSIONER

April 15, 2020

Mr. Todd Langevin  
Division of Fisheries and Wildlife  
State of Maine  
State House Station #41  
Augusta, ME. 04333

*Sent via electronic mail  
Delivery confirmation requested*

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001040  
Maine Waste Discharge License (WDL) Application #W002030-6F-E-R  
***Proposed Draft MEPDES Permit Renewal***

Dear Mr. Langevin,

Attached is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility 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 on April 15, 2020 and ends on May 15, 2020. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business Friday, May 15, 2020. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

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

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
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PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769  
(207) 764-0477 FAX: (207) 760-3143

IFW New Gloucester  
April 15, 2020  
Page 2 of 2

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  
[Cindy.L.Dionne@maine.gov](mailto:Cindy.L.Dionne@maine.gov)

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

Sincerely,



Cindy L. Dionne  
Division of Water Quality Management  
Bureau of Water Quality  
ph: 207-287-7823

Enc.

cc: Barry Mower, DEP  
Pamela Parker, DEP  
Fred Gallant, DEP  
Lori Mitchell, DEP  
Sean Mahoney, CLF  
Environmental Review, DMR  
Ellen Weitzler, USEPA  
Alex Rosenberg, USEPA  
Marelyn Vega, USEPA  
Richard Carvalho, USEPA  
Shelley Puleo, USEPA  
Environmental Review, IFW  
Anna Harris, USFWS



DEPARTMENT ORDER

IN THE MATTER OF

MAINE DEPT. OF INLAND FISHERIES & WILDLIFE	)	MAINE POLLUTANT DISCHARGE
NEW GLOUCESTER FISH HATCHERY	)	ELIMINATION SYSTEM PERMIT
NEW GLOUCESTER, CUMBERLAND CTY, MAINE	)	AND
#ME0001040	)	WASTE DISCHARGE LICENSE
#W002030-6F-F-R	)	<b>RENEWAL</b>
<b>APPROVAL</b>	)	

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

**APPLICATION SUMMARY**

On August 1, 2019, the Department accepted as complete for processing, a renewal application from DIFW for Waste Discharge License (WDL) #W002030-6F-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001040, which was issued on November 6, 2014 for a five-year term. The 11/6/14 MEPDES permit authorized DIFW to discharge an unspecified amount of fish hatchery wastewater from the DIFW New Gloucester Hatchery to Eddy Brook, Class B, in New Gloucester, Maine.

**PERMIT SUMMARY**

This permitting action is carrying forward all the terms and conditions of the previous permitting action.

## CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated April 15, 2020, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
  - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).
5. The applicant has objectively demonstrated to the Department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available, as required by *Standards for classification of fresh surface waters*, 38 M.R.S. § 464(4)(A)(1)(a) for the direct discharge of pollutants to waters having a drainage area of less than 10 square miles.

**ACTION**

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the MAINE DEPARTMENT OF INLAND FISHERIES & WILDLIFE to discharge an unspecified amount of fish hatchery wastewater to Eddy Brook, Class B, in New Gloucester, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*, revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 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 \_\_\_\_\_, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
For GERALD D. REID, Commissioner

Date filed with Board of Environmental Protection \_\_\_\_\_

Date of initial receipt of application: July 29, 2019

Date of application acceptance: August 1, 2019

This Order prepared by Cindy L. Dionne, BUREAU OF WATER QUALITY

**SPECIAL CONDITIONS**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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

Effluent Characteristic	Discharge Limitations					Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Daily Minimum	Measurement Frequency	Sample Type
Flow <i>[50050]</i>	Report MGD <i>[03]</i>	---	---	---	---	Daily <i>[01/01]</i>	Measured <i>[MS]</i>
TSS <i>[00530]</i>	50 lbs./day <i>[26]</i>	250 lbs./day <i>[26]</i>	6 mg/L <i>[19]</i>	10 mg/L <i>[19]</i>	---	1/Month <i>[01/30]</i>	Composite <sup>(2)</sup> <i>[CP]</i>
Total Phosphorus <sup>(3)</sup> <i>[00665]</i> June 1 – September 30	0.77 lbs./day <i>[26]</i>	Report lbs./day <i>[50]</i>	Report mg/L <i>[19]</i>	Report mg/L <i>[19]</i>	---	2/Month <i>[02/30]</i>	Composite <sup>(2)</sup> <i>[CP]</i>
Fish on Hand <i>[45604]</i>	---	Report lbs./day <i>[26]</i>	---	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Formalin <sup>(4)</sup> <i>[51064]</i>	Report lbs./day <i>[26]</i>	18.3 lbs./day <i>[26]</i>	---	---	---	1/Occurrence <i>[01/OC]</i>	Calculate <i>[CA]</i>
Dissolved Oxygen <i>[00300]</i> June 1 – Sept 30	---	---	Report mg/L <i>[19]</i>	Report mg/L <i>[19]</i>	7.5 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	Measured <i>[MS]</i>

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 5 of this permit for applicable footnotes.**

## SPECIAL CONDITIONS

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

#### FOOTNOTES

- 1. Sampling** – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine’s Department of Health and Human Services. Samples that are sent to another POTW 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. 263 (last amended December 19, 2018). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.
- 2. Composite Samples** – Samples must consist of 24-hour composites collected with an automatic composite sampler. Alternatively, when weather conditions and/or equipment prevents automatic compositing and upon Department approval, the permittee may manually composite a minimum of four grab samples collected at two-hour intervals during the working day at the facility. The permittee must indicate the type of sample collected on the DMR.
- 3. Total Phosphorus** – Phosphorus concentration reporting and monitoring requirements and mass limitations are seasonal and are only in effect from June 1 through September 30 each year. See **Attachment A** of this permit for sample protocols.
- 4. Formalin** – Formalin monitoring must be conducted when in use at the facility and must consist of a calculated effluent mass value. Therefore, the following calculation must be applied to assess the total mass of formalin discharged per day (lbs./day):

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

The permittee must provide this information and calculations to the Department in a document accompanying the monthly DMR. The formalin treatment 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 greater 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 “NODI-9” for this parameter on the monthly DMR or “N9” if the submittal is an electronic DMR.

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

## **SPECIAL CONDITIONS**

### **B. NARRATIVE EFFLUENT LIMITATIONS**

1. The permittee 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 causes visible discoloration or turbidity in the receiving waters that causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.
4. The permittee 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 August 1, 2019; 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*, 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.



## SPECIAL CONDITIONS

### E. MONITORING AND REPORTING

#### Electronic Reporting

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

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 15<sup>th</sup> 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.

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

## SPECIAL CONDITIONS

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

2. Materials Storage
  - a. Ensure proper storage of drugs<sup>1</sup>, pesticides<sup>2</sup>, feed, and any petroleum and/or hazardous waste products in a manner designed to prevent spills that may result in the discharge of drugs, pesticides, or feed to waters of the State.
  - b. Implement procedures for properly containing, cleaning, and disposing of any spilled material that has the potential to enter waters of the State.
3. Structural Maintenance
  - a. Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage.
  - b. Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning.
4. Recordkeeping
  - a. Maintain records for fish rearing units documenting the feed amounts and estimates of the numbers and weight of fish.
  - b. Maintain records that document the frequency of cleaning, inspections, repairs and maintenance.
5. Training
  - a. In order to ensure the proper clean-up and disposal of spilled material adequately, train all relevant personnel in spill prevention and how to respond in the event of a spill.
  - b. Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment to prevent unauthorized discharges.

