STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

May 2, 2012

Mr. Steve Tremblay
MDIFW Wade State Fish Hatchery
70 Fish Hatchery Road
Casco, Maine 04915

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001066
Maine Waste Discharge License (WDL) Application # W-002038-6F-E-R
Final MEPDES Permit/Maine WDL, MDIFW Wade State Fish Hatchery, Casco, Maine

Dear Steve:

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

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

Enc./cc: Fred Gallant, Lori Mitchell (MEDEP); Todd Langevin (MDIFW); Sandy Mojica (USEPA

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 624-6550FAX: (207) 624-6024
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

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

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507

web site: www.maine.gov/dep

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
WADE STATE FISH HATCHERY	)	ELIMINATION SYSTEM PERMIT
CASCO, CUMBERLAND COUNTY, ME.	)	AND
FISH HATCHERY	)	
#ME0001066	)	WASTE DISCHARGE LICENSE
#W-002038-6F-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 WADE STATE FISH HATCHERY (hereinafter MDIFW Casco, permittee), 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 #ME0001066 / Maine Waste Discharge License (WDL) #W-002038-5Q-B-R, which was issued on May 8, 2006, for a five-year term. The MEPDES Permit / Maine WDL and subsequent permit modifications approved the discharge of a monthly average of 2.9 million gallons per day (MGD) of fish rearing facility wastewater and 0.052 MGD of fish hatchery wastewater to Mile Stream, Class B from a state fish hatchery and fish rearing facility in Casco, Maine.

PERMIT SUMMARY

This permitting action is similar to the May 8, 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 minimum monitoring frequency requirements for total phosphorus, fish on hand, formalin, and effluent dissolved oxygen;
2. eliminating monitoring requirements for effluent pH, ambient dissolved oxygen, and ambient water temperature;
3. updating requirements related to diseases, pathogens, therapeutic agents, and disinfecting/sanitizing agents; and
4. establishing requirements for macroinvertebrate biomonitoring

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 26, 2012, revised April 26, 2012, 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 WADE STATE (CASCO) FISH HATCHERY AND REARING STATION to discharge fish hatchery wastewater consisting of a monthly average flow of 2.9 MGD of rearing facility wastewater and 0.052 MGD of hatchery facility wastewater to Mile Stream, Class B, 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

DONE AND DATED AT AUGUSTA, MAINE, THIS 2ND DAY OF May, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhn
For Patricia W. Aho, Commissioner

Filed
MAY - 3 2012
State of Maine
Board of Environmental Protection

Date of initial receipt of application: May 12, 2011
Date of application acceptance: May 13, 2011

Date filed with Board of Environmental Protection: _____

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 rearing facility wastewater from **Outfall #005A (rearing station)** to Mile 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 6 and 7.

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]*	2.9 MGD *[03]*	---	---	---	---	Daily *[01/01]*	Measured *[MS]*
BOD *[00310]*	47.1 lbs/day *[26]*	242 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/Month *[01/30]*	Composite[1] *[CP]*
TSS *[00530]*	47.1 lbs/day *[26]*	242 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	---	1/Month *[01/30]*	Composite[1] *[CP]*
Total Phosphorus[2] *[00665]*	report total lbs/month *[76]*	Maximum 274.5 lbs/year *[50]*	0.035 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]*
Dissolved Oxygen[4] **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

2. The permittee is authorized to discharge fish hatchery wastewater from **Outfall #006A (hatchery building)** to Mile 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 6 and 7.

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]*	0.052 MGD *[03]*	---	—	—	—	Daily *[01/01]*	Measured *[MS]*
BOD *[00310]*	0.9 lbs/day *[26]*	4.3 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	—	1/Month *[01/30]*	Composite[1] *[CP]*
TSS *[00530]*	0.9 lbs/day *[26]*	4.3 lbs/day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	—	1/Month *[01/30]*	Composite[1] *[CP]*
Total Phosphorus[2] *[00665]*	report total lbs/month *[76]*	Maximum 5.5 lbs/year *[50]*	0.035 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[5] **1-Hour Treatment Maximum** *[51064]*	report lbs/day *[26]*	7.3 lbs/day *[26]*	report mg/L *[19]*	45 mg/L *[19]*	—	Once per occurrence *[01/OC]*	Calculated *[CA]*
Formalin[5] **24-Hour Treatment Maximum** *[51064]*	report lbs/day *[26]*	7.3 lbs/day *[26]*	report mg/L *[19]*	25 mg/L *[19]*	—	Once per occurrence *[01/OC]*	Calculated *[CA]*
Dissolved Oxygen[4] **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 Outfalls #005A, MDIFW Casco's rearing facility discharge, and #006A, MDIFW Casco's hatchery 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 concentration** limits and monitoring requirements (mg/L) are seasonal and are only in effect from June 1 through September 30 each year. **Phosphorus mass** limits and monitoring requirements (lbs) are in effect year-round. **The permittee is cautioned that compliance with concentration limits will not necessarily result in compliance with mass limits.** 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. 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. 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.

5. 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.**

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 for 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 for 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 for 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 May 13, 2011; 2) the terms and conditions of this permit; and 3) only from Outfalls #005A, MDIFW Casco's rearing facility discharge, and #006A, MDIFW Casco's hatchery facility discharge. 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
312 Canco Road
Portland, Maine 04103

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 Casco is required to submit to the Department for review, an Alternative Discharge Study (ADS) report for the Casco 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 / SHOW POOL 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.

