STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

December 7, 2011

Mr. Henry Hartley
MDIFW Cobb State Fish Hatchery
45 Cobb Road
Enfield, Maine 04493

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001104
Maine Waste Discharge License (WDL) Application # W-002032-6F-E-R
Final MEPDES Permit/Maine WDL, MDIFW Cobb State Fish Hatchery, Enfield, Maine

Dear Henry:

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

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

If you have any questions regarding the matter, please feel free to call me at (207) 215-1579 or contact me via email at Robert.D.Stratton@maine.gov.

Sincerely,

Bob Stratton DEP

Robert D. Stratton
Division of Water Quality Management
Bureau of Land and Water Quality

Enc./cc: Matt Young, Lori Mitchell (MEDEP)); Todd Langevin, Russ Danner (MDIFW);
Sandy Mojica (USEPA

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

IN THE MATTER OF

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

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations the Department of Environmental Protection (Department) has considered the application of the MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE COBB STATE FISH HATCHERY (hereinafter MDIFW Enfield), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The applicant has applied for a renewal of Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001104 / Maine Waste Discharge License (WDL) #W-002032-5Q-B-R, which was issued on March 31, 2006, for a five-year term. The MEPDES Permit / Maine WDL and subsequent permit modifications approved the discharge of a monthly average of 4.75 million gallons per day (MGD) of fish hatchery wastewater to Cold Stream, Class A, from a state fish hatchery and rearing facility in Enfield, Maine, which the applicant requests to increase to 5.0 MGD.

PERMIT SUMMARY

This permitting action is similar to the March 31, 2006 MEPDES Permit / Maine WDL and subsequent permit modifications and revisions in that it is carrying forward all previous terms and conditions with a few exceptions. This permitting action is different in that it is:

1. revising the monthly average flow limit to 5.0 MGD, with effluent limitations and monitoring requirements to represent a combined facility waste-stream for fish rearing and hatchery functions of increased flow;
2. revising minimum monitoring frequency requirements for total phosphorus, fish on hand, formalin, and effluent dissolved oxygen;
3. eliminating monitoring requirements for effluent pH, ambient dissolved oxygen, ambient water temperature, and filamentous bacteria;
4. updating requirements related to diseases, pathogens, therapeutic agents and disinfecting/sanitizing agents; and
5. requiring a fish Containment Management System with provisions for auditing and reporting.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated October 21, 2011 and revised December 5, 2011, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing 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 discharge will be subject to effluent limitations that require application of best practicable treatment.

5. The discharge is necessary and there are no other reasonable alternatives available.

ACTION

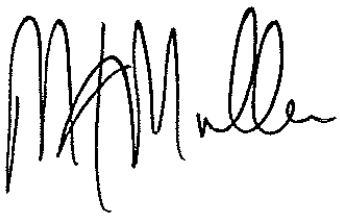
THEREFORE, the Department APPROVES the above noted application of the MDIFW ENFIELD COBB STATE FISH HATCHERY to discharge fish hatchery and rearing facility wastewater consisting of a monthly average flow of 5.0 MGD to Cold Stream, Class A, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,*" revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES



This permit is digitally signed by Michael Mullen on behalf of Commissioner Patricia Aho. It is digitally signed pursuant to 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date.
2011.12.05 17:43:42 -05'00'

Date of initial receipt of application: December 15, 2010
Date of application acceptance: December 16, 2010

This Order prepared by Robert D. Stratton, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **fish hatchery and rearing facility wastewater from Outfall #005A** to Cold Stream. Such discharges shall be limited and monitored by the permittee as specified below. The italicized numeric values bracketed in the table below and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports (DMRs). Footnotes are found on Pages 5 and 6.

Monitoring Parameter	Discharge Limitations and Reporting Requirements				Minimum Monitoring Requirements		
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Daily Minimum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	5.0 MGD *[03]*	---	---	---	---	Daily *[01/01]*	Measured *[MS]*
BOD *[00310]*	79.2 lbs/day *[26]*	402 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/month *[01/30]*	Composite[1] *[CP]*
TSS *[00530]*	79.2 lbs/day *[26]*	402 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/month *[01/30]*	Composite[1] *[CP]*
Total Phosphorus[2] **June 1 - Sept 30 yearly** *[00665]*	1.85 lbs/day *[26]*	report lbs/day *[26]*	0.041 mg/L *[19]*	report mg/L *[19]*	---	2/month[3] *[02/30]*	Composite[1] *[CP]*
Fish on Hand *[45604]*	report lbs/day *[26]*	report lbs/day *[26]*	---	---	---	2/month[3] *[02/30]*	Calculated *[CA]*
Formalin[4] **1-Hour Treatment Maximum** *[51064]*	report lbs/day *[26]*	103.6 lbs/day *[26]*	report mg/L *[19]*	47 mg/L *[19]*	---	Once per occurrence *[01/OC]*	Calculated *[CA]*
Formalin[4] **24-Hour Treatment Maximum** *[51064]*	report lbs/day *[26]*	103.6 lbs/day *[26]*	report mg/L *[19]*	26 mg/L *[19]*	---	Once per occurrence *[01/OC]*	Calculated *[CA]*
Dissolved Oxygen[5] **From June 1 – Sept 30 yearly** *[00300]*	---	---	report mg/L *[19]*	report mg/L *[19]*	7.5 mg/L *[19]*	2/month[3] *[02/30]*	Measured *[MS]*

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOOTNOTES:

Effluent Monitoring: Effluent values shall be collected at Outfall #005A, the only authorized facility discharge, following all means of wastewater treatment prior to discharge to the receiving water. All monitoring shall be conducted so as to capture conditions representative of wastewater generating processes at the facility, such as flow-through and cleaning discharge flows, use of therapeutic and disinfecting/sanitizing agents, etc. and in consideration of settling pond/basin detention times. Any change in sampling location must be approved by the Department in writing. Sampling and analysis must be conducted 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 shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). **All effluent limits are gross, end of pipe limits, unless otherwise specified**.

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

1. Composite Samples: Samples shall consist of 24-hour composites collected with an automatic composite sampler. Alternatively, when weather conditions and/or equipment prevents automatic compositing and upon notification to the Department's compliance inspector, the permittee may manually composite a minimum of four grab samples collected at two-hour intervals during the working day at the facility.

2. Total Phosphorus: The concentration and mass effluent limits and monitoring requirements shall consist of gross, end-of-pipe values. Phosphorus limits and monitoring requirements are seasonal and are only in effect from June 1 through September 30 each year. Laboratory analysis shall consist of a low-level phosphorus analysis with a minimum detection limit of 1 part per billion (1 ug/L).

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

SPECIAL CONDITIONS

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

4. Formalin: Formalin monitoring shall be conducted only when in use at the facility and shall consist of a calculated effluent value. The permittee shall calculate the effluent formalin concentration through accurate determinations of the formalin mass administered in each facility use, the volume of facility wastewater to which the formalin is added during the treatment period, and the volume of large wastewater structures that receive the effluent (during 1-hour treatments or less). The effluent mass shall be calculated by multiplying the gallons of formalin used by a 9.13 lbs / gallon conversion formula based on the weight of formalin. The permittee shall provide this information and calculations to the Department in a document accompanying the monthly DMR. See Fact Sheet Section 6f for sample calculations. The two-tiered formalin limits correspond to a first tier standard one hour per day treatment typical of hatchery and rearing facility discharges and a second tier for up to a maximum of 24 hours of treatment and discharge for addressing emergency conditions at the facility. Concentration limits for both tiers are based on the Department's BPJ of AWQC that will be protective of aquatic life in the receiving water. **Note, formalin treatments and discharges pursuant to the second tier limits (1 hour to 24 hour discharges) must be conducted no more frequently than once every four days. The permittee shall provide a list of dates on which the second tier limits were utilized and the length of time of each such treatment, with each monthly DMR.**

5. Supplemental Data Forms: In addition to specified DMR reporting requirements, the permittee shall submit all data from effluent dissolved oxygen monitoring to the Department in a supplemental report accompanying the appropriate monthly discharge monitoring report pursuant to Permit Special Conditions E.

B. NARRATIVE EFFLUENT LIMITATIONS:

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. UNAUTHORIZED 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 December 16, 2010; 2) the terms and conditions of this permit; and 3) only from Outfall #005A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

D. NOTIFICATION REQUIREMENT:

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

1. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system.

2. For the purposes of this section, adequate notice shall include information on:

   a. The quality or quantity of wastewater introduced to the waste water collection and treatment system; and

   b. Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

E. MONITORING AND REPORTING:

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

Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04401

SPECIAL CONDITIONS

E. MONITORING AND REPORTING (cont'd)

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

F. OPERATION & MAINTENANCE (O&M) PLAN:

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan**.** The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

The O&M Plan shall establish Best Management Practices (BMP) to be followed in operating the facility, cleaning the raceways/culture tanks, screens, and other equipment and disposing of any solid waste. The purpose of the BMP portion of the plan is to identify and to describe the practices which minimize the amounts of pollutants (biological, chemical, and medicinal) discharged to surface waters. Among other items, the plan shall describe in detail efficient feed management and feeding strategies to minimize discharges of uneaten feed and waste products, how and when the accumulated solids are to be removed, dewatered, and methods of disposal. The plan shall also describe where the removed material is to be placed and the techniques used to prevent it from re-entering the surface waters from any onsite storage. The plan shall document the recipients and methods of any offsite waste disposal.

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

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

SPECIAL CONDITIONS

G. ALTERNATIVE DISCHARGE STUDY:

On or before six-months prior to expiration of this permit, MDIFW Enfield is required to submit to the Department for review, an Alternative Discharge Study (ADS) report for the Enfield facility to determine if practical alternatives to the discharge exist. The ADS report shall evaluate wastewater treatment infrastructure, technologies, practices or other modifications that will result in the elimination of the discharge to the receiving water or improvement in the effluent quality, pursuant to guidance in Fact Sheet Section 7. *[34099]*

H. SETTLING BASIN CLEANING:

All wastewater settling structures shall be cleaned when accumulated materials occupy 20% of a basin's operational capacity, when material deposition in any area of the basins exceeds 50% of the operational depth, or at any time that said materials in or from the basins are contributing to a violation of permit effluent limits. The permittee is responsible for reporting effluent violations pursuant to Standard Conditions D.1 (f) and (g).

I. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS:

The permittee must comply with Maine Department of Inland Fisheries and Wildlife (freshwater facilities) and Maine Department of Marine Resources (salmon & marine facilities) fish health rules (12 MRSA, §6071; 12 MRSA, §§7011, 7035, 7201, and 7202, or revised rules). The cited rules include requirements for notification to the appropriate agency within 24-hours of pathogen detection. In addition to the requirements of the MDIFW and MEDMR rules, **the permittee shall notify the Department in writing within 24-hours following pathogen detection**, with information on the disease/pathogen, necessary control measures, and the veterinarian involved.

All medicated fish feeds, drugs, and other fish health therapeutants shall be registered with USEPA as appropriate, approved by the US Food and Drug Administration (USFDA), and applied according to USFDA accepted guidelines and manufacturer's label instructions or used as prescribed by a Maine licensed veterinarian as authorized in the Maine Veterinary Practice Act (31 MRSA, §4852) and the Maine Animal Welfare Act (7 MRSA, §3901). Proper veterinary records of all such materials used are to be maintained at the facility for a period of five years. This permitting action does not authorize routine off-label or extra-label drug use. Such uses shall only be permitted in emergency situations and under the authority of a Maine licensed veterinarian. **The permittee shall notify the Department in writing within 24-hours following such use**, with information on the conditions necessitating off-label or extra-label drug use, necessary control measures, and the veterinarian involved.