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<sup>2</sup> **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].

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

**SPECIAL CONDITIONS**

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

**By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades,** the permittee 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 drugs used for disease prevention or control must be approved or authorized by the U.S. Food and Drug Administration (FDA), and all applications must comply with applicable FDA requirements.
2. **FDA-approved drugs.** Drugs approved by the FDA for fish culture purposes may be used in accordance with label instructions.
  - a) Preventative treatments. The discharge of any approved drug administered as a preventative measure is not authorized by this permit, unless the following conditions are met: the drug must be approved by FDA, and the treatment and route of administration must be consistent with the drug's intended use.
  - b) Drugs identified in the permittee's application. A list of drugs, pesticides and other compounds proposed for use at this facility was proved by the permittee in their application, which is included as **Attachment B** of this permit. The following drugs were identified in the permittee's application as currently being in use:

<u>Name</u>	<u>Freq. of Use</u>	<u>Concentration</u>	<u>Qty. Used/Year</u>
Parasite-S (formalin)	As needed	1667 ppm <sup>1</sup>	< 55 gal.
Tricaine-S	As needed	15 to 330 ppm	<200 grams
Halamid Aqua (Chloramine-T) <sup>2</sup>	As needed	12-20 mg/L	<10 lbs.

<sup>1</sup>Formalin use is listed as 1667 mg/l for 15 minutes or 150-250 mg/L for one hour. The first is for fungus control in incubating eggs (small treatment volumes). The second is for treatment of fish (larger treatment volumes).

<sup>2</sup>Halamid Aqua is limited to 59.5 grams/hour when the flow is 2.9 MGD. Halamid Aqua is limited to 30.2 grams/hour when the flow is less than 2.0 MGD.

## SPECIAL CONDITIONS

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

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

## SPECIAL CONDITIONS

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

4. **Investigational New Animal Drug (INAD).** The discharge of drugs authorized by the FDA for use during studies conducted under the INAD program is not authorized by this permit, unless in accordance with specific prior consent given in writing by the Department.
- a) Initial report. The permittee must provide a written report to the Department for the proposed use of an INAD *within seven (7) days* of agreeing or signing up to participate in an INAD study. The written report must identify the INAD to be used, method of use, dosage, and disease or condition the INAD is intended to treat.
- b) Evaluation and monitoring. *At least ninety (90) days prior to initial use* of an INAD at a facility, the permittee must submit for Department review and approval a study plan for the use of the drug that:
- 1) Indicates the date the facility agreed or signed up to participate in the INAD study.
  - 2) Demonstrates that the minimum amount of drug necessary to evaluate its safety, efficacy, and possible environmental impacts will be used.
  - 3) Includes an environmental monitoring and evaluation program that at a minimum describes sampling strategies, analytical procedures, evaluation techniques and a timetable for completion of the program. Currently available data or literature that adequately 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:

<u>Name</u>	<u>Freq. of Use</u>	<u>Concentration</u>	<u>Qty. Used/Year</u>
Aqui-S® 20E	As needed	25 to 40 mg/L	<1 Liter

**SPECIAL CONDITIONS**

**H. PESTICIDES AND OTHER COMPOUNDS**

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

<u>Name</u>	<u>Freq. of Use</u>	<u>Concentration</u>	<u>Qty. Used/Year</u>
Virkon Aquatic	Daily	As directed on label (1% solution)	+/- 10 lbs.

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

<u>Name</u>	<u>Freq. of Use</u>	<u>Concentration</u>	<u>Qty. Used/Year</u>
Argentyne Iodine	As Needed	100 ppm (37.8 mL:1 gal. water)	+/-3 gallons
Sodium Chloride	As Needed	1-2%	<1000 lbs.

**I. SPILLS**

In the event of a spill of drugs, pesticides, feed, petroleum and/or hazardous waste products that results in a discharge to waters of the State of Maine, the permittee must provide an oral report of the spill to the Department within 24 hours of its occurrence and a written report within 5 days to the Department. The report must include the identity and quantity of the material spilled.

**J. 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.

## **SPECIAL CONDITIONS**

### **K. SEVERABILITY**

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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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).

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

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

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

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

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

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

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

**B. OPERATION AND MAINTENANCE OF FACILITIES**

**1. General facility requirements.**

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

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

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

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

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

**5. Bypasses.**

- (a) Definitions.
  - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
  - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
  - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).
- (d) Prohibition of bypass.
  - (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
    - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (C) The permittee submitted notices as required under paragraph (c) of this section.
  - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

**6. Upsets.**

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (ii) The permitted facility was at the time being properly operated; and
  - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
  - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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**C. MONITORING AND RECORDS**

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

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

**3. Monitoring and records.**

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

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**D. REPORTING REQUIREMENTS**

**1. Reporting requirements.**

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

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

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

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

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

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

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

(a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 ug/l);

(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or

(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

**5. Publicly owned treatment works.**

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

**E. OTHER REQUIREMENTS**

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

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



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

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

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

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

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

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

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

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

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

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

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

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## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

**Maximum daily discharge limitation** means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

# **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<sub>2</sub>SO<sub>4</sub> to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

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

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

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

# **ATTACHMENT B**

**New Gloucester Hatchery Disinfectants/Drugs/Therapeutic Agents**

MEPDES #: ME0001040

**DISINFECTANTS:**

PRODUCT NAME	INGREDIENTS	FREQ. OF USE	CONCENTRATION	TOTAL USED/YR
<b>Virkon Aquatic</b>	Potassium peroxymonosulfate-----21.41% Sodium chloride-----1.50% Other ingredients-----77.09%	As needed for disinfection of nets, utensils, boots, stocking trucks, etc.	1% solution (1.3 oz/gal H <sub>2</sub> O)	+/- 10 lbs
<b>Argentyne or Ovadine</b>	Polymeric-Iodine Complex-----10% Inert Ingredients-----90% Available iodine-----1%	As needed for disinfection of eggs, nets, utensils, boots, stocking trucks, etc.	100 ppm ; (37.8 ml/gal H <sub>2</sub> O)	+/- 3 gal

**DRUGS/THERAPEUTIC AGENTS:**

PRODUCT NAME	INGREDIENTS	FREQ. OF USE	CONCENTRATION	TOTAL USED/YR
<b>Parasite-S/ Formalin</b>	Formaldehyde-----37% Methanol-----6-14% Water & Inert-----49-57%	As needed for fungus control on eggs and parasite control on fish.	1667 ppm 15 min duration 175-250 mg/l 1 hr duration	+/- 6 gals
<b>Tricaine-S (MS 222)</b>	Tricaine methanesulfonate	As needed for anestheizing fish during sampling, fish health/ quality exams, fish marking, etc.	15 to 330 mg/l	< 200 grams
<b>Aqui-S 20 E</b>	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
<b>Sodium Chloride blocks or crystals</b>	NaCl	As needed as a fish stress reduction/osmoregulatory aid post handling/post parasitization	1 - 2%	<1000 lbs
<b>Halamid Aqua</b>	Chloramine-T	Control of bacterial gill disease Used in hatchery for fry	12-20 mg/l Limit of 381.8 grams/day Limit of 59.5 grams/hour	Annual anticipated use = 0 Potential use < 10 lbs Results in max effluent conc of 0.13 mg/l. Based on effluent of 2.9 MGD