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 therapeutic agents is subject to the conditions described in Permit Special Condition C, Unauthorized Discharges and Fact Sheet Section 9, Diseases, Pathogens, and Therapeutic Agents.**

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 and Fact Sheet Section 10, Disinfecting/Sanitizing Agents.

K. MINIMUM TREATMENT TECHNOLOGY REQUIREMENT:

Based on information provided and Department BPJ, the permittee shall provide minimum treatment technology for the Casco 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 Casco 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. AMBIENT MACROINVERTEBRATE BIOMONITORING:

Based on data from 2010 macroinvertebrate biomonitoring as noted in Fact Sheet Section 5, *Receiving Water Quality Conditions*, and Department concerns with potential effects of the facility's effluent discharges on the aquatic life in Mile Stream, this permitting action requires MDIFW Casco to conduct additional macroinvertebrate biomonitoring to determine aquatic life conditions in Mile Stream **during the summer of 2013**, consistent with "*Methods for Biological Sampling and Analysis of Maine's Rivers and Streams*" (DEP #LW0387-B2002, August 2002). The permittee shall submit results to MEDEP DEA and to the Department Compliance Inspector in a biomonitoring report **by December 15, 2013** for review and approval *[90199]*. If results indicate that Mile Stream below the MDIFW Casco facility is attaining its Class B water quality standards and designated uses, this requirement shall cease. If results indicate that the non-attainment conditions indicated in the 2010 monitoring persist, this permitting action may be reopened pursuant to Permit Special Condition M to establish requirements for modification of MDIFW Casco's infrastructure, Operation and Maintenance practices, and/or other factors potentially causing or contributing to non-attainment, followed by resumed macroinvertebrate biomonitoring.

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: March 26, 2012
Revised: April 26, 2012

MEPDES PERMIT NUMBER: # ME0001066
MAINE WDL NUMBER: # W-002038-6F-E-R

NAME AND ADDRESS OF APPLICANT:

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

COUNTY: CUMBERLAND

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

WADE STATE FISH HATCHERY
70 Fish Hatchery Road
Casco, Maine 04915

RECEIVING WATER / CLASSIFICATION: Mile Brook, Class B; tributary to GPA Water; drainage area less than 10 square miles.

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Steve Tremblay Facility Manager (207) 627-4358, stephen.tremblay@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 #ME0001066 / Maine Waste Discharge License (WDL) #W-002038-5Q-B-R, which was issued on May 8, 2006, for a five-year term. The MEPDES Permit / Maine WDL and subsequent permit modifications approved the discharge of a monthly average of 2.9 million gallons per day (MGD) of fish rearing facility wastewater and 0.052 MGD of fish hatchery wastewater to Mile Stream, Class B from a state fish hatchery and fish rearing facility in Casco, Maine.

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 #ME0001066 will be utilized as the primary reference number for the Casco facility.

b. Terms and conditions – This permitting action is similar to the May 8, 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 minimum monitoring frequency requirements for total phosphorus, fish on hand, formalin, and effluent dissolved oxygen;
2. eliminating monitoring requirements for effluent pH, ambient dissolved oxygen, and ambient water temperature;
3. updating requirements related to diseases, pathogens, therapeutic agents, and disinfecting/sanitizing agents; and
4. establishing requirements for macroinvertebrate biomonitoring

c. History: Relevant regulatory actions include the following:

February 12, 1975 – The Maine Department of Environmental Protection issued WDL #662 to the Maine Department of Inland Fisheries and Game for the discharge of a daily average of 4.16 MGD and a daily maximum of 5.18 MGD of fish hatchery wastewater from the Casco facility to Mile Stream, Class B-1. The WDL was valid until February 12, 1978.

February 20, 1975 – The USEPA issued NPDES Permit #ME0001066 to the Maine Department of Inland Fisheries and Game for the discharge of an unspecified volume of wastewater from the Casco facility to Mile Stream. The Permit was valid through February 15, 1980.

September 28, 1977 – The Maine Board of Environmental Protection ordered WDL #662 amended to eliminate or significantly reduce monitoring requirements for all parameters based on effluent monitoring data conducted since issuance of the WDL.

March 8, 1978 – The Maine Department of Environmental Protection issued WDL # 2038 to MDIFW for the discharge of a daily maximum of 5.75 MGD of treated fish hatchery wastewater from MDIFW Casco to Mile Stream, Class B-1. The WDL was issued for a five-year term.

2. PERMIT SUMMARY (cont'd)

May 11, 1983 – The Maine Board of Environmental Protection issued WDL #2038 for the discharge of a daily maximum of 5.75 MGD of treated fish hatchery wastewater from the MDIFW Casco hatchery to Mile Stream, Class B-1. The WDL was issued for a five-year term.

July 21, 2000 – The Department issued # W-002038-5Q-A-R to MDIFW Casco for the discharge of a daily maximum of 2.9 MGD of treated fish hatchery wastewater. The WDL was issued for a five-year term.