SPECIAL CONDITIONS

I. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS (cont'd)

For either reporting requirement outlined, the permittee must provide information on: the proposed treatment(s) including materials/chemicals/agents used, material/chemical/agent toxicity to aquatic life, the mass and concentrations of materials/chemicals/agents as administered, and the concentrations to be expected in the effluent. For any off-label or extra-label use, the permittee shall also provide a description of how the use constitutes off-label or extra-label use, the necessity for the use in terms of the condition to be treated and the inability to utilize accepted drugs or approved methods, the duration of the use, and the likely need of repeat treatments. If, upon review of information regarding a treatment pursuant to this section, the Department determines that significant adverse effects are likely to occur, it may restrict or limit such use.

The use and discharge of therapeutic agents is subject to the conditions described in Permit Special Condition C, Unauthorized Discharges.

J. DISINFECTING/SANITIZING AGENTS:

Disinfectants and/or sanitizing agents shall be registered with USEPA as appropriate and applied according to manufacturer's label instructions. Records of all disinfectants and/or sanitizing agents used that have the potential to enter the waste-stream or receiving water, their volumes and concentrations as used and concentrations at the point of discharge, shall be maintained at the facility for a period of five years. This permitting action only authorizes the discharge of those materials applied for, evaluated by the Department, and either regulated or determined to be deminimus in this permitting action or in subsequent Department actions. **The use and discharge of disinfecting/sanitizing agents is subject to the conditions described in Permit Special Condition C, Unauthorized Discharges.**

K. MINIMUM TREATMENT TECHNOLOGY REQUIREMENT:

Based on the information provided and Department BPJ, the permittee shall provide minimum treatment technology for the Enfield facility that shall consist of treatment equal to or better than 60-micron microscreen filtration of the effluent, wastewater settling/clarification, and removal of solids. MDIFW Enfield shall provide treatment and/or effluent quality equal to or better than the BPJ minimum treatment technology and shall comply with all effluent limitations, monitoring requirements, and operational requirements established in this permitting action. Additional treatment may be necessary to achieve specific water quality based limitations.

SPECIAL CONDITIONS

L. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION:

The US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NFMS) formally listed the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon as an endangered species on November 17, 2000. On June 19, 2009, the two agencies expanded the geographic range of the listed GOM DPS. On June 19, 2009, NMFS also designated critical habitat for Atlantic salmon in certain watersheds within the GOM DPS. Two significant issues of concern regarding the rearing of salmon in Maine involve the genetic integrity of the salmon and escape prevention to avoid impacts on native fish.

In review of MEPDES Permit / Maine WDLs since the 2000 listing and continuing with the 2009 listing expansion, the USFWS and NMFS have advocated for genetic testing of Atlantic salmon housed at hatchery and rearing facilities to ensure that they are of North American origin, as well as employment of a fully functional Containment Management System (CMS) at facilities to prevent the escape of raised salmon or other species of concern in order to avoid impacts on native fish populations. MDIFW Enfield discharges its effluent to Cold Stream, which in turn flows to the Passadumkeag and Penobscot Rivers. The receiving waters of the discharge are within the range of the GOM DPS and are currently occupied by endangered Atlantic salmon. The receiving waters are not designated as critical habitat for Atlantic salmon however, as the Passadumkeag River watershed was identified as an Economic Exclusion by NFMS.

MDIFW Enfield is a state brook trout, splake, lake trout, landlocked Atlantic salmon, and lake whitefish hatchery and rearing facility that produces fish for stocking in Maine waters as part of MDIFW's responsibilities in managing fisheries. MDIFW Enfield does not raise Atlantic salmon as envisioned in the USEPA opinion above and thus is not subject to genetic testing requirements.

Based on requirements established in Maine's Aquaculture General Permit (#MEG130000, Part II, Section I), individual MEPDES Permits for marine aquaculture facilities, and guidance developed by the Maine Aquaculture Association, in this permitting action, the Department requires that **the permittee shall employ a fully functional Containment Management System (CMS) at the facility** designed, constructed, and operated so as to prevent the accidental or consequential escape of fish to open water. The CMS plan shall include a site plan or schematic with specifications of the particular system. The permittee shall develop and utilize a CMS consisting of management and auditing methods to describe or address the following: site plan description, inventory control procedures, predator control procedures, escape response procedures, unusual event management, severe weather procedures and training. The CMS shall contain a facility specific list of critical control points (CCP) where escapes have been determined to potentially occur. Each CCP must address the following: the specific location, control mechanisms, critical limits, monitoring procedures, appropriate corrective actions, verification procedures that define adequate CCP monitoring, and a defined record keeping system. **The permittee shall submit the CMS plan to the Department for review and approval on or before six months following the effective date of this permit.** ***[53799]***

L. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION (cont'd)

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

1. The CMS shall be audited **at least once per year and within 30 days of a reportable escape** (more than 50 fish) by a party other than the facility operator or owner qualified to conduct such audits and approved by the Department ***[63899].*** A written report of these audits shall be provided to the permittee and the Department for review and approval **within 30 days of the audit being conducted.** If deficiencies are identified during the audit, the report shall contain a corrective action plan, including a timetable for implementation and re-auditing to verify deficiencies are addressed as in the corrective action plan approved by the Department. Additional third party audits to verify correction of deficiencies shall be conducted in accordance with the corrective action plan or upon request of the Department. The permittee shall notify the Department upon completion of corrective actions.

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

3. The permittee shall maintain complete records, logs, reports of internal and third party audits and documents related to the CMS on site for a period of 5 years.

4. For new facilities, a CMS shall be prepared and submitted to the Department for review and approval prior to fish being introduced into the facility.

The permittee shall report any known or suspected escapes of more than 50 fish within 24 hours to the Maine Dept of Marine Resources Bureau of Sea-Run Fisheries and Habitats at 207-941-9973 (Pat Keliher and Joan Trial), Maine Department of Inland Fisheries and Wildlife at 207-287-5202 (Commissioner's office), USFWS Maine Field Office at 207-866-3344, and NMFS Maine Office at 207-866-4172. During off-hours, the reports can be called to 800-432-7381.

M. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, new water quality monitoring data or modeling information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime 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, including, but not limited to, new information from ambient water quality studies of the receiving water.

N. SEVERABILITY

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

ATTACHMENT A

(Protocol for Total Phosphorus Sample Collection and Analysis)

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: October 21, 2011
Revised: December 5, 2011

MEPDES PERMIT NUMBER: # ME0001104
WASTE DISCHARGE LICENSE: # W-002032-6F-E-R

NAME AND ADDRESS OF APPLICANT:

COBB STATE FISH HATCHERY
Maine Dept. of Inland Fisheries and Wildlife
284 State Street, 41 State House Station
Augusta, Maine 04333

COUNTY: PENOBSCOT

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

COBB STATE FISH HATCHERY
45 Cobb Road
Enfield, Maine 04493

RECEIVING WATER / CLASSIFICATION: Cold Stream, Class A

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Henry Hartley Facility Manager (207) 732-3676, henry.hartley@maine.gov
Mr. Todd Langevin, MDIFW Hatchery Supervisor (207) 287-5261, todd.langevin@maine.gov

1. APPLICATION SUMMARY

The applicant has applied for a renewal of Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001104 / Maine Waste Discharge License (WDL) #W-002032-5Q-B-R, which was issued on March 31, 2006, for a five-year term. The MEPDES Permit / Maine WDL and subsequent permit modifications approved the discharge of a monthly average of 4.75 million gallons per day (MGD) of fish hatchery wastewater to Cold Stream, Class A, from a state fish hatchery and rearing facility in Enfield, Maine, which the applicant requests to increase to 5.0 MGD.

2. PERMIT SUMMARY

a. Regulatory - January 12, 2001 – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, USEPA extended Maine's NPDES program delegation to all but tribally owned discharges. That decision was subsequently appealed. On August 8, 2007, a panel of the U.S. First Circuit Court of Appeals ruled that Maine's environmental regulatory jurisdiction applies uniformly throughout the State. From January 12, 2001 forward, the program has been referred to as the MEPDES program and permit #ME0001104 will be utilized as the primary reference number for the Enfield facility.

b. Terms and conditions – This permitting action is similar to the March 31, 2006 MEPDES Permit / Maine WDL and subsequent permit modifications and revisions in that it is carrying forward all previous terms and conditions with a few exceptions. This permitting action is different in that it is:

1. revising the monthly average flow limit to 5.0 MGD, with effluent limitations and monitoring requirements to represent a combined facility waste-stream for fish rearing and hatchery functions of increased flow;
2. revising minimum monitoring frequency requirements for total phosphorus, fish on hand, formalin, and effluent dissolved oxygen;
3. eliminating monitoring requirements for effluent pH, ambient dissolved oxygen, ambient water temperature, and filamentous bacteria;
4. updating requirements related to diseases, pathogens, therapeutic agents and disinfecting/sanitizing agents; and
5. requiring a fish Containment Management System with provisions for auditing and reporting.

c. History: The most recent relevant regulatory actions include the following:

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

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

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

2. PERMIT SUMMARY (cont'd)

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

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

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

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

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

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

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

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

2. PERMIT SUMMARY (cont'd)

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

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

d. Source Description/ Facility Operation:

The MDIFW Enfield facility, or Cobb State Fish Hatchery, was constructed in 1958 as a state aquaculture facility to replace both a rearing station and fish hatchery previously located in Enfield. The MDIFW Enfield hatchery and rearing station underwent significant upgrades in 2005. The MDIFW Enfield facility raises brook trout (Kennebago strain, Maine Hatchery strain, and/or Kennebago-Maine Hatchery cross strain), splake, lake trout, landlocked Atlantic salmon, and lake whitefish obtained from this facility, other MDIFW hatchery facilities, and wild stocks to appropriate sizes for stocking in Maine waters as part of MDIFW's responsibilities in managing fisheries in Maine. MDIFW Enfield maintains Kennebago and Maine Hatchery strain brook trout broodstock on site, as described below. In November of each year, Maine Hatchery, Kennebago, and Kennebago-Maine Hatchery cross strain eggs are obtained and fertilized from these broodstock and sent to the warmer water MDIFW Governor Hill (Augusta) and/or Dry Mills (Gray) facilities for hatching and initial rearing. Maine Hatchery strain brood and production are hatched and raised at MDIFW Enfield. In addition, Maine Hatchery, Kennebago, and Kennebago-Maine Hatchery cross strain eggs are hatched and reared in MDIFW Enfield's colder water as backup for the MDIFW's hatchery system. These fry are stocked in June after MDIFW's fry transfers are completed. Fish not hatched at MDIFW Enfield are brought in from other MDIFW facilities according to the summary table below.

Species/Strain	Source	Month Received	Rec'd As	Approx. #	FF %	SY %	FY %	Brood %
Brook Trout / Kennebago	Dry Mills	May / June	Fry	66,000	57	39	3	1
Brook Trout / Crosses	Dry Mills / Gov. Hill	May / June	Fry	58,000	77	3	20	
Landlocked Salmon	Grand Lake Stream	January / June	Eyed Eggs / Fry	17,000		77	23	
Splake	Gov. Hill	May / June	Fry	20,000	31	58	11	
Lake Trout	Gov. Hill	Nov / Dec	FF	11,000		100		
Lake Whitefish	Wild Stock	Hatched	Green Eggs	15,000	100			

FF = fall fingerlings, SY = spring yearlings, FY = fall yearlings

2. PERMIT SUMMARY (cont'd)

All new fry are approximately 1 to 2-inches and fall fingerlings are 6 to 8 inches in length. In November, MDIFW captures adult whitefish in Clear Lake, strips and fertilizes eggs (approximately 30,000) and transports the "green" eggs to MDIFW Enfield for hatching and rearing. In January, MDIFW Enfield obtains "eyed" salmon eggs (approximately 17,000) from MDIFW Grand Lake Stream for hatching and rearing. As an alternative, salmon fry can be received in June. Hatching and rearing operations are described below.