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

**FACT SHEET**

DATE: **April 15, 2020**

PERMIT NUMBER: **#ME0001040**

WASTE DISCHARGE LICENSE: **#W002030-6F-F-R**

NAME AND ADDRESS OF APPLICANT:

**MAINE DEPARTMENT OF INLAND FISHERIES &  
WILDLIFE  
NEW GLOUCESTER FISH HATCHERY  
284 STATE STREET, 41 STATE HOUSE STATION  
AUGUSTA, MAINE 04333**

COUNTY: **CUMBERLAND**

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

**MAINE DEPARTMENT OF INLAND FISHERIES &  
WILDLIFE  
NEW GLOUCESTER FISH HATCHERY  
312 FISH HATCHERY ROAD  
NEW GLOUCESTER, MAINE 04260**

RECEIVING WATER CLASSIFICATION: **EDDY BROOK/CLASS B**

COGNIZANT OFFICIAL CONTACT INFORMATION:

**MR. TIM KNEDLER, FACILITY MANAGER  
(207) 657-3423  
[tim.knedler@maine.gov](mailto:tim.knedler@maine.gov)**

**1. APPLICATION SUMMARY**

Application: On August 1, 2019, the Maine Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from the Department of Inland Fisheries and Wildlife (DIFW) for Waste Discharge License (WDL) #W002030-6F-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001040, which was issued on November 6, 2014 for a five-year term. The 11/6/14 MEPDES permit authorized DIFW to discharge an unspecified amount of fish hatchery wastewater from the DIFW New Gloucester Hatchery to Eddy Brook, Class B, in New Gloucester, Maine.



## 2. PERMIT SUMMARY

- a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action.
- b. History: The most current relevant regulatory actions include:

*February 20, 1975* – The USEPA issued NPDES Permit #ME0001040 to the Maine Department of Inland Fisheries and Game for the discharge of an unspecified volume of wastewater from the New Gloucester Rearing Pools to Eddy Brook. The permit was valid through February 15, 1980.

*March 3, 1975* - The Maine Department of Environmental Protection issued License #663 to the Maine Department of Inland Fisheries and Game for the discharge of a daily average of 2.02 MGD and a daily maximum of 2.3 MGD of fish hatchery wastewater from the New Gloucester Rearing Pools to Eddy Brook, Class B-1. The license expired on February 12, 1978.

*August 28, 1975* – The USEPA modified NPDES Permit #ME0001040 and reduced effluent monitoring requirements for the New Gloucester facility based on effluent data collected at New England fish hatcheries.

*September 28, 1977* – The Maine Board of Environmental Protection ordered WDL #663 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 # 2030 to DIFW for the discharge of a daily maximum of 3.0 MGD of hatchery wastewater from the DIFW New Gloucester Fish Rearing Station Rearing Pools to Eddy Brook, Class B-1. The WDL was issued for a five-year term.

*March 8, 1982* – The USEPA accepted DIFW's NPDES Permit reapplication as complete. Department files contain no evidence of further permitting actions by USEPA for this facility.

*May 11, 1983* – The Maine Board of Environmental Protection issued WDL #2030 for the discharge of a daily maximum of 3.0 MGD of fish hatchery wastewater from the DIFW New Gloucester Rearing Pools to Eddy Brook, Class B-1. The WDL was a renewal of a previously issued license #2030, although it eliminated parameters for suspended solids and eliminated monitoring requirements for all other parameters. The WDL was issued for a five-year term.

*July 21, 2000* – The Department issued # W-002030-5Q-A-R to the DIFW New Gloucester Fish Hatchery for the discharge of a daily maximum of 3.0 MGD of treated fish hatchery wastewater. The WDL was issued for a five-year term.

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

## 2. PERMIT SUMMARY (cont'd)

*February 2002* – On behalf of DIFW, Fishpro Inc. submitted an Alternative Discharge Study report for all nine DIFW 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 DIFW 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 DIFW.

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

*July 11, 2003* – The Department administratively modified WDL # W-002030-5Q-A-R to extend the 3-year schedule of compliance for BOD<sub>5</sub>, 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 DIFW for renewal of the WDL for the discharge of fish hatchery wastewater from the New Gloucester facility. The application was assigned WDL # W-002030-5Q-B-R and MEPDES permit #ME0001040.

*July 5, 2006* – The Department issued WDL #W-002030-5Q-B-R / #ME0001040 for a five-year term.

*October 10, 2008* – The Department issued minor revision WDL #W-002030-5Q-C-M / #ME0001040 (incorrectly identified on the revision as #ME0001140) for the amendment of the formalin concentration limits.

*April 23, 2009* – The Department issued minor revision WDL #W-002030-5Q-D-M / #ME0001040 (incorrectly identified on the revision as #ME0001140) for the amendment of the flow limit and monitoring frequency requirements for BOD<sub>5</sub> and TSS.

*June 2, 2010* – The Department entered into a Consent Agreement with DIFW for the violations incurred at several hatchery facilities including New Gloucester hatchery.

*June 28, 2011* – DIFW submitted a complete and timely application for renewal of WDL/MEPDES permit for the New Gloucester hatchery. The application was assigned WDL #W002030-6F-E-R / #ME0001040.

*November 6, 2014* – The Department issued renewal permit WDL #W-002030-6F-E-R / #ME0001040.

## 2. PERMIT SUMMARY (cont'd)

*July 29, 2019* – DIFW submitted a complete and timely application for renewal of WDL W002030-6F-E-R/MEPDES permit #ME0001040 for the New Gloucester hatchery. The application was assigned WDL #W002030-6F-F-R / #ME0001040.

- c. Source Description: The DIFW New Gloucester State Fish Hatchery was constructed in 1932 as a state aquaculture facility and is located on a 138-acre parcel of state-owned land. The hatchery has been added to and renovated since its inception. DIFW New Gloucester is a flow-through facility that discharges to Eddy Brook, followed by Collyer Brook, and the Royal River. DIFW New Gloucester consists of two hatchery buildings (with employee living quarters on the second floor of the “new” hatchery), two on site employee houses, a feed storage building (freezer building), an emergency generator building, two separate lines of raceway pools for rearing, and Eddy Brook into which the facility effluent is discharged.

Influent Water: DIFW New Gloucester has 2 sources of water, a reservoir with a DIFW-controlled dam, and a well.

Reservoir water: The DIFW New Gloucester rearing facility obtains a portion of its influent water from a reservoir constructed in Eddy Brook, which was rebuilt in 1995. The reservoir intake branches into two 12-inch diameter PVC pipes, which supply water to the east side and west side raceways. The reservoir water is also available for use in the “new” and “old” hatcheries. The raceway influent water is screened by ½ inch wide slats and is not treated. Several springs along the raceways also contribute water to the flow at this facility.