September 10, 2001 – The Department suspended monitoring requirements established in WDL # W-002038-5Q-A-R for Outfall #001A, designated for effluent discharges from the show pools when not cleaning the show pools.. The Department required monitoring for Outfall #001B, designated for effluent discharges from the show pools when cleaning raceways that discharge through the show pools, to be conducted by autocompositer and required monitoring for Outfall #002A, designated for effluent discharges from raceways being cleaned that discharge directly to the receiving water and not through the show pools, to be conducted by hand or by autocompositer.. The Department made no mention of Outfall #003A, designated for a summary of the phosphorus mass discharged from Outfalls #001A or #001B and #002A. The Department also made no mention of Outfall #004A, designated for a summary of the flow, mass of fish on hand, and total phosphorus mass values from Outfalls #001A, #001B, and #002A. MDIFW continued to monitor all outfalls.

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-002038-5Q-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.

2. PERMIT SUMMARY (cont'd)

May 8, 2006 - The Department issued MEPDES Permit #ME0001066 / Maine WDL #W-002038-5Q-B-R to MDIFW Casco for the discharge of a monthly average of 2.9 MGD of fish rearing facility wastewater and 0.052 MGD of fish hatchery facility wastewater to Mile Stream, Class B, in Casco. The Permit / WDL was issued for a five-year term.

October 10, 2008 - The Department issued Minor Revision #W-002038-5Q-C-M / MEPDES Permit #ME0001066 to revise effluent formalin limitations based on newly obtained toxicity data and a revision of the Department's best professional judgement of ambient water quality criteria.

April 23, 2009 - The Department issued Minor Revision #W-002038-5Q-D-M / MEPDES Permit #ME0001066 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.

May 12, 2011 – MDIFW Casco submitted a timely application for renewal of its MEPDES Permit / WDL. The application was assigned MEPDES Permit #ME0001066 / WDL #W-002038-6F-E-R.

d. Source Description/ Facility Operation:

The MDIFW Casco facility, or Wade State Fish Hatchery, was constructed in 1955 as a state aquaculture facility. The facility underwent significant upgrades in 2005 and further upgrades in 2011. MDIFW Casco is a fish hatchery and rearing station, raising landlocked Atlantic salmon, brook trout, brown trout, and rainbow trout obtained from this and other MDIFW hatchery facilities to appropriate sizes for stocking in Maine waters as part of MDIFW's responsibilities in managing fisheries in Maine. In October-November of each year, MDIFW Casco obtains Sebago Lake strain landlocked salmon through capture, egg taking, and fertilization from wild broodstock at the Panther Pond dam on Sebago Lake in Raymond, Maine. In November of each year, MDIFW Casco obtains salmon eggs from 3-year old broodstock maintained on site, as described below. Salmon egg hatching, early rearing, and growout occurs at MDIFW Casco. In November-December of each year, MDIFW Casco obtains 4 to 6-inch long brook trout fall fingerlings from the MDIFW Dry Mills (Gray) hatchery for rearing at Casco. In May-June of each year, MDIFW Casco obtains 1.5 to 2-inch long brown trout and rainbow trout fry from the MDIFW New Gloucester hatchery for rearing at Casco.

SPECIES	MDIFW HATCHERY DONOR	MONTH RECEIVED	STAGE WHEN RECEIVED	FF	SY	FY	Brood	Appr #
Landlocked Salmon	Casco	November	Eggs	0%	71%	27%	2%	16,572
Brown Trout	New Gloucester	May/June	Fry	0%	60%	40%	0%	49,637
Rainbow Trout	New Gloucester	May/June	Fry	0%	64%	34%	2%	20,878
Brook Trout	Dry Mills	Nov/Dec	FF	0%	100%	0%	0%	14,438

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

2. PERMIT SUMMARY (cont'd)

Influent Water: Source water for the MDIFW Casco facility is obtained from Pleasant Lake (1,077-acres) through one 16-inch diameter iron intake pipe. The intake is fitted with a "T" that allows the use of either deep water (35-feet) or shallow water (12-feet) supplies, depending on fish growth temperature requirements. The intake depth to be used must be physically changed by a MDIFW SCUBA diver. The intake is fitted with a coarse (4-inch) screen on the lake end of the pipe to prevent fish or large debris from entering the station. The intake water is passed through one of two ultraviolet disinfection units consisting of 64 bulbs per unit for bacterial disinfection. Following UV disinfection and prior to contact with fish on station, excess influent water can be discharged directly to Mile Stream through a 12-inch diameter over flow pipe. Influent water is piped to the head of both of two sets of raceways. A separate 8-inch diameter intake line provides influent water from the UV building to the facility hatchery building. The hatchery building incorporates nylon stockings on each tank inlet for filtration and exclusion of freshwater organisms. MDIFW Casco is a flow-through facility with flows through each of two parallel raceway lines to Mile Brook (Class B, less than 10 square mile watershed), which in turn flows to the Crooked River (Class AA, tributary to GPA water) and Sebago Lake (Class GPA).

Broodstock Facilities: MDIFW Casco's salmon broodstock originate from two sources. Wild salmon are captured from the Panther Pond dam on Sebago Lake for egg taking and fertilization, as described above, and then returned to Sebago Lake. Also, three hundred 2-year old salmon and three hundred 3-year old salmon broodstock, which were raised from eggs previously hatched at MDIFW Casco, are maintained on site in raceway pools. The 3-year old "domestic" broodstock are stripped of eggs in November, released in various waters per MDIFW's fish stocking needs, and replaced with three hundred fall yearlings from on-site stocks to repeat the cycle. The wild and "domestic" strains are kept separate, with wild strains used at Casco and "domestic" strains shipped to other facilities.