Influent Water: Source water for the MDIFW Enfield facility is obtained from Cold Stream Pond, which consists of two main basins; the 704-acre North Basin and 2,934-acre South Basin. MDIFW Enfield has two intake pipes on the southwest shore of the South Basin, a deep water (46-feet deep) 24-inch diameter iron pipe and a shallow water (8-feet deep) 18-inch diameter iron pipe. Both intake pipes are fitted with coarse screens on the lake ends of the pipes. Significant upgrades to the influent microscreen drum filters and ultraviolet disinfection units were made in 2011. Each of the two influent water sources is passed through a 30µm microscreen drum filter to prevent fish or debris from entering the facility; then subjected to an ultraviolet disinfection unit to address potential pathogens in the source water. The ultraviolet disinfection unit consists of nine four-lamp modules for the deep line and five four-lamp modules for the shallow line. The facility hatchery building also incorporates nylon stockings on each tank inlet for additional filtration. The filtering and disinfection process also serves to prevent any other fish eggs from being imported into the facility and accidentally raised and stocked in pristine trout waters. Excess influent water and influent filter backwash are discharged to Cold Stream at the head of the facility prior to contact with any raised fish or eggs. MDIFW Enfield then passes deep, shallow, or blended source water to its hatchery and raceway systems as needed to meet temperature requirements (50-55 degrees F for most species, 65-70 F for salmon) for its fish. MDIFW Enfield is a flow-through facility with flows through its hatchery facility and each of two parallel raceway lines to Cold Stream (Class A), which in turn flows to the Passadumkeag (Class AA) and Penobscot (Class B) Rivers.

Hatchery Facilities: MDIFW Enfield's hatchery facilities consist of aluminum egg/fry troughs, plastic egg/fry troughs, combi-tanks, and hatching jars. Eggs are placed in hatching baskets and inserted into the aluminum egg/fry troughs, which are arranged in 12 lines of two 10-foot long by 16-inch wide by 12-inch deep (operational depth) (100-gallons) troughs for a total of 24 aluminum troughs. The flow-through rate for these units is 4 gpm for eggs and 6 gpm for fry per line or 72 gpm if all lines are in use. Eggs are also placed in hatching baskets in either of one 20-foot long by 29-inch wide by 18-inch deep (operational depth) (540-gallons) and one 30-foot long by 29-inch wide by 18-inch deep (operational depth) (810-gallons) plastic troughs. The flow-through rate for these units is 6-10 gpm per unit or 12-20 gpm if both are in use. Egg/fry troughs are used for egg hatching and initial rearing of fry until they are transferred to facility raceways for rearing. MDIFW Enfield also has five, 5-foot diameter by 3-feet deep (440-gallon) combi-tanks with a flow-through rate of 2-10 gpm through each tank for a total of 50 gpm for all combi tanks. Combi tanks are used for egg hatching and initial rearing of fry until they are transferred to facility raceways for rearing. MDIFW Enfield has five 6-inch diameter by 12-inch deep (1.5-gallons) circular hatching jars and six 6-inch diameter by

2. PERMIT SUMMARY (cont'd)

18-inch deep (2.2 gallons) hatching jars. Hatching jars are used to raise brook trout and whitefish eggs from acquisition in mid-November to the "eyed" stage in the end of December. Eyed brook trout eggs are transferred to aluminum troughs and eyed whitefish eggs are then transferred to combi tanks for hatching and initial rearing. MDIFW reports that currently all 24 of the aluminum egg/fry troughs, none of the plastic egg/fry troughs, and 1-5 of the combi tanks depending on need are used. Additional combi-tanks are used as needed to provide room for "thinning" the growing whitefish. The hatchery facility is used for hatching whitefish, broodstock and three strains of brook trout eggs and initial rearing of non-feeding sacfry from November through April, followed by start-up feeding of fry in May before they are moved to facility raceways. MDIFW Enfield reports that trout are typically moved out of the hatchery by mid-June, while whitefish and salmon are typically moved out by the first week of July. Water is supplied via gravity flow in series through each line, with a discharge of 0.176 MGD of hatchery wastewater into the facility waste-stream for treatment and discharge, as described below. After fry are moved to raceways, the hatchery facility is cleaned, shut down until the next season, and the discharge is discontinued.

Broodstock Facilities: MDIFW Enfield maintains a broodstock supply of approximately 7,660 Kennebago strain and 7,160 Maine Hatchery strain brook trout. The broodstock are maintained for a three-year rotation. Each year, three-year old fish are stocked out in Maine waters in the fall and replaced with Maine Hatchery strain propagated in-house and Kennebago fry from MDIFW Dry Mills (Gray) in June. The new broodstock eggs are hatched and initially reared in the facility hatch house as described above, then moved to facility raceways in May to June.

Rearing Facilities: MDIFW Enfield's rearing facilities consist of two lines of covered concrete raceways referred to as the "A" (north) side and "B" (south) side raceways. Both the "A" and "B" raceways consist of three sets of six raceway pools for a total of 18 pools per side and 36 raceway pools for the facility. Each of the raceway pools is 6-feet wide by 100-feet long, operated at a depth of 18-inches (6,732-gallons). Influent water is blended in the raceway headboxes enabling temperature management of individual lines of raceway pools. Feeding is conducted manually for large fish and automatically by touch demand for smaller fish. MDIFW Enfield indicates using an average of 195 pounds of food per day, a maximum of 402 lbs/day, and a period of peak feeding during July, August, September.

MDIFW Enfield utilizes raceway space depending on fish needs, with the exception that salmon are typically housed in one dedicated raceway line on the "A" side with 1-2 raceway pools used and 4-5 pools remaining vacant. Additionally, splake (2-5 pools) and lake trout (1 pool) are housed in one raceway line on the A side. All other raceway pools and lines are used as necessary for the species raised. Fish are raised for both spring and fall stocking. In the fall, MDIFW Enfield stocks 6-8-inch long brook trout, 4-6-inch long whitefish, and 6-8-inch long splake fall fingerlings as well as 12-14-inch long brook trout, 12-14-inch landlocked salmon, and 12-14-inch long splake fall yearlings held over the previous year. In the spring, MDIFW Enfield stocks 6-8-inch long salmon, 8-10-inch long brook trout,

2. PERMIT SUMMARY (cont'd)

8-10-inch long splake, and 6-8-inch long lake trout spring yearlings held over the previous winter. New eggs and fry are then brought on station for rearing as outlined above. MDIFW Enfield indicates a maximum quantity of fish on station of 227,989 first year fish weighing 45,598 lbs, 26,871 second year fish weighing 26,871 lbs, and 1,290 broodstock weighing 3,225 lbs for a total of 256,150 fish weighing 75,694 lbs.

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

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

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

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

2. PERMIT SUMMARY (cont'd)

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

Use of agents for therapeutic and disinfecting/sanitizing purposes are addressed in subsequent Fact Sheet sections titled accordingly.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 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, 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, 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:

Maine law, 38 M.R.S.A., Section 467.7.F(6) classifies "*Passadumkeag River and its tributaries - Class A, unless otherwise specified*", which includes Cold Stream at the point of discharge. Maine law, 38 M.R.S.A., Section 465.2, describes the standards for Class A waters.

In 1990, the Maine Legislature amended the water classification statute to upgrade Cold Stream from Class B to Class A. On January 24, 1996, the Department interpreted the Legislature's intent to "grandfather" the discharge existing at that time from the Class A requirement that the effluent be of equal or better quality than the receiving water. See Fact Sheet Section 6 for clarification of this grandfathering.

5. RECEIVING WATER QUALITY CONDITIONS:

The State of Maine 2010 *Integrated Water Quality Monitoring and Assessment Report* (DEPLW1187), prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act contains lists of waters in Maine that are attaining water quality standards as well as those that are impaired. The report includes the receiving water in the designation *Cold Stream (Enfield) downstream of hatchery* (Assessment Unit ME0102000503_221R01), listed in

5. RECEIVING WATER QUALITY CONDITIONS:

Category 4-B, Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment. The listing identifies the impairment cause as *Benthic-Macroinvertebrate Bioassessments (Streams)* for a 1.63 mile segment of Class A water. The listing further provides comments, *Hatchery permit issued 3/31/2006,* and lists an "Expect To Attain Date" of *2011*.

All freshwaters in Maine are listed as only partially attaining the designated use of recreational fishing due to a fish consumption advisory (Category 5-C). The advisory was established in response to elevated levels of mercury in some fish caused by atmospheric deposition. The Department has no information at this time that the Enfield facility causes or adversely contributes to non-attainment of standards in Cold Stream. The Department notes that macroinvertebrate biomonitoring conducted in 2006 indicated that the receiving water below the MDIFW Enfield facility was attaining Class A aquatic life standards. The MEDEP Division of Environmental Assessment (DEA) conducted macroinvertebrate biomonitoring in Cold Stream below MDIFW Enfield in 2011 and results of this investigation are pending.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS:

Pursuant to Maine Law (38 M.R.S.A., §414-A.1), the Department shall only authorize discharges to Maine waters when those discharges, either by themselves or in combination with other discharges, "*will not lower the quality of any classified body of water below such classification". Further, "the discharge will be subject to effluent limitations that require application of the best practicable treatment". "Best practicable treatment* (BPT) *means the methods of reduction, treatment, control and handling of pollutants, including process methods, and the application of best conventional pollutant control technology or best available technology economically available, for a category or class of discharge sources that the department determines are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Water Pollution Control Act" (40 CFR). "If no applicable standards exist for a specific activity or discharge, the department must establish limits on a case-by-case basis using best professional judgement…"* considering "*…the existing state of technology, the effectiveness of the available alternatives for control of the type of discharge and the economic feasibility of such alternatives…*". Pursuant to 38 M.R.S.A, §414-A.1 and §464.4, the Department regulates wastewater discharges through establishment of effluent limitations and monitoring requirements that are protective of Maine waters.

At the time of the previous permitting action, the Department undertook to revise its wastewater discharge permitting program for fish hatcheries and rearing facilities to provide for establishment of scientifically valid and consistently applied effluent limitations, monitoring and operational requirements based on the Department's best professional judgement (BPJ) of best practicable treatment (BPT) or site specific water quality conditions. This permitting action represents a continuance of that process based on observations and analyses conducted for MDIFW Enfield and other facilities since issuance of the previous permitting actions.

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

As described herein, MDIFW Enfield discharges its wastewater to a small, Class A stream that provides minimal dilution. The Department advises MDIFW that considerations of the number, mass, and life stages of fish maintained on station need to also evaluate and include the wastewater treatment infrastructure, operations and maintenance necessary to insure effluent quality, ambient water quality, and attainment of water class standards and designated uses.