Summer water levels in Eddy Brook are considered minimally adequate to meet facility needs, thus DIFW New Gloucester typically uses all of the flow contained in Eddy Brook during the summer months.

Well water: Influent water for the hatchery facility is obtained from a 47-foot deep drilled well located on site. This well can sustain a continuous supply of 95 gpm. Well water is available in the “new” and the “old” hatcheries. Approximately 83 gpm is used in the “new” hatchery and approximately 12 gpm is used in the “old” hatchery. In 2009, a double pump “stacker” system was installed in the well with the lead pump running on a variable frequency drive and a second back-up pump as a single-phase fixed speed unit. In 2006 a Radon Reduction System was installed in the “new” hatchery. During normal operation the influent well water passes through this unit before entering the headbox in the “new” hatchery. Alternatively, the sealed and packed columns can be used as described. Oxygen is supplied as needed via diffusers in the “new” hatchery headbox. In case of well pump failure, the facility is equipped to draw water from a 24-inch diameter PVC pipe from the Eddy Brook reservoir. The “new” hatchery facility utilizes one sealed and one packed (bio-rings) aeration/degassing column to reduce high dissolved nitrogen gas concentrations and increase the dissolved oxygen concentrations. Well water enters two 8” wide columns with one sealed and one open top. This water passes through the columns and is contained in a head box for distribution to the combi tanks on the 1<sup>st</sup> floor. A portable liquid oxygen tank (4,505 cubic feet (cf)) is used to supply oxygen to the sealed column coupled with a backup system of three (282 cf) high-pressure oxygen tanks. The “old” hatchery has 2 head boxes. The large head box is supplied by an 8-inch diameter packed column and the small head box is supplied with a 6-inch diameter packed column. Oxygenated well water can be supplied to the “old” hatchery as well.

## 2. PERMIT SUMMARY (cont'd)

### Hatchery Facilities

“New Hatchery”: DIFW New Gloucester’s “new” hatchery consists of twenty-five, 5-foot diameter fiberglass combi-tanks. The top portions of the tanks have a flow through rate of 3 gpm and maintain depths of 0.58 feet (85-gallons each). The bottom portions of the tanks have a flow through rate of 3-4 gpm and maintain depths of 2.4 feet (353-gallons each). The maximum flow to the combi-tanks is 3-5 GPM. Each unit is operated independently with well water constituting the primary source of influent water and reservoir water acting as an emergency (well pump failure) secondary source. The combi tanks are cleaned daily by scrubbing down the sides and bottoms, with wastewater disposed of as described below.

Trout eggs are brought into the “new” hatchery post “eye-up”, typically in late fall. The eggs are first set up in the top portion of the combi-tanks to facilitate egg picking and hatching.

All rainbow and brown trout fry are moved out of the hatchery by mid-June by way of transfer to outside raceways, transfer to other facilities, or as unscheduled surplus stocking. The “new” hatchery is consequently shut down for the summer and will not resume operation until mid-October.

Hatchery flow-through and cleaning wastewater is routed directly to Eddy Brook thru an outfall below the bridge culverts (West side of Eddy brook).

“Old Hatchery”: DIFW New Gloucester’s “old” hatchery Consists of 20 aluminum troughs and 5 fiberglass circular tanks that are used for incubation and early rearing. The trough dimensions are 120 inches long by 20 inches wide with a water depth of 9 inches (94-gallons each) and have a flow through rate of 3-5 gpm. The five fiberglass tanks are 8 feet in diameter with a water depth of 13 inches (407-gallons each) and have a flow through rate of 3-5 gpm. All tanks and troughs are operated with well water constituting the primary source of influent water and the reservoir water acting as a supplement or secondary source. Trout eggs are typically brought into the “old” hatchery post spawn to utilize gravity fed water and to facilitate egg picking and to minimize Formalin treatment.

Post transfer of eggs and/or fry from the “old” hatchery in the spring it is consequently shut down for the summer and will not resume operation until Fall.

Hatchery flow-through and cleaning wastewater is routed directly to Eddy Brook through an outfall in the riprap adjacent to the building (East side of “old” hatchery).

### Broodstock Facilities

Broodstock are contained in a 8-foot x100-foot x 31-inch deep (15,460-gallon) covered concrete raceway.

## 2. PERMIT SUMMARY (cont'd)

### Rearing Facilities

DIFW New Gloucester's rearing facilities consist of two lines of earthen raceways with concrete dams (except raceway #8 East (broodstock)) referred to as the "West side" and "East side" raceways because of their orientation on the site. The West side consists of 13 individual raceways, while the East side consists of 14 raceways. Raceways are numbered starting at the top (highest upstream) to the bottom (lowest downstream).

Current utilization of the West side: West side raceways #1 and #2 are utilized as an influent sediment containment area and fish are reared in raceways #2, #3, #4, and #5. West side raceways #6 through #13 are utilized as effluent sediment containment areas. Current utilization of the East side: East side raceways #1, #2, and #3 are utilized as an influent sediment containment area and fish are reared in raceways #2, #3, #4, #5, #6, #7, and #8. East side raceways #9 through #14 are utilized as effluent sediment containment areas. Raceway utilization is flexible and dependent upon production goals, densities and time of year.

For calendar year 2018, DIFW New Gloucester raised 1,008 broodstock (2,520 pounds), 103,695 first year fish (6,590 pounds), and 26,248 second year fish (13,815 pounds).

### Feed

For calendar year 2018 DIFW New Gloucester fed an average of 61.9 pounds of food per day, a maximum of 154.4 lbs./day, with the highest amount of feed per month in August. Also for 2018, a maximum quantity of fish on station was as follows:

Broodstock:	2,513 lbs.	Amount: 955 fish
First Year Fish:	14,131 lbs.	Amount: 81,959 fish
Second Year Fish:	25,979 lbs.	Amount: 23,617 fish

Feed is distributed to the fry in the hatcheries by mechanical means (Sweeny automatic feeders, belt feeders), and by hand. Feed is distributed to the fish in the raceways by hand.

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## 2. PERMIT SUMMARY (cont'd)

### d. Wastewater Treatment

Hatchery flow-through and cleaning wastewaters are discharged to Eddy Brook. The “new” hatchery discharges flow-through and cleaning wastewater directly to Eddy Brook through an outfall below the bridge culverts (west side of Eddy brook). The “old” hatchery discharges flow-through and cleaning wastewater directly to Eddy Brook through an outfall in the riprap adjacent to the building (east side of “old” hatchery). Raceway flow-through water is discharged in series through all of the pools in each line and then to Eddy Brook at the bottom of the West and East lines near the “closed to fishing above this point” sign. Raceway cleaning water is discharged through individual outfall concrete chambers at the end of each raceway, when the cleaning dam boards are removed, to Eddy Brook, which runs between the west side and east side raceways. To clean the earthen raceways, DIFW staff agitates settled wastes using a paddle starting at the top end of the raceway pool moving down the raceway with the water flow. When the sediment reaches the mid-point of the raceways, the cleaning dam boards are removed to discharge directly into Eddy Brook. After the raceway is cleaned, the outfall (cleaning) dam boards are replaced, the raceway refills, and the Fish Culturists move to the next raceway. The concrete raceway (broodstock) is cleaned in a similar fashion using a push broom. DIFW New Gloucester indicates that it takes two Fish Culturists approximately one hour to clean each raceway. Two to three raceways are cleaned approximately once per week during the summer, or as needed, and once every 2 to 3 weeks during the non-summer period, or as needed. The sediment containment raceways are dredged every four to five years, or as needed, with accumulated materials removed and properly disposed of.