Hatchery Facilities: MDIFW Casco's hatchery facilities consist of eight, 10-foot long by 1.2-feet wide by 6-inches deep (operational depth) aluminum egg/fry troughs. The troughs have a flow-through rate of 6 gallons per minute (gpm) per set of two troughs. The troughs are arranged so that four adjacent troughs flow into another four adjacent troughs downgradient for a total discharge flow of 24 gpm or 34,560 gallons per day as used. Salmon eggs are brought into the MDIFW Casco hatch house in November. Eggs are placed in hatching baskets and inserted into the aluminum egg/fry troughs. Salmon eggs hatch in the spring. After the swim-up stage, the baskets are removed. MDIFW Casco also has six, 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 maximum total of 60 gpm (86,400 gpd) 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. From November through April, through the egg incubation, hatching, and non-feeding fry stages, no feeding occurs. Fry begin being fed in May of each year for 4-6 weeks with automatic fish feeders. In June when they are approximately 1-2 inches in length the salmon are moved to raceway pools for rearing. Hatch house wastewater is discharged via flow-through directly to Mile Stream as described below. The hatchery building is typically not operated from June when fry are moved through October each year.

2. PERMIT SUMMARY (cont'd)

However, this permitting action is providing for possible use of, and discharge from, the hatchery building during at least a portion of the summer months.

Rearing Facilities: MDIFW Casco's rearing facilities consist of two lines of covered concrete raceways referred to as the east side and west side raceways because of their orientation on the site. Fry are reared in the raceways until they achieve appropriate sizes for stocking. Both sets of raceways consist of three rows of four, 5-foot wide by 100-foot long pools (raceway series A-D, total 24 pools) followed by two rows of two, 8-foot wide by 100-foot long pools (raceway series E-F, total 8 pools) for a total of 32 raceway pools. Each pool is operated at a depth of 24-inches. A 16-foot wide by 8-foot long showpool is located at the end of each of the two raceway lines. Feeding is conducted automatically by demand. MDIFW Casco indicates using an average of 118 pounds of food per day, a maximum of 185 lbs/day, and a period of peak feeding during July through October.

Typically, brown trout are kept in the east side raceways and salmon, rainbow trout, brook trout, and extra brown trout are kept in the west side raceways. New salmon are typically placed in the first set of 5-foot wide west side raceway pools and rainbow trout fry in the first set of 8-foot wide west side raceway pools. The remainder of the pools are utilized according to species, sizes, and numbers of fish. Fish are raised for both spring and fall stocking. In the spring, MDIFW stocks 6-8-inch long spring yearling salmon (one year old) and 8-10-inch long spring yearling brook trout (one-year old plus). In the fall MDIFW stocks 10-13-inch long fall yearling salmon (one year old plus), 4-6-inch long fall fingerling brown trout (less than one year old), 10-12-inch long fall yearling brown trout (one year old plus), and 12-14-inch long fall yearling rainbow trout (one year old plus). Replacement fish and eggs are brought on station as described above. MDIFW Casco indicates a maximum quantity of fish on station of 675 broodstock weighing 975 lbs, 112,388 first year fish weighing 23,500 lbs, and 29,000 second year fish weighing 16,800 lbs for a total of approximately 142,063 fish weighing 41,275 lbs.

e. Wastewater Treatment: All flow-through and cleaning flows leaving the broodstock facility and the rearing facilities (raceways) are routed to a 60-micron drum filter for filtration prior to discharge to the receiving water. Cleaning activities are conducted 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 Casco 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. After a raceway is cleaned, the discharge pipe "plug" is removed, sending cleaning flows via a common wastewater pipeline to the

2. PERMIT SUMMARY (cont'd)

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.

Raceways are cleaned once per week in a single day during the summer and once every 2-3 weeks as needed during the winter when numbers of fish are reduced. MDIFW Casco indicates that it takes approximately 15-30 minutes to clean each raceway pool. MDIFW Casco indicates that raceways housing fall yearling brown trout are not cleaned due to stress on the fish and because the fish appear to "self clean" the raceways they inhabit as they stir up and resuspend any settled material through increased activity.

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 16-foot (48,000-gallon) clarifier , during which time excess clarifier water (supernatant) is routed back to the microscreen filter for filtration and discharge. Solids in the clarifier are constantly raked and automatically or manually pumped to an adjoining approximately 20-foot by 20-foot by 16-foot (48,000-gallon) sludge storage/dewatering tank designed to provide a minimum of 6-months of storage capacity. During the fall of 2011, MDIFW installed a rake arm to assist in clarifier solids removal as well as a building over the clarifier. 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 Casco's-treated rearing facility wastewater is discharged through Outfall #005A, a 36-inch diameter pipe. However, MDIFW 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 will not clean or feed its fish so that all effluent discharges will consist of flow-through water only. MDIFW Casco discharges hatchery building flow-through and cleaning wastewater without screening or other treatment through Outfall #006A, a 15-inch diameter iron pipe to Mile Stream discharging at the mean low water level. Regardless of the scenarios described, MDIFW Casco's discharges are at all times subject to the effluent limitations and monitoring requirements established in this permitting action.

Use of agents for therapeutic and disinfecting/sanitizing purposes is 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 467.9.B(4) classifies Mile Brook (Casco) as a Class B water. Maine law, 38 M.R.S.A., Section 465.3, describes the standards for Class B waters. The Department has determined that Mile Stream, at the point of discharge, has a watershed of 7.75 square miles. Maine law, 38 M.R.S.A., Section 464.4.A(1) states, "*...the department may not issue a water discharge license for... direct discharge of pollutants to waters having a drainage area of less than 10 square miles, except that discharges into these waters that were licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist*".