In a January 24, 1996 letter, the Department addressed the issue of applicable effluent and water quality standards for those licensed discharges existing when a receiving water classification is upgraded from Class B to Class A, as was the case for the MDIFW Enfield facility. Class A water standards (38 MRSA, Section 465.2(C)) require that the effluent from direct discharges licensed after January 1, 1986, must "be equal to or better than the existing water quality of the receiving waters" and that discharges licensed before January 1, 1986, "are allowed to continue only until practical alternatives exist". Based on the Department's 1996 letter and as clarified in 2004, for those existing licensed discharges the Department will apply the more stringent of the previous discharge license effluent limits, newly calculated BPT or water quality based effluent limits, or past demonstrated effluent performance, in lieu of the "equal to or better" standard. The aquatic life, bacteria, and dissolved oxygen standards applicable to the previous discharge license (Class B standards) were carried forward until the receiving water met Class A standards. Class A standards now apply to Cold Stream in the vicinity of the MDIFW Enfield discharge based on the results of macroinvertebrate biomonitoring conducted in 2006. The permittee must conduct an Alternative Discharge Study at least prior to each relicensing to determine if the discharge can be eliminated or if there is treatment technology and/or practices available that will result in improved effluent and receiving water quality, ultimately resulting in attainment of Class A standards. All new discharges of pollutants or increases in pollutants in a permitted facility's existing discharge, excluding flow, must meet all Class A standards and "*be equal to or better than the existing water quality of the receiving waters*". It is noted that these standards will apply to any future requests to incorporate methods or materials onsite that may result in the discharge of new pollutants or increased amounts of permitted pollutants. Accordingly, if MDIFW Enfield wishes to increase the number and mass of fish on station, it will likely need to provide additional wastewater treatment that will hold effluent quality constant.

a. Flow: The previous permitting action established monthly average discharge limits of 4.75 MGD for the rearing facility (Outfall #005A) and 0.072 MGD for the hatchery facility (Outfall #006A). The two discharges were subsequently combined and Outfall #006A was eliminated. In this permitting action, the flow limit is being increased to 5.0 MGD to represent a combined facility waste-stream for fish rearing and hatchery functions and current facility needs. MDIFW notes that additional flow increases may be necessary in the future based on production needs and infrastructure changes at MDIFW Enfield. The required daily minimum measurement frequency is being carried forward from the previous permitting action, consistent with Department guidelines for wastewater treatment facility discharges.

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

A review of the Discharge Monitoring Report (DMR) data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
EFFLUENT FLOW

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	4.75 MGD	4.03 MGD	4.75 MGD	4.64 MGD	54

OUTFALL #006A - HATCHERY BUILDING
EFFLUENT FLOW

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.072 MGD	0.024 MGD	0.135 MGD	0.068 MGD	45

10 exceedence of the monthly average flow limit for Outfall #006A.

b. Dilution Factors: Dilution factors associated with wastewater discharges are derived in accordance with freshwater protocols established in Department Rule 06-096 CMR 530, *Surface Water Toxics Control Program*, October 2005 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). To calculate potential effects from a facility's effluent discharge, the Department utilizes the receiving water's available dilution during low flow conditions. The MDIFW Enfield facility discharges its treated facility effluent (Outfall #005A) to a freshwater wetland, which in turn flows approximately 75 yards into the side of Cold Stream. Typically, these types of discharges do not achieve rapid and complete mixing with the receiving water since initial dilution is based on mixing resulting from the momentum of a discharge as it exits a discharge pipe (jet effect) as well as the dispersion of the effluent plume as it rises to the surface of the receiving water.

As noted in the previous permitting action, MDIFW owns the dam on Cold Stream Pond, however there is no formal Water Level Order for Cold Stream Pond and no formal requirement specifying a guaranteed minimum flow that must be passed over or through the dam to Cold Stream. MDIFW Enfield reports that the pond water level sometimes falls below the height of the dam spillway. Reportedly, flow is always maintained through the dam's 8-inch by 10-inch fishway opening and the dam allows some leakage, but Cold Stream below the dam is virtually dewatered on occasion. At those times, the MDIFW Enfield discharge constitutes the largest component of the flow in that portion of Cold Stream. MDIFW reports that the facility's influent water treatment system is able to discharge excess flows to the river above the facility and maps indicate that a tributary enters Cold Stream below the dam. However, guaranteed minimum flow data is not well established. The previous permitting action contained separate monthly average effluent flow limits and dilution factors for the rearing facility and the hatchery facility, which is being revised in this permitting action to represent a combined facility waste-stream for fish rearing and hatchery functions. With a monthly average flow limitation of 5.0 MGD and based on Department

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

analysis conducted pursuant to the methods outlined above, the dilution factors associated with the MDIFW Enfield facility are calculated as follows:

Mod. Acute: ¼ 1Q10 = 0.28 cfs $\Rightarrow \frac{(0.28 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.04:1$

Acute: 1Q10 = 1.1 cfs $\Rightarrow \frac{(1.1 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.14:1$

Chronic: 7Q10 = 1.3 cfs $\Rightarrow \frac{(1.3 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.17:1$

Harmonic Mean = 3.9 cfs $\Rightarrow \frac{(3.9 \text{ cfs})(0.6464) + 5.0 \text{ MGD}}{5.0 \text{ MGD}} = 1.50:1$

06-096 CMR 530.4.B(1) states that analyses using numeric acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. As stated above, MDIFW Enfield's discharges do not achieve rapid and complete mixing, thus the Department is utilizing the default stream flows of ¼ of the 1Q10 pursuant to 06-096 CMR 530 in acute evaluations. If MDIFW wishes to establish a guaranteed minimum flow from the Cold Stream Pond dam in the future or can provide long term guaranteed minimum flow data, this determination may be revisited.

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established monthly average and daily maximum concentration limits of 6 mg/L and 10 mg/L respectively for BOD_5 and TSS based on Department BPJ of Best Practicable Treatment (BPT), which are being carried forward in this permitting action. These limits were based on recommendations included in USEPA's 2002 proposed draft National Effluent Guidelines for TSS from fish hatchery wastewater receiving a secondary level of treatment, the Department's long-standing view of the relationship with and significance of BOD_5, and consideration of effluent quality from facilities utilizing the Department's BPJ of minimum treatment technology. Mass limits were determined pursuant to the Department's upgrade "grandfathering" determination described in Fact Sheet Section 6. Monthly average mass values were calculated using the 2 mg/L concentration limits established in prior licenses and the previous 4.75 MGD discharge flow limit. As no relevant maximum limits were previously established, daily maximum mass values were calculated using the BPJ of BPT 10 mg/L concentration limit and the 4.75 MGD flow limit. For both monthly average and daily maximum limits, the values were then allocated to the separate hatchery facility and rearing facility discharges based on their individual flows.

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

As these two waste-streams have now been combined, this permitting action combines the previously divided allocations to result in BOD_5 and TSS mass limits of 79.2 lbs/day (monthly average) and 402 lbs/day (daily maximum). This does not represent an increase in pollutants allowed to be discharged. Pursuant to Class A water standards, all new discharges of pollutants or increases in pollutants in a permitted facility's existing discharge must meet all Class A standards and "*be equal to or better than the existing water quality of the receiving waters*". Accordingly, if MDIFW Enfield wishes to increase the number and mass of fish on station, it will likely need to provide additional wastewater treatment that will hold effluent quality constant.

A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
BOD MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	78 lbs/day	38 lbs/day	<166 lbs/day	<78.2 lbs/day	54
Daily Max.	396 lbs/day	59 lbs/day	257 lbs/day	<80.5 lbs/day	54

28 exceedences of the monthly average BOD mass limit, of which 27 were <79 lbs/day

BOD CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	1.3 mg/L	<4.0mg/L	<2.0 mg/L	54
Daily Max.	10 mg/L	<2 mg/L	6.7 mg/L	<2.1 mg/L	54

TSS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	78 lbs/day	40 lbs/day	<135 lbs/day	<77.2 lbs/day	54
Daily Max.	396 lbs/day	52 lbs/day	195 lbs/day	<78.7 lbs/day	54

29 exceedences of the monthly average TSS mass limit, of which 28 were <79 lbs/day

TSS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	1.0 mg/L	<3.5 mg/L	<2.0 mg/L	53
Daily Max.	10 mg/L	1.4 mg/L	5.0 mg/L	<2.1 mg/L	53

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

OUTFALL #006A - HATCHERY BUILDING
BOD MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	1.2 lbs/day	<0.5 lbs/day	1.8 lbs/day	<1.1 lbs/day	37
Daily Max.	6 lbs/day	<0.5 lbs/day	2.0 lbs/day	<1.2 lbs/day	38

8 exceedences of the monthly average BOD mass limit

BOD CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	<2 mg/L	3.8 mg/L	<2.1 mg/L	38
Daily Max.	10 mg/L	<2 mg/L	3.8 mg/L	<2.1 mg/L	38

TSS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	1.2 lbs/day	<0.5 lbs/day	2.4 lbs/day	<1.1 lbs/day	39
Daily Max.	6 lbs/day	<0.5 lbs/day	4.0 lbs/day	<1.2 lbs/day	39

5 exceedences of the monthly average TSS mass limit

TSS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	1.0 mg/L	6.0 mg/L	<2.1 mg/L	39
Daily Max.	10 mg/L	<1.2 mg/L	9.0 mg/L	<2.1 mg/L	39

The previous permitting action established minimum monitoring requirements of once per two weeks for effluent BOD_5 and TSS, which were modified to once per month in April 2009, based on revised Department BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions. This permitting action carries forward the once per month minimum monitoring frequency requirement.

d. Total Phosphorus and Orthophosphate: Phosphorus is a nutrient that encourages the growth of plants such as planktonic algae and macrophytes in northern waters. Oxygen levels in the water are reduced in the early morning hours due to extended nighttime respiration of algae. The decomposition of excess plant material further reduces the amount of available oxygen in the water through biochemical oxygen demand. Lowering oxygen levels in a receiving water impacts the aquatic life in that water, making it unfit for some forms of life. Further, enrichment from excess nutrients, such as phosphorus, can result in reductions in aquatic macro-invertebrate species diversity, an indicator of the overall health of a receiving water. Excess phosphorus can also result in undesirable aesthetic conditions in a receiving water, impacting that water's ability to meet standards for maintaining recreational use, a designated use by law. Therefore, any increase in the phosphorus content in a receiving water has the potential to cause or contribute to non-attainment of classification standards. Pursuant to Maine law (38 MRSA § 414-A.1), the Department shall only authorize discharges to Maine

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

waters when those discharges, either by themselves or in combination with other discharges, "*will not lower the quality of any classified body of water below such classification*".

In the previous permitting action, the Department established a seasonal monthly average phosphorus concentration limit based on a 0.035-mg/L BPJ instream ambient water quality (AWQ) threshold and MDIFW Enfield's chronic dilution factor for each of the then separate hatchery facility (11.3:1) and rearing facility (1.16:1) discharges, subject to a schedule of compliance for implementation of new, more restrictive water quality based limits. Based on Department research, the AWQC of 0.035 mg/L corresponds to the maximum level at which algae blooms will not typically occur in a receiving river or stream under normal circumstances. As phosphorus is typically of concern under chronic discharge conditions, the 7Q10 dilutions were utilized in calculation of a water quality based effluent concentration limits. As noted above, the two waste-streams have been combined. The Department recalculated the facility's dilution factors as indicated in Fact Sheet Section 6b above. Though the chronic dilution factor increased from 1.16:1 to 1.17:1, the resulting monthly average phosphorous limit still calculates as equivalent to the previous 0.041 mg/L limit, which is being carried forward in this permitting action along with the daily maximum reporting requirement established in the previous permitting action for Outfall #005A.

The previous permitting action also established monthly average mass limits for the hatchery (#006A) and rearing facility (#005A) outfalls pursuant to the Department's upgrade "grandfathering" determination described in Fact Sheet Section 6. As Cold Stream is a Class A water, with limitations on effluent discharges as stated above, the Department must apply the more stringent of the previous license mass limits and new water quality based mass limits. New water quality based monthly average mass limits of 1.61 lbs/day (rearing facility) and 0.24 lbs/day (hatchery) were established as they were more restrictive than the previous mass limit of 2.49 lbs/day. As these two waste-streams have now been combined, this permitting action combines their previous separate allocations to result in a monthly average mass limit of 1.85 lbs/day. This does not represent an increase in pollutants allowed to be discharged.

Monitoring and reporting requirements were also previously established for the phosphorus mass and concentration discharged. As phosphorus is typically a summer time concerns for water quality in free flowing rivers and streams, the effluent limits and monitoring requirements were in effect from June 1 through September 30 each year. A required minimum monitoring frequency of once per two-weeks was established based on the Department's BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions, which is being revised to twice per month, also based on BPJ.