The west side and east side raceways converge into a 100-foot x 20-foot x 3-foot deep (44,883-gallons) impounded settling area constructed in Eddy Brook during the summer months. From late fall through early spring the dam boards are removed from the sediment containment raceways to prevent access road flooding. Flow from the settling area continues on in Eddy Brook and downstream receiving waters.

In accordance with Standard Condition D, as referenced in Special Condition D of this permit, the permittee must notify the Department of any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system. A map showing the location of the facility is included as Fact Sheet **Attachment A**. A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

### 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 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

### 4. RECEIVING WATER QUALITY STANDARDS

*Classification of major river basins*, 38 M.R.S. § 467(11)(B) classifies the “Royal River, tributaries,” which includes Eddy Brook, as Class B. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465 (3) describes the standards for Class B waters.

The Department has determined that Eddy Brook, at the point of discharge, has a watershed of less than 10 square miles. 38 M.R.S. § 464 (4)(A)(1) states that: “Discharges into these waters that were licensed prior to January 1, 1986 are allowed to continue only until practical alternatives exist.” Prior to issuing a discharge license, the Department requires the applicant to objectively demonstrate to the Department’s satisfaction that the discharge is necessary and that there are no other reasonable alternatives available. An Alternative Discharge Study performed by Fishpro for multiple DIFW facilities (including New Gloucester) indicate that there are no reasonable alternatives to the current discharge. Todd Langevin of DIFW (email correspondence dated October 29, 2019) confirmed the 2002 Fishpro conclusion that no reasonable alternatives exist.

### 5. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine 2016 Integrated Water Quality Monitoring and Assessment Report* (Report), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the waters in Eddy Brook (Assessment Unit ID ME0106000102\_603R03) as “Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses.”

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

## 5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department has no information that the discharge from the permittee, as permitted causes or contributes to non-attainment of applicable Class B water quality standards.

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow: The April 23, 2009 Minor Revision eliminated the 3.0 MGD monthly average flow limit and established a monthly average flow reporting requirement. This permit action is carrying forward the requirement to report monthly average flow at the facility.

The Department reviewed Discharge Monitoring Reports (DMRs) that were submitted for the period December 2014 – October 24, 2019. A review of data indicates the flow ranged from 1.47 MGD to 8.43 MGD and Average 2.9 MGD.

- b. Dilution Factors: Dilution factors associated with wastewater discharges are derived in accordance with freshwater protocols established in *Surface Water Toxics Control Program* 06-096 CMR 530 (effective March 21, 2012), and methods for low flow calculation contained in *Estimating Monthly, Annual, and Low 7-day, 10-year Streamflows for Ungaged Rivers in Maine* (Scientific Investigations Report 2004-5026, US Department of Interior, US Geological Service).

The DIFW New Gloucester facility obtains its water from the headwaters of Eddy Brook and a well. DIFW reports that the section of Eddy Brook below the DIFW owned reservoir dam is significantly or completely dewatered on occasion. At those times, the DIFW New Gloucester discharge constitutes the only flow in that portion of Eddy Brook. Based on this information, the Department must assume acute (1Q10), chronic (7Q10) and harmonic mean dilution factors of 1:1. If DIFW wishes to establish a guaranteed minimum flow from the Eddy Brook reservoir dam in the future, this determination may be revisited.

- c. TSS: In the 7/5/06 permit, TSS and BOD<sub>5</sub> concentration limits of 6 and 10 mg/L for monthly average and daily maximum, respectively, were established as best professional judgment (BPJ) of minimum treatment technology. In the 11/6/14 permit, the Department removed BOD sampling as TSS serves as a surrogate for BOD.

The Department reviewed DMRs that were submitted for the period of December 2014 through October 24, 2019. A review of data indicates there were monthly average mass exceedances in December 2014, May 2015, March and August 2016, September and October 2017, and May and July 2019. Monthly average exceedances ranged from 53 lbs./day to 596 lbs./day. A review of the data indicates that there were daily maximum mass exceedances in August 2016 (596 lbs./day) and October 2017 (510 lbs./day). Monthly average concentration limits were exceeded in August 2016, September 2017 and October 2017. Exceedances ranged from 6.4 to 39 mg/L. Daily maximum concentration limits were exceeded in August 2016 (37 mg/L) and October 2017 (39 mg/L).



## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

- d. Dissolved Oxygen: The 11/6/14 permit required in-stream DO measurements to be taken at the point of discharge in the months of July, August and September of each year. The Department reviewed DMR's that were submitted for the period of December 2014 through October 24, 2019. A review of data indicates the DO ranged from 8 mg/L to 11.1 mg/L.

As referenced previously, The Class B dissolved oxygen standard is:

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

Facility data indicate that the DO was consistently within the Class B water quality standards. This permitting action is carrying forward the seasonal daily maximum limit for dissolved oxygen to ensure the discharge does not cause or contribute to non-attainment of Class B dissolved standards.

- e. Total Phosphorus: Previous permitting action established both mass and concentration limitation for total phosphorous. The monthly average mass limit of 0.77 lbs./day is a water quality-based limit necessary to ensure compliance with Class B water quality standards and is being carried forward in this permitting action. The monthly average concentration limit of 0.035 mg/L for total phosphorous was established based on BPJ of BPT for this discharge. The Department is identifying in this permitting action that the concentration limit is not necessary to ensure water quality standards are achieved and that the limitation was established in error. Section 402(o) of the Clean Water Act contains prohibitions for anti-backsliding. Generally, anti-backsliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. The Clean Water Act contains certain exceptions to anti-backsliding at Section 402(o)(2). In the case of DIFW's New Gloucester facility and the concentration limitation for phosphorous, the Department has determined that establishing a concentration limitation for phosphorus constitutes a technical mistake in issuing the permit. Section 402(o)(2)(B)(ii) of the Clean Water Act contains an exception to anti-backsliding for this reason. Therefore, this permitting action is eliminating the concentration limitation for total phosphorous but is requiring concentration data to be reported. (It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules). Monitoring remains limited to June through September, annually.

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

The Department reviewed DMR's that were submitted for the period of December 2014 through October 24, 2019. A review of data indicates that the phosphorus monthly average mass was exceeded in June 2015, June and August 2016, June and September 2017 and June 2019. Exceedance values ranged from 0.90 lbs./day to 1.30 lbs./day.