Maine law, 38 M.R.S.A., Section 467.9.B(2) classifies the Crooked River as a Class AA water. Maine law, 38 M.R.S.A., Section 465.1, describes the standards for Class AA waters.

Sebago Lake is classified as a Class GPA water pursuant to Maine law, 38 M.R.S.A., Section 465-A. Therefore, Mile Stream at the point of discharge, being approximately 7.5 miles upstream of Sebago Lake, entails a tributary to a GPA water. Maine law, 38 M.R.S.A., Section 464.4.A states, "*... the department may not issue a water discharge license for...* " (3) "*Any discharge into a tributary of GPA waters that by itself or in combination with other activities causes water quality degradation that would impair the characteristics and designated uses of downstream GPA waters or causes an increase in the trophic state of those GPA waters*".

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 *Mile Brook (Casco)* (Assessment Unit ME0106000101_605R01), listed in

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

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 2.28 mile segment of Class B water. The listing further provides comments, "*Hatchery permit issued 5/8/2006; exp. Date 5/8/2011*" and lists an 'Expect To Attain Date' of "*2009*".

Macroinvertebrate biomonitoring conducted in 2010 by the MEDEP Division of Environmental Assessment (DEA) indicated that the receiving water below the MDIFW Casco facility did not attain the Class B aquatic life criteria. MEDEP DEA notes that generic richness and diversity were found to be low and the number of sensitive organisms collected indicated some detrimental change. At the time of monitoring, the receiving water only attained Class C criteria for aquatic life. The Department has determined that MDIFW Casco caused or contributed to this non-attainment of standards. Normally, this condition would be sufficient to consider establishing or revising effluent limitations, monitoring and operational requirements accordingly, including requirements for additional ambient macroinvertebrate biomonitoring. The Department notes that MDIFW Casco undertook additional facility upgrades in the fall of 2011. This permitting action establishes requirements for further macroinvertebrate biomonitoring. However, as noted in Permit Special Condition L, the resumption of macroinvertebrate biomonitoring to reassess aquatic life conditions in Mile Stream is required for 2013 to enable the facility to fully utilize the updated infrastructure, improve operations and maintenance, and improve effluent and ambient quality prior to the assessment.

All freshwaters in Maine are listed as only partially attaining the designated use of recreational fishing due to a fish consumption advisory (Category 4-A, Waters Impaired by Atmospheric Deposition of Mercury). 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 Casco facility causes or adversely contributes to non-attainment of standards in Mile Stream related to the fish consumption advisory. However, other factors necessitate Department action. If it is determined that non-attainment conditions persist in the receiving water(s) and that MDIFW Casco causes or contributes to those conditions, this permitting action may be reopened pursuant to Permit Special Condition M and effluent limitations, monitoring and operational requirements, and/or wastewater treatment requirements adjusted accordingly.

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*

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

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 Casco and other facilities since issuance of the previous permitting actions. As described herein, MDIFW Casco discharges its wastewater to a Class B water that provides minimal dilution. Further, as previously noted, Mile Stream has a drainage area of less than 10 square miles and no new direct discharges of pollutants are allowed by statute. 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.

a. Flow: The previous permitting action established monthly average discharge limits of 2.9 MGD for the rearing facility (Outfall #005A) and 0.052 MGD for the hatchery facility (Outfall #006A), and required daily minimum measurement frequencies, all of which are being carried forward in this permitting action, consistent with Department guidelines for wastewater treatment facility discharges. A review of the Discharge Monitoring Report (DMR) data for the IFW Casco facility for the period of June 2006 through September 2011 indicates the following.

OUTFALL #005A (REARING FACILITY)
EFFLUENT FLOW

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	2.9 MGD	2.9 MGD	2.9 MGD	2.9 MGD	64

OUTFALL #006A (HATCHERY BUILDING)
EFFLUENT FLOW

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.052 MGD	0.017 MGD	0.052 MGD	0.048 MGD	35

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

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 Casco facility discharges its treated effluent via a discharge pipe into the side of Mile 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. 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 noted in the previous permitting action, the dam on Pleasant Lake, which feeds Mile Stream, is privately owned. There is a formal water level order for Pleasant Lake, dated August 15, 1978, but there is no formal requirement specifying a minimum flow that must be passed over or through the dam to Mile Stream. MDIFW Casco reports that upper portions of Mile Stream are significantly or completely dewatered on occasion. At those times, the MDIFW Casco discharge constitutes the only flow in that portion of Mile Stream. Based on this information, in the previous permitting action, the Department assumed a seasonal low flow of 0 cubic feet per second in Mile Stream and acute (1Q10), chronic (7Q10) and harmonic mean dilution factors of 1:1, representative of the fact that the MDIFW Casco discharge sometimes constitutes the only river flow. The MEDEP DEA has reviewed the conditions described and verified the 1:1 dilution factors. If a guaranteed minimum flow from the Pleasant Lake dam is established in the future, 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. In the previous permitting action, it was noted that pursuant to 38 M.R.S.A., Section 464.4.A, "*...the department may not issue a water discharge license for...*" (1) a new "*direct discharge of pollutants to waters*