The previous permitting action established a one year monitoring requirement for monthly average and daily maximum orthophosphate mass and concentration. Orthophosphate is the portion of total phosphorous that is readily available for uptake by aquatic plants. The requirement was fulfilled and is not being carried forward in this permitting action.

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

Pursuant to Class A water standards, all new discharges of pollutants or increases in pollutants in a permitted facility's existing discharge must meet all Class A standards and "*be equal to or better than the existing water quality of the receiving waters*". Accordingly, if MDIFW Enfield wishes to increase the number and mass of fish on station, it will likely need to provide additional wastewater treatment that will hold effluent quality constant.

A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	2.25 lbs/day	0.61 lbs/day	2.21 lbs/day	1.35 lbs/day	19
	1.61 lbs/day				
Daily Max.	report lbs/day	0.64 lbs/day	3.57 lbs/ day	1.62 lbs/ day	19

2 exceedences of the monthly average phosphorus mass limit

PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.063 mg/L	0.018 mg/L	0.057 mg/L	0.035 mg/L	19
	0.04 mg/L				
Daily Max.	report mg/L	0.019 mg/L	0.093 mg/L	0.041 mg/L	19

3 exceedences of the monthly average phosphorus concentration limit

ORTHO-PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	0.79 lbs/day	1.05 lbs/day	0.92 lbs/day	2
Daily Max.	report lbs/day	0.95 lbs/day	1.35 lbs/day	1.15 lbs/day	2

ORTHO-PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	0.020 mg/L	0.019 mg/L	0.020 mg/L	2
Daily Max.	report mg/L	0.024 mg/L	0.340 mg/L	0.182 mg/L	2

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

OUTFALL #006A - HATCHERY BUILDING
PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.24 lbs/day	0.01 lbs/day	0.04 lbs/day	0.03 lbs/day	15
Daily Max.	report lbs/day	0.01 lbs/yr	0.41 lbs/yr	0.06 lbs/yr	15

PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.4 mg/L	0.01 mg/L	0.11 mg/L	0.06 mg/L	15
Daily Max.	report mg/L	0.01 mg/L	0.11 mg/L	0.07 mg/L	15

ORTHO-PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day				0
Daily Max.	report lbs/day				0

ORTHO-PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L				0
Daily Max.	report mg/L				0

For the purpose of this permitting action the Department is continuing to utilize the BPJ AWQ threshold for phosphorus described above. It is noted that the Department is currently undergoing rulemaking to establish new nutrient criteria. The adoption of Department Rule 06-096 CMR 583, Use Attainment Evaluation Using Nutrient Criteria for Surface Waters, may, or may not, effect future limits for phosphorus.

e. Fish on Hand: This permitting action is carrying forward the reporting requirement for monthly average and daily maximum mass of fish on hand. This parameter is intended to enable both the Department and the permittee in evaluating management practices at the facility and trends in effluent quality and receiving water impacts. This permitting action is revising the required minimum monitoring frequency of once per two weeks to twice per month, based on the Department's BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions.

A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

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

OUTFALL #005A - REARING STATION
FISH ON HAND

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	12,866 lbs/day	53,952 lb/day	29,018 lb/day	53
Daily Max.	report lbs/day	12,866 lbs/day	53,952 lb/day	29,149 lb/day	53

OUTFALL #006A - HATCHERY BUILDING
FISH ON HAND

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	<1 lbs/day	232 lb/day	67 lb/day	30
Daily Max.	report lbs/day	<1 lbs/day	232 lb/day	67 lb/day	30

f. Formalin: Fish hatcheries and rearing facilities commonly use formalin based biocides for therapeutic treatment of fungal infections and external parasites of finfish and finfish eggs. MDIFW Enfield reports that approximately 165 gallons of formalin are used at the Enfield facility annually, an increase from the 80-gallons per year projected for the previous permitting action. The previous permitting action established monthly average mass and concentration reporting requirements and daily maximum mass and concentration limits for formalin with a required minimum monitoring frequency requirement of once per two weeks and guidance for calculating the levels of effluent formalin. For the previous permitting action, as existing studies revealed significant variability in formalin toxicity, the MEDEP undertook its own investigation to determine appropriate limitations, contracting with a commercial laboratory for Whole Effluent Toxicity (WET) testing on *Ceriodaphnia dubia* for 48-hour acute toxicity, pursuant to standard methods. Pursuant to MEDEP's long standing goal of 100% survival of the test species, Lotic Inc. identified a BPJ of ambient water quality criteria (AWQC) of 1.56 mg/L. The 1.56 mg/L BPJ of AWQC was multiplied by the facility's acute (1Q10) ambient to effluent dilution to calculate concentration limits under acute critical low flow conditions. Mass limits were calculated based on the projected maximum amount of formalin used per day, multiplied by a conversion factor of 9.13 lbs / gallon representing the weight of formalin. Though standard methods and assumptions were utilized in the Lotic study, realistically no facilities utilize formalin for 48-hours continuously. Thus, using the standard methods and assumptions appeared to overestimate impacts to aquatic life. In 2008, the Maine Department of Inland Fisheries and Wildlife (MDIFW) provided results of its study of acute toxicity at more targeted time frames of less than 48-hours, typical of rearing facility operations.

MDIFW utilized statistical "bootstrapping" to lend greater statistical significance to the data set. These results were reviewed by MEDEP and determined to represent a more appropriate means of establishing toxicity based effluent limits for formalin. Simultaneously, MEDEP revised its survival goals to 95% of test species to correspond with toxicity work conducted by USEPA. A MEDEP biologist noted, "*the basis for all of EPA's ambient water quality criteria for aquatic life (is) to protect 95% of the species*" and determined that using the 5^{th} percentile of MDIFW's 1-hour exposure data "*gives an equivalent amount of protection to*

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

aquatic life." Based on this, in 2008 the Department developed a revised BPJ of AWQC of 45 mg/L based on a one hour treatment, typical of most hatchery and rearing facility discharges. Under emergency conditions, it is acknowledged that additional rearing structures may need to be treated, causing formalin discharges to extend beyond the typical one hour period. To accommodate this, the Department also developed a BPJ of AWQC of 25 mg/L based on a maximum 24-hour treatment period. Such emergency treatments and discharges must be conducted no more frequently than once every four days to ensure the average formalin concentration does not exceed the 5^{th} percentile level. Based on this research, the Department revised MDIFW Enfield's MEPDES Permit / Maine WDL on October 10, 2008, revising hatchery and rearing station permit concentration limits for formalin.

In this permitting action, the Department is utilizing the same procedure to calculate formalin concentration limits. These calculations utilize a 1-hour exposure criteria typical of normal treatment operations, a 24-hour exposure criteria to accommodate emergency treatment conditions, and the effluent to ambient acute dilution applicable to this facility and its receiving water.

In the previous permitting action, the Department established daily maximum concentration limits using MDIFW Enfield's acute dilution factor for each of the then separate hatchery facility (3.2:1) and rearing facility (1.04:1) discharges, subject to a schedule of compliance for implementation of new, more restrictive water quality based limits. As noted above, the two waste-streams have been combined. The Department recalculated the facility's dilution factors as indicated in Fact Sheet Section 6b above. The dilution factors for the combined facility discharge were equivalent to the previous dilution factors for the rearing facility portion of MDIFW Enfield's discharge (acute 1.04:1). Therefore, the formalin concentration limits for Outfall #005A are calculated as:

45 mg/L (1-hour acute criteria) x 1.04 (effluent dilution) = 47 mg/L formalin limit.
25 mg/L (24-hour acute criteria) x 1.04 (effluent dilution) = 26 mg/L formalin limit.

The previously established daily maximum formalin mass limits of 102 lbs/day for Outfall #005A (as corrected in the 2008 Permit Revision) and 1.4 lbs/day for Outfall#006A, developed pursuant to 06-096 CMR 523.6(f) based on projected use at MDIFW Enfield, are being combined because of the combined discharges and carried forward in this permitting action as a 103.6 lbs/day daily maximum limit. It must be noted that the concentration and mass limits are derived separately and that compliance with one does not guarantee compliance with the other. Throughout the term of the permit, the permittee shall report the monthly average effluent formalin mass and concentration. Effluent values shall be determined through calculations, as described below. This permitting action is establishing effluent limitations and monitoring requirements for formalin, as this is the commonly used form, and not for formaldehyde. The Department is requiring MDIFW Enfield to report therapeutic agents used at the facility that have the potential to be discharged to the

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

receiving water. This permitting action revises the minimum monitoring frequency requirement to once per occurrence (each formalin use), consistent with Department BPJ and requirements for other facilities within this industry.

A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
FORMALIN MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg. 1-hr treatment	report lbs/day	1.6 lbs/day	76.7 lbs/day	41.6 lbs/day	23
24-hr treatment	report lbs/day	51.1 lbs/day	51.1 lbs/day	51.1 lbs/day	2
Daily Max. 1-hr treatment	12.8 lbs/day 102 lbs/day	51.0 lbs/day	102.3 lbs/day	67.3 lbs/day	23
24-hr treatment	12.8 lbs/day 102 lbs/day	51.1 lbs/day	51.1 lbs/day	51.1 lbs/day	2

15 exceedences (100%) of the daily maximum formalin mass limit prior to limit revision, 0 after.

FORMALIN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg. 1-hr treatment	report mg/L	0.7 mg/L	31.9 mg/L	17.0 mg/L	23
24-hr treatment	report mg/L	21.8 mg/L	21.8 mg/L	21.8 mg/L	2
Daily Max. 1-hr treatment	13.5/ 1.6 mg/l 47 mg/L	21.8 mg/L	43.5 mg/L	25.2 mg/L	23
24-hr treatment	13.5/ 1.6 mg/l 26 mg/L	21.8 mg/L	21.8 mg/L	21.8 mg/L	2

15 exceedences (100%) of the daily maximum formalin concentration limit prior to limit revision, 0 after.

OUTFALL #006A - HATCHERY BUILDING
FORMALIN MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg. 1-hr treatment	report lbs/day	1.5 lbs/day	7.5 lbs/day	3.7 lbs/day	6
24-hr treatment	report lbs/day				0
Daily Max. 1-hr treatment	1.4 lbs/day	3.1 lbs/day	11.6 lbs/day	6.3 lbs/day	6
24-hr treatment	1.4 lbs/day				0

3 exceedences (100%) of the daily maximum formalin concentration limit prior to limit revision, 3 after (100%).

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

FORMALIN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg. 1-hr treatment	report mg/L	120 mg/L	732 mg/L	448.8 mg/L	6
24-hr treatment	report mg/L				0
Daily Max. 1-hr treatment	13.5/ 5.0 mg/l 144/ 80 mg/l	172 mg/L	1634 mg/L	884.9 mg/L	6
24-hr treatment	13.5/ 5.0 mg/l 144/ 80 mg/l				0

3 exceedences (100%) of the daily maximum formalin concentration limit prior to limit revision, 3 after (100%).

Effluent levels of formalin can be calculated based on the amount of formalin used at the facility for hatchery, rearing, and broodstock functions and the dilution available in large wastewater settling structures and through mixing in the total facility waste-stream. Previously, the Department developed methods for calculating effluent formalin concentrations and mass values utilizing the varying treatment concentrations in the different facility functions and various internal dilutions provided within the facility. In this permitting action, the Department is providing a more simplified recommendation that utilizes the total mass of formalin used for all functions during the treatment period and the dilutions described above during the same time period. The facility may propose alternative methods for Department review and approval. Effluent formalin values must be calculated upon each use at the facility.