- f. Fish on Hand: This permitting action is carrying forward the previously established 1/Month daily maximum mass reporting requirement for fish on hand. The Department reviewed DMR's that were submitted for the period of December 2014 through October 24, 2019. A review of the data indicates that the fish on hand values ranged from 8,492 lbs./day to 28,392 lbs./day.
- g. Formalin: The October 10, 2008 minor permit revision amended the formalin limits based on the Department's BPJ after reviewing the January 2008 report titled "*Meeting Maine Clean Water Standards during Fish Therapeutic Treatments: Determining the Acute No Effect Concentration (ANOEC) Discharge Concentrations in Hatchery Effluents after Fish Therapeutic Treatments with Formalin, Hydrogen Peroxide, Potassium Permanganate and Sodium Chloride*" by G. Russell Danner and Thora Maltais. Formalin concentration limits were based on the ambient water quality criteria (AWQC) of 25 mg/L and 45 mg/L for a 24-hour application and a 1-hour application, respectively and multiplied by the acute dilution factor of 1.

$$\begin{aligned} 25 \text{ mg/L} \times 1 \text{ (effluent dilution)} &= 25 \text{ mg/L} \quad 24\text{-hour treatment} \\ 45 \text{ mg/L} \times 1 \text{ (effluent dilution)} &= 45 \text{ mg/L} \quad 1\text{-hour treatment} \end{aligned}$$

Mass limits were carried forward in the 2008 revision. The following is an excerpt from the 2008 revision:

"Effluent mass limits were previously and remain calculated based on the permittee's projected maximum amount of formalin used per day (2-gallons) times the weight of formalin (9.13 lbs./gal), resulting in a value of 18.3 lbs./day."

Mass limits derived from the 2008 revised AWQC concentration limits would have been calculated as such:

$$\begin{aligned} 25 \text{ mg/L} \times 9.03 \text{ lbs./gal.} \times 1.5^4 \text{ MGD} &= 338.625 \text{ lbs./day or } \mathbf{339 \text{ lbs./day}} \quad 24\text{-hour treatment} \\ 45 \text{ mg/L} \times 9.03 \text{ lbs./gal.} \times 1.5 \text{ MGD}/24 \text{ hours} &= 25.396875 \text{ or } \mathbf{25 \text{ lbs./hr.}} \quad 1\text{-hour treatment} \end{aligned}$$

Based on the above mass calculations, both the 24-hour treatment limit of 339 lbs./day and the 1-hour limit of 25 lbs./hour are less stringent than the previously established limit of 18.3 lbs./day. Therefore, based on the Departments BPJ of AWQC, the mass limit established in the 2006 permit (and carried forward since that time) is being carried forward in this permitting action.

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<sup>4</sup> 1.5 MGD is the lowest recorded flow since June 2006 at New Gloucester according to facility records.

## **6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)**

The Department is identifying in this permitting action that the formalin concentration limit is not necessary to ensure water quality standards are achieved and that the limitation was established in error. Section 402(o) of the Clean Water Act contains prohibitions for anti-backsliding. Generally, anti-backsliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. The Clean Water Act contains certain exceptions to anti-backsliding at Section 402(o)(2). In the case of DIFW's New Gloucester facility and the concentration limitation for formalin, the Department has determined that establishing a concentration limitation for formalin constitutes a technical mistake in issuing the permit. Section 402(o)(2)(B)(ii) of the Clean Water Act contains an exception to anti-backsliding for this reason. Therefore, this permitting action is eliminating the concentration limitation for formalin. (It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules.

The Department reviewed DMR's that were submitted for the period of December 2014 through October 24, 2019. A review of the data indicates that the formalin use ranged from 0.7 lbs./day to 2.5 lbs./day.

## **7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY**

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of Eddy Brook to meet standards for Class B classification.

## **8. PUBLIC COMMENTS**

Public notice of this application was made in the *Sun Journal* newspaper on or about July 26, 2019. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

## **9. RESPONSE TO COMMENTS**

*Reserved until the end of the public comment period.*

## 10. DEPARTMENT CONTACTS

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

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Division of Water Quality Management  
Bureau of Water Quality  
Department of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017 Telephone: (207) 287-7823 Fax: (207) 287-3435  
e-mail: [cindy.l.dionne@maine.gov](mailto:cindy.l.dionne@maine.gov)

# **ATTACHMENT A**

# New Gloucester Hatchery Waste Discharge Permit Renewal 2019 MEPDES #0001040 Application Information

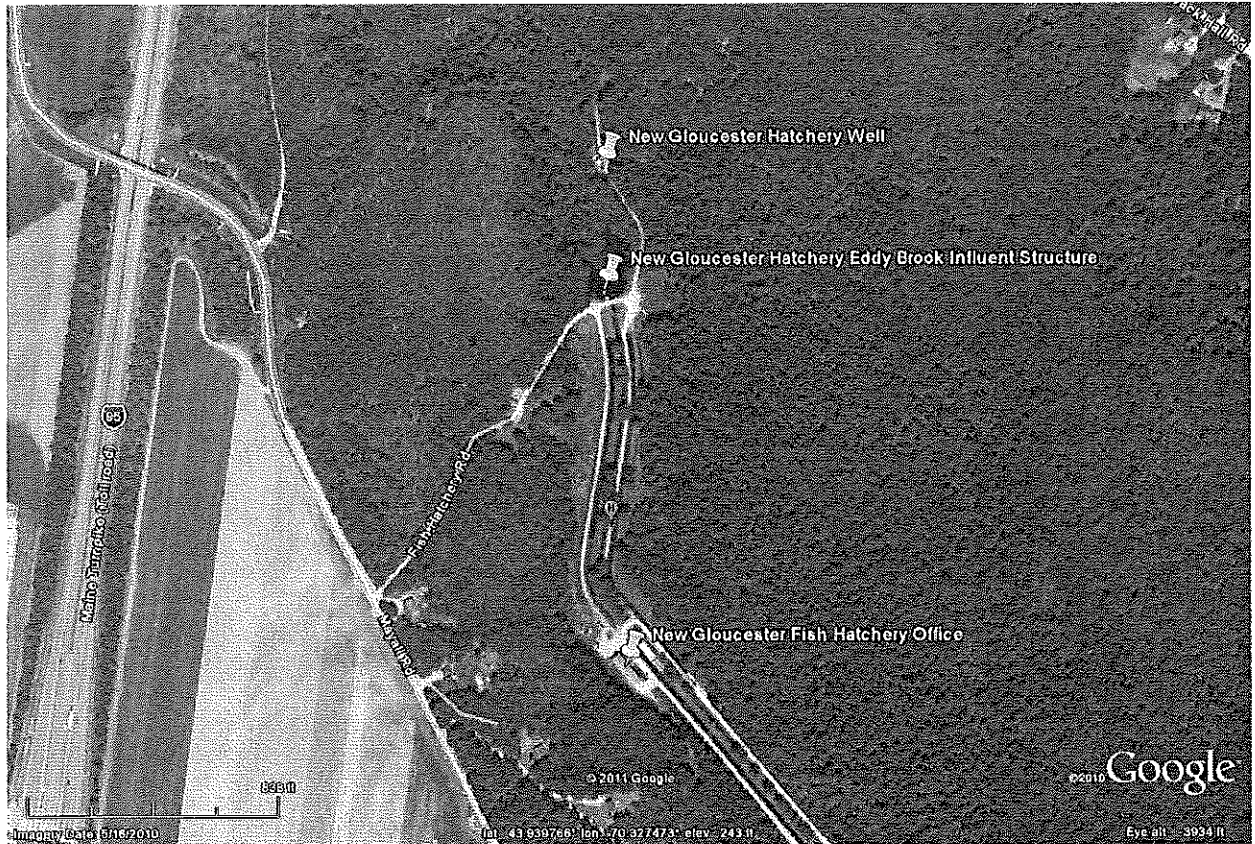


Figure 1 New Gloucester Hatchery source water (Well and Eddy Brook)