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

having a drainage area of less than 10 square miles and (2) a "*New direct discharge of domestic pollutants to tributaries of Class-GPA waters*". Therefore, to calculate applicable mass limits for BOD and TSS, the Department utilized the previous WDL monthly average concentration limits of 2 mg/L (ppm), the previous maximum flow limit of 2.9 MGD, and a conversion factor of 8.34 lbs/gallon to yield a total facility monthly average mass limit of 48 lbs/day. To allocate this mass limit between the rearing facility discharge (Outfall #005A) and the hatchery facility discharge (Outfall #006A), the Department used the hatchery discharge flow limit of 0.052 MGD in the above formula to calculate a monthly average mass limit of 0.9 lbs/day. The rearing facility discharge was then allocated the remaining 47.1 lbs/day as a monthly average limit. The daily maximum mass limits were based on the newly established daily maximum concentration limits of 10 mg/L, new monthly average flow limits of 2.9 MGD and 0.052 MGD, and a conversion factor of 8.34 lbs/gallon to yield 242 lbs/day and 4.3 lbs/day daily maximum limits for Outfalls #005A and #006A, respectively. The Department anticipated that the monthly average mass limits would be limiting factors for the MDIFW Casco discharge, thus meeting the provisions of 38 M.R.S.A., Sections 464.4.A(1) and (2) noted above.

The Department has revisited the above determination pursuant to 38 M.R.S.A., Section 464.4.A(2). As the levels of BOD and TSS in fish hatchery and rearing facility effluent are significantly below those levels found in sanitary wastewater, it no longer considers them to constitute *domestic pollutants*, as defined at 38 MRSA, Section 466.6. However, MDIFW Casco's receiving water still has a drainage area of less than 10 square miles. Therefore, 38 M.R.S.A., Section 464.4.A(1) still limits the discharge of pollutants as described above. Both monthly average and daily maximum mass limits are being carried forward in this permitting action.

Based on the restrictions noted above for new or increased discharges of pollutants to the receiving water (38 M.R.S.A., §464.4.A), if MDIFW Casco 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. As noted in Fact Sheet 5, *Receiving Water Quality Conditions*, results of 2010 macroinvertebrate biomonitoring indicate that the receiving water below the MDIFW Casco facility did not attain the Class B aquatic life criteria. The Department has determined that MDIFW Casco caused or contributed to this non-attainment of standards. Because it recently undertook facility upgrades, MDIFW Casco is being provided additional time to correct and assess this situation.

A review of the DMR data for the IFW Casco facility for the period of June 2006 through September 2011 indicates the following.

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

OUTFALL #005A (REARING STATION)
BOD MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	47.1 lbs/day	<19 lbs/day	61 lbs/day	<46.6 lbs/day	64
Daily Max.	242 lbs/day	<43 lbs/day	<242 lbs/day	<129.8 lb/day	64

28 exceedences of the monthly average BOD mass limit.

BOD CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	1 mg/L	<6 mg/L	<2.1 mg/L	64
Daily Max.	10 mg/L	<2 mg/L	<10 mg/L	<2.3 mg/L	64

TSS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	47.1 lbs/day	<43 lbs/day	<48 lbs/day	<47.0 lbs/day	64
Daily Max.	242 lbs/day	<43 lbs/day	<242 lbs/day	<138.3 lb/day	64

26 exceedence of the monthly average TSS mass limit.

TSS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	<2 mg/L	<6 mg/L	<2.1 mg/L	64
Daily Max.	10 mg/L	<2 mg/L	<10 mg/L	<2.3 mg/L	64

OUTFALL #006A (HATCHERY BUILDING)
BOD MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.9 lbs/day	<0.7 lbs/day	<0.9 lbs/day	<0.9 lbs/day	35
Daily Max.	4.3 lbs/day	<0.7 lbs/day	<4.3 lbs/day	<2.4 lbs/day	35

BOD CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	<2 mg/L	<2 mg/L	<2 mg/L	34
Daily Max.	10 mg/L	<2 mg/L	<2 mg/L	<2 mg/L	34

TSS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.9 lbs/day	<0.7 lbs/day	<0.9 lbs/day	<0.9 lbs/day	35
Daily Max.	4.3 lbs/day	<0.7 lbs/day	<4.3 lbs/day	<2.4 lbs/day	35

TSS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	6 mg/L	<2 mg/L	<6 mg/L	<2.1 mg/L	35
Daily Max.	10 mg/L	<2 mg/L	<10 mg/L	<2.2 mg/L	35

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

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. Any increase in the phosphorus content in a receiving water has the potential to cause or contribute to non-attainment of classification standards. Phosphorus concerns for the MDIFW Casco facility are two-fold in that the facility discharges its effluent to Mile Stream (Class B), which flows to the Crooked River (Class AA), both of which serve as tributaries to Sebago Lake (Class GPA). Both streams/rivers and lakes are sensitive to phosphorus, but must be managed differently to avoid adverse effects. Pursuant to Maine law (38 MRSA § 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*". The amount of any pollutant, including phosphorus, in a discharge must not contribute, now or in the future, to an increase in the trophic state of the lake or otherwise cause or contribute to nonattainment of the class standards. As noted in Fact Sheet 5, *Receiving Water Quality Conditions,* results of 2010 macroinvertebrate biomonitoring indicate that the receiving water below the MDIFW Casco facility did not attain the Class B aquatic life criteria. The Department has determined that MDIFW Casco caused or contributed to this non-attainment of standards. Because it recently undertook facility upgrades, MDIFW Casco is being provided additional time to correct and assess this situation.