In this example, a theoretical facility adds approximately 0.172-gallons (650 ml) of undiluted formalin directly to each line of hatchery egg troughs to achieve the desired dose during a 15-minute treatment period. The hatchery facility uses a maximum of 6 lines of egg troughs for treatment at a time. The hatchery facility wastewater joins with the total facility wastewater prior to discharge to the receiving water. With a total facility discharge flow of 3.0 MGD, the flow during the 15-minute treatment period equates to 31,250-gallons (3.0 MGD / 24-hours / 4) available for dilution of the 1.03 gallons of formalin administered (0.172 gal x 6 troughs). The combined wastewater flow is then discharged to the receiving water. The end of pipe concentration from egg treatments can be calculated as follows, using 1 million parts per million to provide for the concentration of undiluted formalin.

31,250-gal wastewater / 1.03 gal formalin = 30,340:1 dilution
1,000,000 ppm (undiluted) formalin / 30,340 = 33 ppm formalin discharged

For treatments on fish in rearing structures, the same facility adds approximately 6-gallons of undiluted formalin at the head of raceway pools by drip and allows it to flow through the entire line over a one hour period. As in the example above, the rearing facility wastewater joins with the total facility wastewater prior to discharge to the receiving water. With a total facility discharge flow of 3.0 MGD, the flow during the one hour treatment period equates to 125,000-gallons (3.0 MGD / 24-hours) available for dilution of the 6.0 gallons of formalin

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

administered. The combined wastewater flow is then discharged to the receiving water. The end of pipe concentration from fish treatment can be calculated as follows:

125,000-gal rearing facility wastewater / 6 gal formalin = 20,833:1 dilution
1,000,000 ppm (undiluted) formalin / 20,833 = 48 ppm formalin discharged

These examples consider hatchery and rearing facility treatments to be conducted on different occasions. If multiple treatments occur simultaneously, the total amount of formalin must be considered in calculating the end of pipe concentration. For brevity, these examples do not include a broodstock function, which would be calculated in a similar manner. If extended period pool treatments are conducted at the facility, the time during which the pool volume is discharged into the facility waste-stream should be used to determine an appropriate dilution volume instead of the time the formalin is added to the pool. Also, these examples utilized a facility that discharges its effluent without significant wastewater settling. If the facility used a 500,000-gallon settling basin, the rearing facility discharge under the one-hour discharge scenario could be analyzed as follows.

125,000-gal rearing facility wastewater / 6 gal formalin = 20,833:1 dilution
500,000-gal basin volume / 125,000 combined waste-stream = 4:1 dilution
1,000,000 ppm (undiluted) formalin / 20,833 / 4 = 12 ppm formalin discharged

Use of the settling basin volume as an additional dilution is only applicable for the one-hour treatment scenario. Under a greater period of time of treatment and discharge, the additional settling volume becomes part of the facility infrastructure and the total facility discharge flow is used. It must be noted that to obtain an accurate end-of-pipe calculation, each facility must utilize accurate amounts of formalin used for all treatment functions, accurate volumes of the facility's effluent flow during the treatment period, and accurate volumes of water within any large settling structures. Effluent flow limits and design criteria can not be used. These examples illustrate end-of-pipe (EOP) concentrations, which would be further diluted depending upon the facility's effluent dilution in the receiving water. If a facility receives a 3:1 effluent dilution in the receiving water, the calculated EOP concentration should be divided by three to provide the concentration in the receiving water after mixing.

g. Dissolved Oxygen (effluent): The previous permitting action established a seasonal daily minimum effluent dissolved oxygen (DO) limit of 7.5 mg/L and once per week monitoring requirements from June 1 through September 30 each year. This limit was established because of the low dilution of facility effluent provided in the receiving water. It was based on Department modeling and to ensure compliance with Class A dissolved oxygen standards. The previous permitting action also established monthly average and daily maximum effluent DO concentration monitoring requirements at a minimum frequency of once per week.

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

A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
EFFLUENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	8.2 mg/L	10.9 mg/L	9.1 mg/L	20
Daily Max.	report mg/L	8.5 mg/L	11.4 mg/L	9.6 mg/L	20
Daily Min.	7.5 mg/L	7.6 mg/L	10.5 mg/L	8.6 mg/L	20

OUTFALL #006A - HATCHERY BUILDING
EFFLUENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	8.2 mg/L	10.7 mg/L	9.2 mg/L	15
Daily Max.	report mg/L	8.5 mg/L	15.3 mg/L	10.5 mg/L	15
Daily Min.	7.5 mg/L	6.7 mg/L	10.0 mg/L	8.4 mg/L	15

1 violation of the daily minimum DO concentration limit.

This permitting action carries forward the daily minimum limit and monthly average and daily maximum monitoring requirements for DO, but revises the minimum monitoring frequency to twice per month based on the data observed. The permittee shall maintain copies of all data from effluent dissolved oxygen monitoring at the facility for a period of five years and shall provide copies of data to the Department upon request.

h. pH: The previous permitting action (2006) carried forward a daily maximum pH range limit of 6.0 – 8.5 standard units (su) from the preceding (2000) licensing action, considered by the Department as a best practicable treatment standard for fish hatcheries and rearing facilities and consistent with the pH limit established in discharge permits for these facilities. The 2000 licensing action contained no requirements to monitor pH, whereas the 2006 permitting action established a requirement to monitor pH once / 2 weeks. A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

OUTFALL #005A - REARING STATION
pH RANGE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	6.3 s.u.	7.3 s.u.	---	27
Daily Max.	6.0-8.5 s.u.	6.3 s.u.	7.4 s.u.	---	27

OUTFALL #006A - HATCHERY BUILDING
pH RANGE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	6.0 s.u.	7.1 s.u.	---	27
Daily Max.	6.0-8.5 s.u.	6.3 s.u.	7.1 s.u.	---	27

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

The Department observes that MDIFW Enfield has demonstrated consistent effluent quality with pH values within the required range, without exception. Similar to procedures established in 06-096 CMR 530, as this data demonstrates no exceedence of or reasonable potential to exceed the established criteria and based on the demonstrated long-term trend which is not anticipated to change, this permitting action eliminates requirements to monitor effluent pH based on Department BPJ.

7. ALTERNATIVE DISCHARGE STUDY

Maine Law, 38 M.R.S.A., § 465.2(C), states that discharges into Class A waters *"…licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist"*. Further, "*…the department shall require the applicant to objectively demonstrate to the department's satisfaction that the discharge is necessary and that there are no other reasonable alternatives available.*" Cold Stream is a Class A water in the vicinity of the MDIFW Enfield discharge. The MDIFW Enfield facility's wastewater discharge is subject to "grandfathering" to the extent outlined in Fact Sheet Section 6. However it is still subject to the above cited requirements.

The previous permitting action required MDIFW Enfield to conduct and submit a study of alternatives to the discharge of hatchery wastewater to Cold Stream on or before six months prior to expiration of the permit. On October 15, 2010, MDIFW submitted a copy of its 2002 Alternative Discharge Study, in which alternative discharge options were extensively studied, accompanied by estimated cost increases for the previously studied alternatives. In this review, MDIFW Enfield has demonstrated to the Department's satisfaction that it currently has no practical alternative to its wastewater discharge to Cold Stream.

In keeping with the requirements of 38 M.R.S.A., § 465.2(C) and as described in Permit Special Condition G, on or before six-months prior to expiration of this permit, MDIFW Enfield is required to submit to the Department for review, an Alternative Discharge Study (ADS) report for the Enfield facility to determine if practical alternatives to the discharge exist. The ADS report shall evaluate wastewater treatment infrastructure, technologies, practices or other modifications that will result in the elimination of the discharge to the receiving water or improvement in the effluent quality. Alternative Discharge Studies typically evaluate the technical feasibility, estimated costs, and potential environmental impact from alternatives that will result in elimination of a discharge to a receiving water. Such alternatives include, but are not limited to, piping the discharge to a less restrictive receiving water, connecting the discharge to a municipal wastewater treatment facility, and constructing storage capacity and land applying effluent. The study shall include a material and cost breakdown of each identified option, additional equipment necessary, any needed real estate purchases or easements, and other issues and expenses. If no practical alternative for elimination of the discharge exists, then the ADS shall also evaluate modifications to existing wastewater treatment infrastructure and practices that will result in improvement of the effluent quality, such as additional or alternative treatment technology or methods, operational changes, seasonal modifications, discharge reduction, etc.

8. SETTLING BASIN CLEANING:

Discharge of inadequately treated fish hatchery wastewater (excess feed and fish waste) contributes solids, BOD, and nutrients to receiving waters, which can contribute to eutrophication and oxygen depletion. This, in combination with other pollutant specific toxic effects, impacts the aquatic life and habitat value in the receiving water. Typical hatchery wastewater treatment practices include effluent filtration and settling with solids removal.

This permitting action carries forward requirements that the permittee must clean any settling structures at a minimum when accumulated materials occupy 20% of a basin's operational capacity, when material deposition in any area of the basin exceeds 50% of the operational depth, or at any time that said materials in or from the basins are contributing to a violation of permit effluent limits.

9. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS:

This permitting action updates requirements related to diseases, pathogens, and therapeutic agents. Maine Department of Inland Fisheries and Wildlife (MDIFW) Rules (Chapter 2.03-A) and Maine Department of Marine Resources (MeDMR) Rules (Chapter 24.21) state that *"the transfer and/or introduction of organisms fall within the jurisdiction of the Department of Marine Resources (12 MRSA, §6071) into coastal waters within the State of Maine and the Department of Inland Fisheries and Wildlife (12 MRSA, §§7011, 7035 and 7201, 7202) into public and/or private waters within the State of Maine. These rules are intended to protect wild and farmed salmonid fish populations and shall be applicable to all individuals involved in the culture and movement of live salmonids and gametes."* Further, both agencies' rules define Diseases of Regulatory Concern as *"…infectious agents that have been demonstrated to cause a significant increase in the risk of mortality among salmonid populations in the State of Maine. Diseases of Regulatory Concern are classified by the Commissioner into three (3) disease categories: exotic, endemic (limited distribution) and endemic based on an annual review and analysis of epidemiological data."*

In the June 30, 2004, USEPA Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category (National Effluent Guidelines), EPA requires proper storage of drugs, pesticides and feed and requires facilities to report use of any investigational new animal drug (INAD), extra-label drug use, and spills of drugs, pesticides or feed that results in a discharge to waters of the U.S.

This permitting action does not authorize the discharge of drugs authorized by the USFDA pursuant to the Investigational New Animal Drug (INAD) program. As the INAD program typically involves the long-term study of drugs, their benefits and effects, the permittee is anticipated to be able to notify the Department of its intent to conduct, and provide information related to, such study. The permittee is required to provide notification to the Department for review and approval prior to the use and discharge of any drug pursuant to the INAD program. This notification must include information to demonstrate that the minimum amount of drug

9. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS (cont'd):

necessary to evaluate its safety, efficacy, and possible environmental impacts will be used. Notifications must also include 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. The program must consider the possible effects on the water column, benthic conditions and organisms in or uses of the surrounding waters. INAD related uses and discharges will be subject to Department review and approval.

The permittee must comply with Maine Department of Inland Fisheries and Wildlife (freshwater facilities) and Maine Department of Marine Resources (salmon & marine facilities) fish health rules (12 MRSA, §6071; 12 MRSA, §§7011, 7035, 7201, and 7202, or revised rules). The cited rules include requirements for notification to the appropriate agency within 24-hours of pathogen detection. In addition to the requirements of the MDIFW and MEDMR rules, the permittee shall notify the Department in writing within 24-hours following pathogen detection, with information on the disease/pathogen, necessary control measures, and the veterinarian involved.