Figure 2 Raceways 1-4 West and East

Dimensions:

- 1 West (not used to contain fish) Length 89 feet, average Width 16.39 feet, average Depth 1.47 feet
- 2 West (not used to contain fish) Length 190 feet, average Width 15.96 feet, average Depth 1.10 feet
- 3 West Length 194 feet, average Width 14.93 feet, average Depth 0.92 feet
- 4 West Length 196 feet, average Width 14.56 feet, average Depth 1.08 feet
- 1 East (not used to contain fish) Length 98 feet, average Width 14.64 feet, average Depth 1.36 feet
- 2 East (not used to contain fish) Length 205 feet, average Width 15.03 feet, average Depth 0.83 feet
- 3 East (not used to contain fish) Length 195 feet, average Width 13.89 feet, average Depth 0.64 feet
- 4 East Length 197 feet, average Width 15.42 feet, average Depth 0.88 feet



Figure 3 Raceways 4-6 West and East

Dimensions:

5 West Length 203 feet, average Width 15.32 feet, average Depth 0.98 feet

6 West (not used to contain fish) Length 202 feet

5 East Length 152 feet, average Width 15.10 feet, average Depth 0.85 feet

6 East Length 187 feet, average Width 13.0 feet, average Depth 0.66 feet



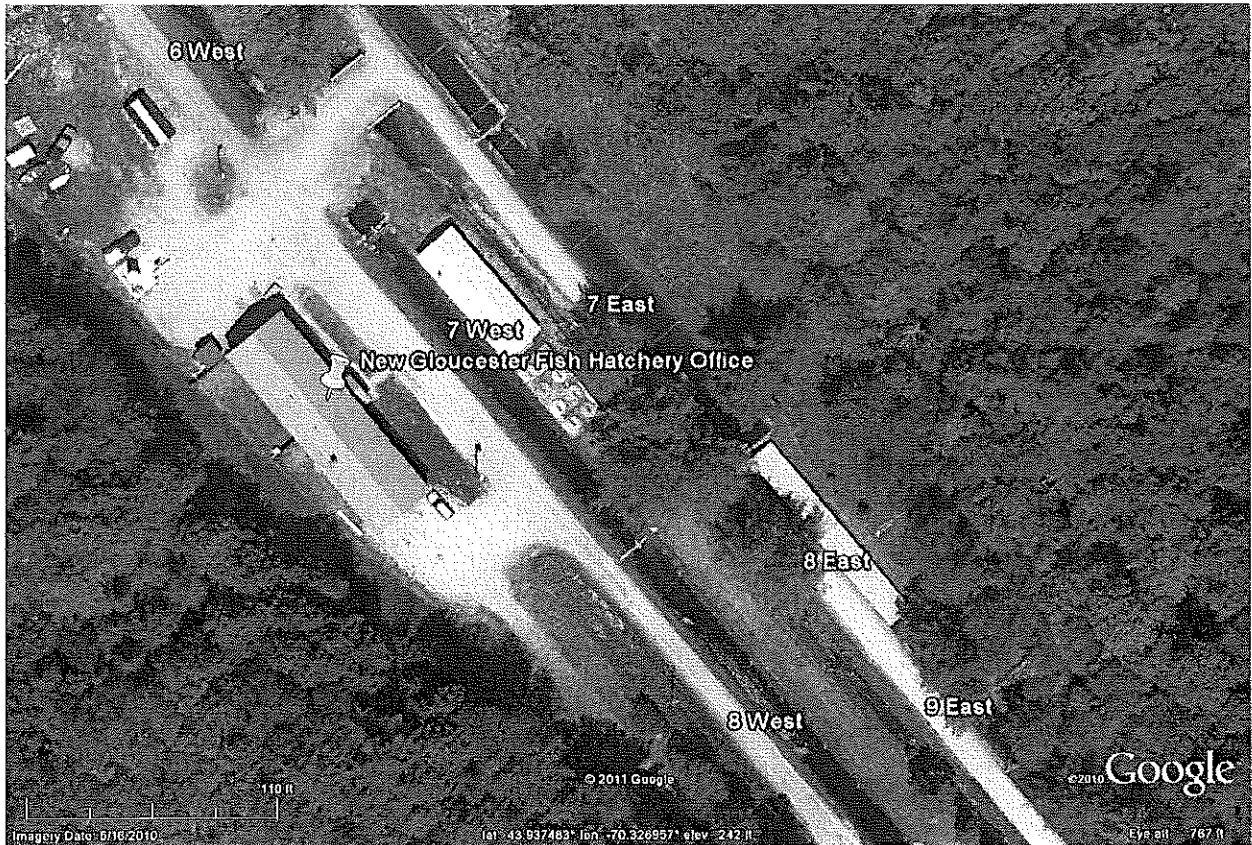


Figure 4 Raceways 6-8 West and 7-9 East

Dimensions:

7 West (not used to contain fish) Length 198 feet

8 West (not used to contain fish) Length 198 feet

7 East Length 197 feet, average Width 13.64 feet, average Depth 0.71 feet

8 East Length 100 feet, Width 8.0 feet, average Depth 2.57 feet

9 East (not used to contain fish) Length 92 feet



Figure 5 Raceways 8-10 West, 9-11 East

Dimensions:

- 9 West (not used to contain fish) Length 198 feet
- 10 West (not used to contain fish) Length 200 feet
- 10 East (not used to contain fish) Length 200 feet
- 11 East (not used to contain fish) Length 200 feet



Figure 6 Raceways 10-12 West, 11-13 East

Dimensions:

11 West (not used to contain fish) Length 198 feet

12 West (not used to contain fish) Length 203 feet

12 East (not used to contain fish) Length 198 feet

13 East (not used to contain fish) Length 198 feet



Figure 7 Raceways 12-13 West, 13-14 East

Dimensions:

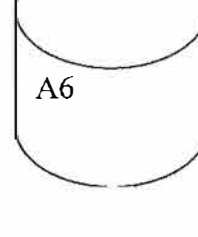
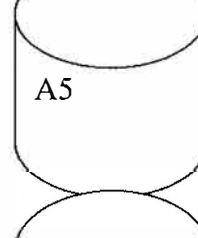
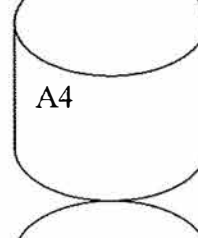
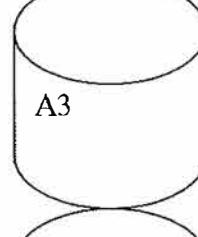
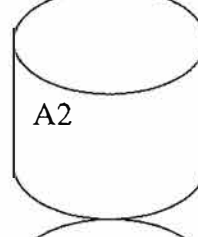
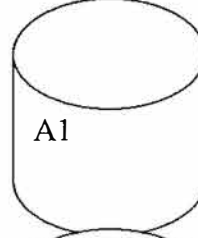
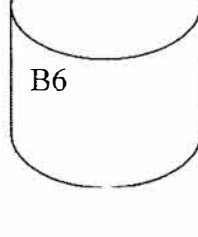
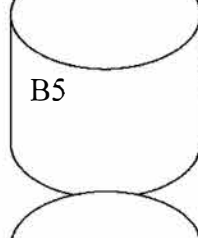
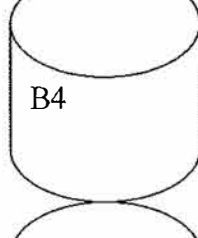
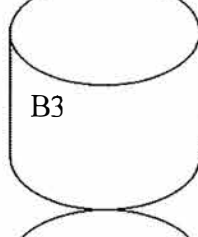
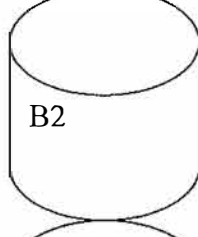
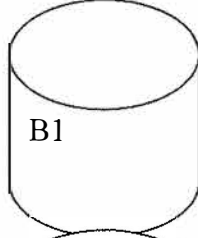
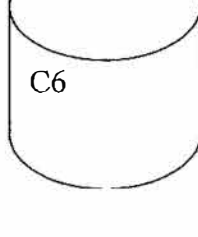
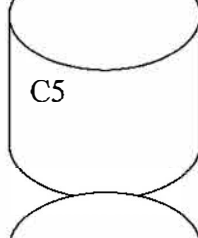
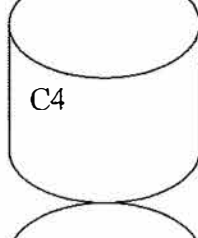
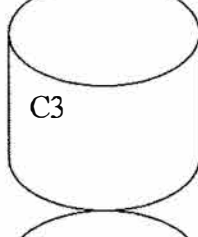
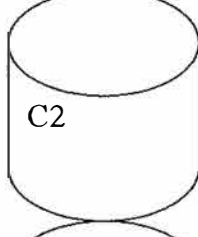
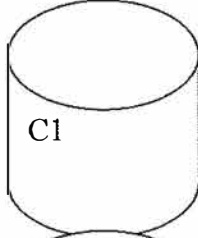
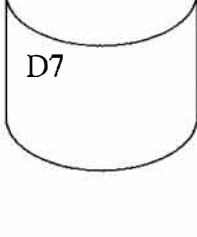
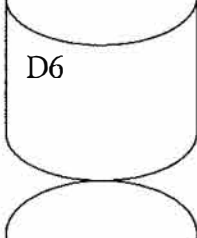
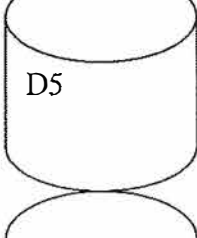
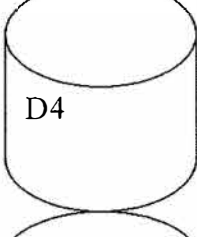
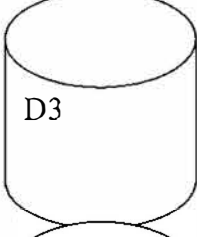
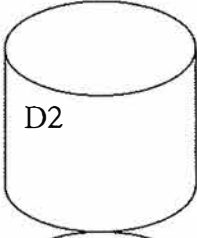
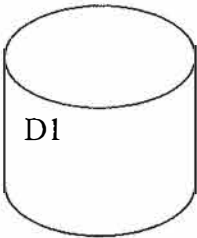
13 West (not used to contain fish) Length 197 feet

14 East (not used to contain fish) Length 285 feet

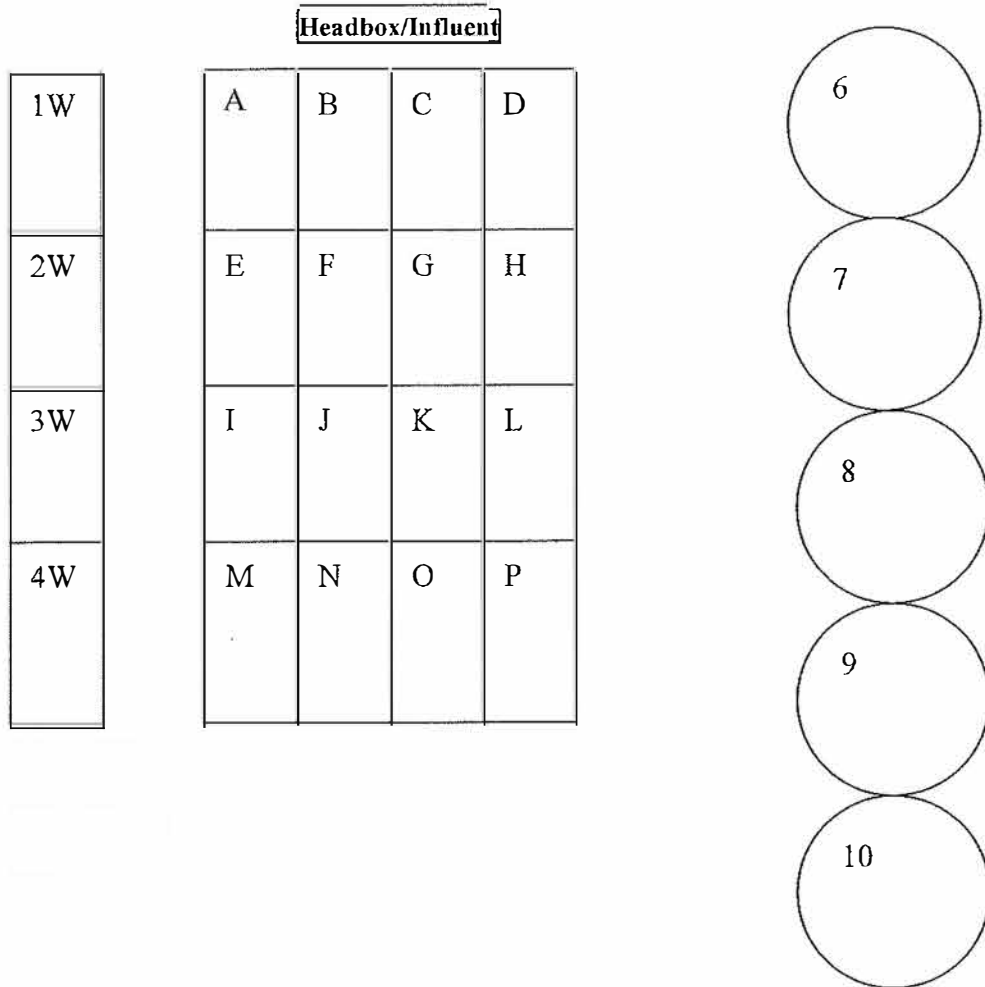
# **ATTACHMENT B**

# New Gloucester Hatchery New Hatchery tank setup

25 Combi Tanks  
5' diameter, 2.4' depth of water max.



## New Gloucester Hatchery Old Hatchery tank setup



1-4W 10'L, 1.69'W, 0.83'water depth  
 A-P 10'L, 1.16'W, 0.67'water depth  
 6-10 8' Diameter, 1.16'water depth