Lake Concerns: In implementation of this standard, which is also applied to changes of land use in lake watersheds in section 465-A, the Department has recognized (1) that most lakes can accept some small increment of increased phosphorus load before they will demonstrate a perceivable increase in trophic state, and (2) that this increment would more likely be the result of the cumulative loading from a number of sources and not be provided by one source. This is the basis for the phosphorus technical guide (Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development. DEP, 1992), which is used under Department Regulation, Chapter 500, Stormwater Management, the Site Location of Development Law (38 MRSA, §§ 481-490), and many town land use ordinances to define a maximum allowable increase in phosphorus load to each lake which will not risk a perceivable increase in trophic state; and to distribute that increase among proposed and anticipated development activities in the lake's watershed.

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

The 1992 phosphorus technical guide defines the maximum increment of increased phosphorus content that will not risk a perceivable increase in lake trophic state. This "acceptable increase in phosphorus concentration" is a function of the lake's current water quality, its potential for developing a significant phosphorus recycling problem, and whether or not it supports, or has the potential to support, a coldwater fishery. An in-depth description of the model assumptions and methodology is provided in the Fact Sheet of the previous permitting action.

IF & W Hatchery, Casco, Mile Brook to Crooked River, tributary to Sebago Lake

According to the Department's Division of Watershed Management at the time of development of the previous permitting action, Sebago Lake is a large, oligotrophic, coldwater fishery lake, which serves as the public water supply for Portland and surrounding communities. Its water quality category is outstanding with a high level of protection, so its acceptable increase in lake phosphorus concentration is 0.5 ppb. The resulting allowable increase in phosphorus load to the lake is 1,068.4 kg/yr (2,355 lbs/year). Based on the rationale described above, the portion of this load allocated to point sources is 0.10 X 1,068.4 kg/yr or 106.8 kg/yr (236 lbs/year). This is equivalent to the limit established in the previous licensing action and limited information on the phosphorus discharge from the Casco hatchery suggests it currently discharges about this amount of phosphorus.

The 236 lbs/year water quality based total phosphorus mass limit entails MDIFW Casco's allowable total phosphorus discharge contribution to Sebago Lake per year. The Department recognizes that the water source, Pleasant Lake, contains ambient levels of phosphorus that would naturally enter Sebago Lake (44 lbs/year, 20 kg/year). The Department calculated MDIFW Casco's total allowable phosphorus discharge, including background levels of phosphorus in the source waters, to be 280 lbs/yr (126.8 kg/yr). Allocation of the phosphorus mass limit between MDIFW Casco's hatchery and rearing facilities is described below.

River Concerns: 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 Casco's chronic dilution factor of 1:1. The resulting monthly average limit of 0.035 mg/L is being carried forward in this permitting action, as is a daily maximum concentration monitoring requirement. Based on Department research, the AWQ threshold 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 dilution of 1:1 described in Fact Sheet Section 6b, Dilution Factors, is utilized in calculation of a water quality based effluent concentration limit. In free flowing rivers and streams, phosphorus is typically a summer time concern for water quality. Therefore, the effluent concentration limits and monitoring requirements were in effect from June 1 through September 30 each year. A required minimum monitoring

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

frequency of once per two weeks (twice per month) was established based on the Department's BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions. Each of these factors is carried forward in this permitting action.

As noted in the previous permitting action, pursuant to 38 M.R.S.A., Section 464.4.A, "*...the department may not issue a water discharge license for...*" (1) a new "*direct discharge of pollutants to waters having a drainage area of less than 10 square miles* and (2) a "*New direct discharge of domestic pollutants to tributaries of Class-GPA waters*". Therefore, to calculate applicable mass limits for phosphorus, the Department must allocate the limit between both Outfalls #005A and #006A. In both the previous and current permitting actions, to do this, the Department utilized the monthly average concentration limit of 0.035 mg/L (ppm), the hatchery facility monthly average flow limit of 0.052 MGD, and a conversion factor of 8.34 lbs/gallon times 365 days to yield a mass limit of 5.5 lbs/year for Outfall #006A. The rearing facility discharge (Outfall #005A) was then allocated the remaining 274.5 lbs/year limit. A daily maximum mass limit is not being established to provide MDIFW Casco with management flexibility to meet the yearly mass limits. However, this permitting action is requiring MDIFW Casco to report the mass of phosphorus discharged per month to provide for short term phosphorus management, as well as to identify either trends or effluent fluctuations related to seasonal and/or operational changes. A required minimum monitoring frequency of once per two weeks (twice per month) was established based on the Department's BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions. Each of these factors is carried forward in this permitting action.

Mile Stream, the Crooked River, and Sebago Lake will all receive phosphorus discharged from the Casco facility. Each of these receiving waters is sensitive to the effects of this pollutant, therefore the discharge must be managed according to receiving water specific needs. This permitting action is continuing annual phosphorus mass limits based on water quality specific needs in Sebago Lake and seasonal phosphorus concentration limits based on water quality specific needs in Mile Stream.