All medicated fish feeds, drugs, and other fish health therapeutants shall be registered with USEPA as appropriate, approved by the US Food and Drug Administration (USFDA), and applied according to USFDA accepted guidelines and manufacturer's label instructions or used as prescribed by a Maine licensed veterinarian as authorized in the Maine Veterinary Practice Act (31 MRSA, §4852) and the Maine Animal Welfare Act (7 MRSA, §3901). Proper veterinary records of all such materials used are to be maintained at the facility for a period of five years. This permitting action does not authorize routine off-label or extra-label drug use. Such uses shall only be permitted in emergency situations and under the authority of a Maine licensed veterinarian. The permittee shall notify the Department in writing within 24-hours following such use, with information on the conditions necessitating off-label or extra-label drug use, necessary control measures, and the veterinarian involved.

For either reporting requirement outlined, the permittee must provide information on: the proposed treatment(s) including materials/chemicals/agents used, material/chemical/agent toxicity to aquatic life, the mass and concentrations of materials/chemicals/agents as administered, and the concentrations to be expected in the effluent. For any off-label or extra-label use, the permittee shall also provide a description of how the use constitutes off-label or extra-label use, the necessity for the use in terms of the condition to be treated and the inability to utilize accepted drugs or approved methods, the duration of the use, and the likely need of repeat treatments. If, upon review of information regarding a treatment pursuant to this section,

9. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS (cont'd):

the Department determines that significant adverse effects are likely to occur, it may restrict or limit such use. The use and discharge of therapeutic agents is subject to the conditions described in Permit Special Condition C, Unauthorized Discharges.

MDIFW Enfield indicates that the following therapeutic agents may be used at the Enfield facility. These agents must be used pursuant to the requirements specified herein.

Formalin. Effluent limitations and monitoring requirements related to the use of formalin at the facility are addressed in Permit Special Condition A, footnote 4 and Fact Sheet Section 6.f.
Finquel/MS 222 fish anesthetic to allow for close examination including fin clippings and vaccinations. Active ingredient Tricaine methanesulfonate. Less than 20 grams (0.7 oz) per year are used.
Fish-eeZZZ fish anesthetic to allow for close examination including fin clippings and vaccinations. Active ingredients spearmint oil, wintergreen oil, and emulsifying agents. Approximately 32 oz (1 liter) per year is used.
Sodium Chloride to assist fish in times of high stress. It induces additional slime production to aid in combat against naturally occurring freshwater parasites. Approximately 6,000 pounds per year is used, with a maximum of 50 pounds of salt per day applied between June 1 and September 30 in one raceway line dedicated for housing broodstock. The Department has determined that effluent salt concentrations are anticipated to fall significantly below the level of concern in the aquatic environment and as such considers this to be a deminimus discharge. The Department's analysis is included in the previous permitting action Fact Sheet.
Limestone, Calcium Carbonate ground calcium carbonate is added in the bottom of raceways that house brook trout broodstock to provide for proper fish development by ensuring that calcium levels within the rearing structures approximate those normally found in Maine waters. MDIFW reports that only small amounts are used and that levels are not permitted to exceed the natural range of calcium currently found in Maine waters. MDIFW Enfield uses 625 pounds of carbonate of lime per year, applied at approximately two pounds of calcium carbonate per week in each of six raceway pools (one line of raceways) at the Enfield facility. Residual calcium levels in the flow-through water are diluted in the full facility wastewater stream and the 60,000-gallon clarifier prior to entering the receiving water. The Department anticipates deminimus levels of calcium discharged and thus is not establishing limitations or monitoring requirements in this permitting action. Instead, use of calcium carbonate shall be consistent with the use and record keeping requirements specified above.

The use and discharge of the materials described above or incorporated in the future are subject to the conditions described in Permit Special Condition C, Unauthorized Discharges.

10. DISINFECTING/SANITIZING AGENTS:

MDIFW Enfield indicates that the following disinfecting/sanitizing agents may be used at the Enfield facility. These agents must be used pursuant to the requirements specified herein.

Steris TBQ for disinfection of nets, utensils, boots, stocking trucks, etc. Active ingredients alkyl dimethyl benzyl ammonium chloride (8%) and inert ingredients (90%). Approximately 2 gallons used per year at a concentration of 2 oz per 1 gallon of water.
Argentyne for disinfection of nets, utensils, boots, stocking trucks, eggs, etc. Active ingredients polymeric-iodine complex (10%), inert ingredients (90%). Approximately 2 gallons used per year at a concentration of 3.9 oz (115 ml) per 1 gallon of water.

This permitting action updates requirements related to disinfecting/sanitizing agents. Disinfectants and/or sanitizing agents shall be registered with USEPA as appropriate and applied according to manufacturer's label instructions. Records of all disinfectants and/or sanitizing agents used that have the potential to enter the waste-stream or receiving water, their volumes and concentrations as used and concentrations at the point of discharge, shall be maintained at the facility for a period of five years. This permitting action only authorizes the discharge of those materials applied for, evaluated by the Department, and either regulated or determined to be deminimus in this permitting action or in subsequent Department actions. The use and discharge of disinfecting/sanitizing agents is subject to the conditions described in Permit Special Condition C, Unauthorized Discharges.

11. MINIMUM TREATMENT TECHNOLOGY REQUIREMENT:

Between 2000 and 2002, eleven Maine fish hatcheries were evaluated to identify potential options for facility upgrades. All nine Maine Department of Inland Fisheries and Wildlife hatcheries were evaluated by FishPro Inc., while the two USFWS hatcheries were evaluated by the Freshwater Institute. Recommended wastewater treatment upgrades for each of the facilities included microscreen filtration of the effluent. In the previous permitting action, based on the information provided and Department BPJ, the Department required that the permittee shall provide minimum treatment technology for the Enfield facility that shall consist of treatment equal to or better than 60-micron microscreen filtration of the effluent, wastewater settling/clarification, removal of solids. This determination is being carried forward in this permitting action. MDIFW Enfield shall provide treatment equal to or better than the BPJ minimum treatment technology and shall comply with all effluent limitations, monitoring requirements, and operational requirements established in this permitting action. Additional treatment may be necessary to achieve specific water quality based limitations.

12. AMBIENT MACROINVERTEBRATE BIOMONITORING:

In the previous permitting action, the Department committed to conducting macroinvertebrate biomonitoring in the receiving water in 2006 to determine attainment of the aquatic life standards following upgrade of the MDIFW Enfield facility. Based on limited available

12. AMBIENT MACROINVERTEBRATE BIOMONITORING (cont'd)

data and Department concerns with potential effects of the facility's effluent discharges on the aquatic life in Cold Stream, the previous permitting action required the permittee to conduct ambient macroinvertebrate biomonitoring annually beginning calendar year 2007. Results were to be reported to the Department annually. The previous permitting action contained provisions for modification or discontinuance of the biomonitoring requirement if the receiving water was determined by the Department to be meeting criteria, standards, and designated uses for its assigned water quality class.

MEDEP's Division of Environmental Assessment's (DEA's) 2006 macro-invertebrate sampling indicated that Cold Stream was attaining Class A aquatic life standards below the discharge from the MDIFW Enfield facility. Based on this, MDIFW Enfield was not required to conduct macroinvertebrate biomonitoring in 2007 or in subsequent years of the permitting action. MEDEP DEA conducted additional macro-invertebrate sampling in 2011 and results are currently pending. The Department has no information that indicates that additional macroinvertebrate testing is required at this time.

13. AMBIENT DISSOLVED OXYGEN AND TEMPERATURE MONITORING:

Based on the low effluent dilution provided in the receiving water and the need for additional data on the effects of the MDIFW Enfield's effluent on the water quality of Cold Stream, the previous permitting action required the permittee to seasonally monitor ambient dissolved oxygen and temperature levels at two locations in Cold Stream. The permittee monitored ambient dissolved oxygen and temperature (Celsius) at a frequency of once per week from June 1 through September 30 each year. Monitoring was conducted at two locations:
(1) between the Cold Stream Pond dam and the head of the MDIFW Enfield facility in an area representing free-flowing conditions and (2) below the MDIFW Enfield outfalls in an area representing the dissolved oxygen sag point, unless revised by the Department. A review of the DMR data for the IFW Enfield facility for the period of April 2006 through January 2011 indicates the following.

AMBIENT LOCATION 1 – UPSTREAM MONITORING
AMBIENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	7.8 mg/L	10.1 mg/L	8.8 mg/L	19
Daily Max.	report mg/L	8.4 mg/L	11.3 mg/L	9.2 mg/L	19
Daily Min.	report mg/L	6.7 mg/L	9.2 mg/L	8.4 mg/L	19

AMBIENT WATER TEMPERATURE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report deg C	15.9 degrees C	22.1 degrees C	19.0 degrees C	19
Daily Max.	report deg C	17.8 degrees C	26.2 degrees C	20.1 degrees C	19
Daily Min.	report deg C	12.7 degrees C	21.4 degrees C	17.1 degrees C	19

13. AMBIENT DISSOLVED OXYGEN AND TEMPERATURE MONITORING (cont'd)

AMBIENT PERCENT SATURATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	85.9%	102.4%	94.1%	19
Daily Max.	---	88%	121.1%	97.9%	19
Daily Min.	---	77.2%	97.2%	90.1%	19

AMBIENT LOCATION 2 – DOWNSTREAM MONITORING
AMBIENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	7.3 mg/L	10.2 mg/L	8.7 mg/L	19
Daily Max.	report mg/L	7.9 mg/L	11.6 mg/L	9.2 mg/L	19
Daily Min.	report mg/L	4.9 mg/L	9.3 mg/L	8.0 mg/L	19

AMBIENT WATER TEMPERATURE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report deg C	12.9 degrees C	16.8 degrees C	14.8 degrees C	19
Daily Max.	report deg C	13.8 degrees C	17.8 degrees C	16.0 degrees C	19
Daily Min.	report deg C	10.9 degrees C	16.4 degrees C	13.7 degrees C	19

AMBIENT PERCENT SATURATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	71.0 %	102 %	86.0 %	19
Daily Max.	---	74.5 %	118.2 %	91.0 %	19
Daily Min.	---	50.2 %	95.1 %	80.2 %	19

The Department has determined that further information is not needed at this time on potential ambient water quality effects from MDIFW Enfield's discharge and is therefore eliminating the ambient monitoring requirements in this permitting action.

14. AMBIENT WATER QUALITY MONITORING:

In the previous permitting action, based on 2001 observations of filamentous bacteria (*Sphaerotilus*) within the receiving water, the Department noted potential water quality impacts to Cold Stream from the Enfield facility. The Department determined that additional data was necessary to determine the significance of this issue and required the permittee to conduct ambient water quality monitoring (AWQM) to evaluate the presence, extent, and ambient conditions associated with *Sphaerotilus* in Cold Stream caused or contributed to by the Enfield facility. The permittee was required to submit a proposed scope of work and schedule for an AWQM program for Department approval, subsequently conduct the monitoring, and submit a report of the findings during 2006.

14. AMBIENT WATER QUALITY MONITORING (cont'd)

The Department compliance inspector indicates that the required AWQM plan was not submitted, nor was the monitoring initiated until 2008. Following commencement of the AWQM program, MDIFW Enfield conducted multiple monitoring events. Additionally, the MEDEP compliance inspector and a biologist from the Division of Environmental Assessment inspected Cold Stream in 2008. The Department compliance inspector indicates that filamentous bacteria was not observed below the MDIFW Enfield discharge. The Department has no information that indicates that additional AWQM is required at this time and therefore this requirement is not being carried forward in this permitting action.

15. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION:

The US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NFMS) formally listed the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon as an endangered species on November 17, 2000. On June 19, 2009, the two agencies expanded the geographic range of the listed GOM DPS. The Atlantic salmon GOM DPS encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment. Also included in the GOM DPS are all associated conservation hatchery populations used to supplement these natural populations. Excluded are landlocked Atlantic salmon and those salmon raised in commercial hatcheries for aquaculture. On June 19, 2009, NMFS also designated critical habitat for Atlantic salmon in certain watersheds within the GOM DPS. Two significant issues of concern regarding the rearing of salmon in Maine involve the genetic integrity of the salmon and escape prevention to avoid impacts on native fish.

On December 4, 2000, in regard to the Department's pending delegation to administer the NPDES Permit Program, USEPA Region I informed the Department that "*permits issued to freshwater hatcheries raising salmon will require that the facility be designed or modified to achieve zero escapement of fish from the facility*". The EPA also stated, "*The information contained in the* (US Fish and Wildlife and NOAA Fisheries) *Services' listing documents indicates that a remnant population of wild Atlantic salmon is present in…*" Maine waters "*…and that salmon fish farms and hatcheries are activities having a significant impact on the…*" GOM DPS "*…through, among other things, the escape of farmed and non-North American strains of salmon which may interbreed with the wild Maine strains, compete for habitat, disrupt native salmon redds, and spread disease." "Based on this information, the Services have concluded that the escape of farm-raised salmon from fish farms and hatcheries is likely to significantly impair the growth, reproduction and habitat of wild salmon, thereby impairing the viability of the DPS." "EPA has analyzed current information, including these findings, and based on this information believes that this remnant population constitutes an existing instream use of certain Gulf of Maine rivers and considers that the above-described impacts to the population would be inconsistent with Maine's water quality standards. Assuming the information discussed above does not significantly change, EPA will utilize its*

15. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION (cont'd)

authorities to ensure compliance with Maine water quality standards by ensuring that conditions to protect the remnant population of Atlantic salmon are included in NPDES permits for salmon fish farms and hatcheries, which are subject to regulation as concentrated aquatic animal production facilities." "In view of the substantial danger of extinction to the DPS described by the Services, it is EPA's view that proposed permits authorizing activities that would adversely affect the population, as described earlier in this letter, would be inconsistent with Maine's water quality standards and objectionable under the CWA."

In review of MEPDES Permit / Maine WDLs since the 2000 listing and continuing with the 2009 listing expansion, the USFWS and NMFS have advocated for genetic testing of Atlantic salmon housed at hatchery and rearing facilities to ensure that they are of North American origin, as well as employment of a fully functional Containment Management System (CMS) at facilities to prevent the escape of raised salmon or other species of concern in order to avoid impacts on native fish populations. The release or escape of certain species is also of concern to the Maine Department of Inland Fisheries and Wildlife (MDIFW), which manages fisheries resources in Maine. MDIFW Enfield discharges its effluent to Cold Stream, which in turn flows to the Passadumkeag and Penobscot Rivers. The receiving waters of the discharge are within the range of the GOM DPS and are currently occupied by endangered Atlantic salmon. The receiving waters are not designated as critical habitat for Atlantic salmon however, as the Passadumkeag River watershed was identified as an Economic Exclusion by NFMS.

Genetic Integrity: MDIFW Enfield is a state brook trout, splake, lake trout, landlocked Atlantic salmon, and lake whitefish hatchery and rearing facility that produces fish for stocking in Maine waters as part of MDIFW's responsibilities in managing fisheries. MDIFW Enfield does not raise Atlantic salmon as envisioned in the USEPA opinion above and thus is not subject to genetic testing requirements.

Escapement: The previous permitting action did not require a CMS plan for MDIFW Enfield because, at the time, MDIFW Enfield did not discharge effluent to a GOM DPS river segment. Based on the 2009 listing expansion, the receiving water is within the range of the GOM DPS and a CMS plan is being required for the protection of endangered Atlantic salmon. MDIFW Enfield reports that the upgraded facility employs effluent screens at the ends of both lines of raceways. Further, the facility drum filter and associated wing walls provide fish escape prevention. All screens are sized according to the size of the fish and are inspected regularly. Any escapees would have to elude these measures to enter the receiving water.

Based on requirements established in Maine's Aquaculture General Permit (#MEG130000, Part II, Section I), individual MEPDES Permits for marine aquaculture facilities, and guidance developed by the Maine Aquaculture Association, in this permitting action, the Department requires that the permittee shall employ a fully functional Containment Management System (CMS) at the facility designed, constructed, and operated so as to prevent the accidental or

15. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION (cont'd)

consequential escape of fish to open water. The CMS plan shall include a site plan or schematic with specifications of the particular system. The permittee shall develop and utilize a CMS consisting of management and auditing methods to describe or address the following: site plan description, inventory control procedures, predator control procedures, escape response procedures, unusual event management, severe weather procedures and training. The CMS shall contain a facility specific list of critical control points (CCP) where escapes have been determined to potentially occur. Each CCP must address the following: the specific location, control mechanisms, critical limits, monitoring procedures, appropriate corrective actions, verification procedures that define adequate CCP monitoring, and a defined record keeping system. The permittee shall submit the CMS plan to the Department for review and approval on or before six months following the effective date of this permit.

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

1. The CMS shall be audited at least once per year and within 30 days of a reportable escape (more than 50 fish) by a party other than the facility operator or owner qualified to conduct such audits and approved by the Department. A written report of these audits shall be provided to the facility and the Department for review and approval within 30 days of the audit being conducted. If deficiencies are identified during the audit, the report shall contain a corrective action plan, including a timetable for implementation and re-auditing to verify deficiencies are addressed as in the corrective action plan approved by the Department. Additional third party audits to verify correction of deficiencies shall be conducted in accordance with the corrective action plan or upon request of the Department. The facility shall notify the Department upon completion of corrective actions.

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

3. The permittee shall maintain complete records, logs, reports of internal and third party audits and documents related to the CMS on site for a period of 5 years.

15. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION (cont'd)

4. For new facilities, a CMS shall be prepared and submitted to the Department for review and approval prior to fish being introduced into the facility.

The permittee shall report any known or suspected escapes of more than 50 fish within 24 hours to the Maine Dept of Marine Resources Bureau of Sea-Run Fisheries and Habitats at 207-941-9973 (Pat Keliher and Joan Trial), Maine Department of Inland Fisheries and Wildlife at 207-287-5202 (Commissioner's office), USFWS Maine Field Office at 207-866-3344, and NMFS Maine Office at 207-866-4172. During off-hours, the reports can be called to 800-432-7381.

16. DISCHARGE IMPACT ON RECEIVING WATER QUALITY:

As permitted, based on the information available to date and best professional judgement, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of Cold Stream to meet standards for Class A classification.

17. PUBLIC COMMENTS:

Public notice of this application was made in the Bangor Daily News newspaper on or about December 15, 2010. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

18. DEPARTMENT CONTACTS:

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

Robert D. Stratton
Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Telephone: (207) 215-1579
Fax: (207) 287-3435
email: Robert.D.Stratton@maine.gov

19. RESPONSE TO COMMENTS:

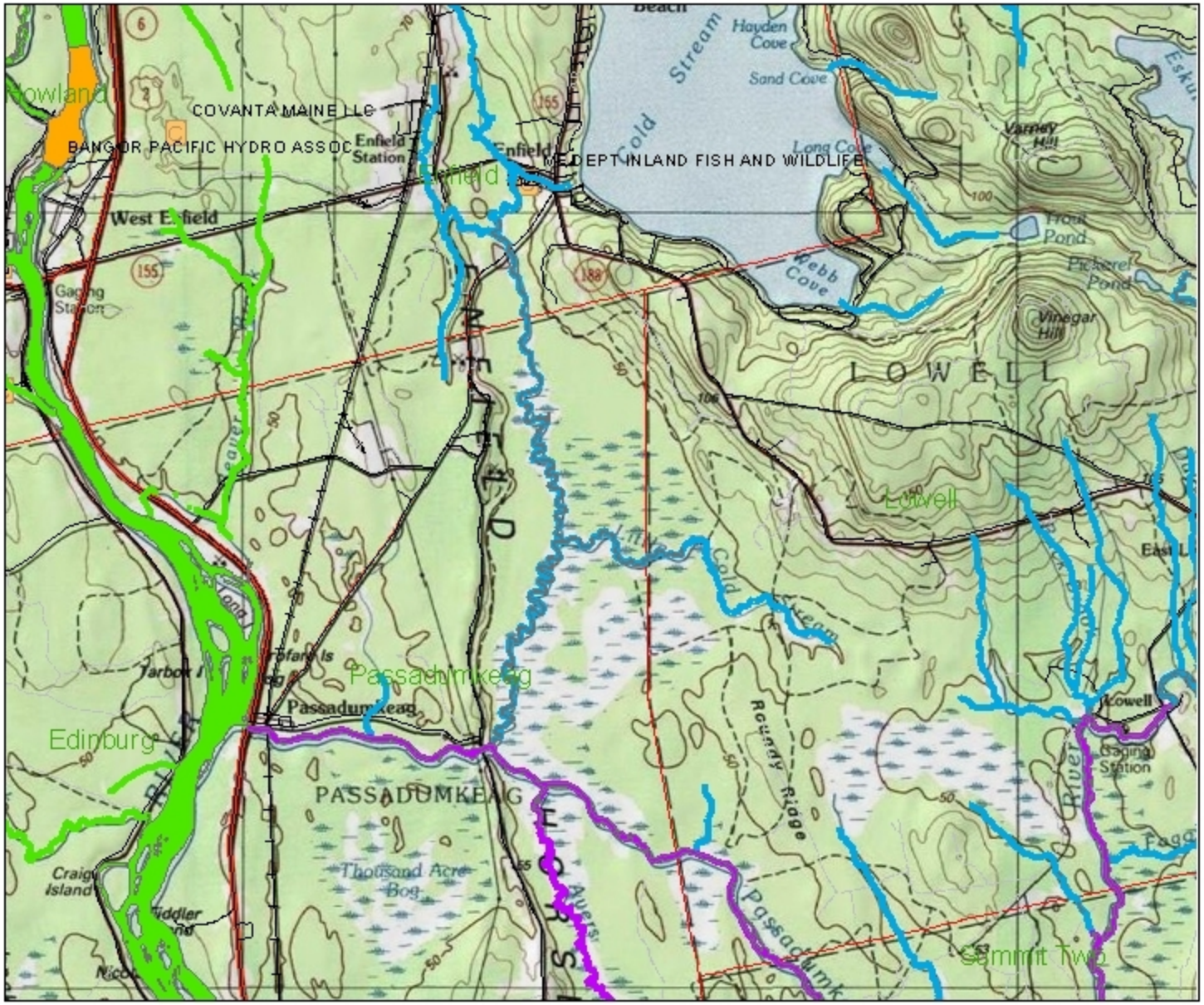
During the period of October 21, 2011 through November 21, 2011, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License to be issued to MDIFW Enfield for the proposed discharge. The Department did not receive any comments that resulted in significant revisions to the permit. Therefore, no response to comments has been prepared.

ATTACHMENT A

(Facility Location Maps)

ATTACHMENT B

(Facility Site Plans)



Legend

River_polygons

- <all other values>

RIVCLASS

- AA
- A
- B
- C
- ca
- nh
- <all other values>
- AA
- A
- B
- C
- SA
- SB
- SC
- Roads_E911
- Wastewater_Outfalls
- Railroads

Roads

JURISDICTION

- Town Road
- Town Road - Summer
- Town Road - Winter
- State-aided Highway
- State Highway
- Toll Highway
- Private Road
- Reservation Road
- Seasonal Parkway

N

MDIFW Cobb State Fish Hatchery
Enfield, ME

Map created by:
Bob Stratton
Division of Water Quality Management
Maine Department of Environmental Protection

DEPARTMENT OF ENVIRONMENTAL PROTECTION · STATE OF MAINE ·

Enfield Pool Chart

A

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18

B

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18

Each raceway is 100' x 6' x 1.5'

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

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

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

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

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

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

6. Upsets.

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

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

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

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

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

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status*. Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

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

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

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