It should be noted that as the concentration and mass limits are calculated based on different receiving waters, compliance with the established concentration limit will not necessarily result in compliance with the established mass limit. The permittee will need to actively manage its phosphorus discharge to achieve compliance and prevent adverse impacts in the receiving waters. It must be noted that all new proposed discharges of pollutants or increases in pollutants in the existing discharge, excluding flow, are subject to the provisions for discharges to waters with less than 10 square mile watersheds contained in 38 M.R.S.A., Section 464.4.A(1) and tributaries to GPA waters contained in 38 M.R.S.A., Section 464.4.A (2) and (3). Therefore, if MDIFW Casco 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.

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

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.

A review of the DMR data for the IFW Casco facility for the period of June 2006 through September 2011 indicates the following.

OUTFALL #005A (REARING STATION)
PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Total lbs / month	report lbs / month	3.7 lbs / month	41.2 lbs / month	17.4 lbs / month	67
Max lbs / year	274.5 lbs / year	143.2 lbs / year	247.6 lbs/year	194.0 lbs / year	6

PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.035 mg/L	0.010 mg/L	0.055 mg/L	0.033 mg/L	24
Daily Max.	report mg/L	0.010 mg/L	0.064 mg/L	0.039 mg/L	24

9 exceedences of the monthly average phosphorus concentration limit.

ORTHO-PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	0.22 lbs/day	0.75 lbs/day	0.6 lbs/day	4
Daily Max.	report lbs/day	0.41 lbs/day	0.75 lbs/day	0.6 lbs/day	4

ORTHO-PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	0.009 mg/L	0.031 mg/L	0.024 mg/L	4
Daily Max.	report mg/L	0.017 mg/L	0.031 mg/L	0.026 mg/L	4

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

OUTFALL #006A (HATCHERY BUILDING)
PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Total lbs/month	report lbs /month	0.011 lbs /month	0.229 lbs /month	0.077 lbs /month	21
Max lbs/year	5.5 lbs/year	0.34 lbs/year	1.16 lbs/year	0.61 lbs/year	6

PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	0.035 mg/L	0.003 mg/L	0.035 mg/L	0.008 mg/L	21
Daily Max.	report mg/L	0.004 mg/L	0.066 mg/L	0.012 mg/L	21

ORTHO-PHOSPHORUS MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	0.010 lbs/day	0.010 lbs/day	0.010 lbs/day	1
Daily Max.	report lbs/day	0.022 lbs/day	0.022 lbs/day	0.022 lbs/day	1

ORTHO-PHOSPHORUS CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	0.023 mg/L	0.023 mg/L	0.023 mg/L	1
Daily Max.	report mg/L	0.05 mg/L	0.05 mg/L	0.05 mg/L	1

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 Chapter 583, Use Attainment Evaluation Using Nutrient Criteria for Surface Waters, may, or may not, affect 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 Casco facility for the period of June 2006 through September 2011 indicates the following.

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

OUTFALL #005A (REARING FACILITY)
FISH ON HAND

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	9,459 lbs/day	56,392 lbs/day	21,481 lbs/day	64
Daily Max.	report lbs/day	9,459 lbs/day	56,392 lbs/day	21,538 lbs/day	64

OUTFALL #006A (HATCHERY BUILDING)
FISH ON HAND

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report lbs/day	26 lbs/day	60 lbs/day	44.8 lbs/day	5
Daily Max.	report lbs/day	26 lbs/day	60 lbs/day	44.8 lbs/day	5

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 Casco reports that it uses approximately 25 gallons of formalin for treatment of fungal infections on eggs annually and that it does not use formalin on fish. This is an equivalent amount and use as that 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 criterion (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*"

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

and determined that using the 5th percentile of MDIFW's 1-hour exposure data "*gives an equivalent amount of protection to 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 5th percentile level. Based on this research, the Department revised MDIFW Casco's MEPDES Permit / Maine WDL on October 10, 2008, revising hatchery 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 criterion typical of normal treatment operations, a 24-hour exposure criterion to accommodate emergency treatment conditions, and the 1:1 effluent to ambient acute dilution applicable to this facility and its receiving water.

45 mg/L (1-hour acute criterion) x 1 (effluent dilution) = 45 mg/L formalin limit.
25 mg/L (24-hour acute criterion) x 1 (effluent dilution) = 25 mg/L formalin limit.

The previously established daily maximum formalin mass limit of 7.3 lbs/day, developed pursuant to 06-096 CMR 523.6(f) based on projected use at MDIFW Casco, is being carried forward in this permitting action. 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. 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 Casco facility for the period of June 2006 through September 2011 indicates the following.

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

OUTFALL #006A (HATCHERY BUILDING)
FORMALIN MASS

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.					
1-hr treatment	report lbs/day	---	---	---	0
24-hr treatment	report lbs/day	---	---	---	0
Daily Max.					
1-hr treatment	7.3 lbs/day	0.3 lbs/day	0.3 lbs/day	0.3 lbs/day	2
24-hr treatment	7.3 lbs/day	---	---	---	0

FORMALIN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.					
1-hr treatment	report mg/L	0.6 mg/L	0.6 mg/L	0.6 mg/L	2
24-hr treatment	report mg/L	---	---	---	0
Daily Max.	13.5 mg/L /				
1-hr treatment	45 mg/L	0.6 mg/L	0.6 mg/L	0.6 mg/L	2
24-hr treatment	13.5 mg/L / 25 mg/L	---	---	---	0

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.

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

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 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.

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

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 B 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. A review of the DMR data for the IFW Casco facility for the period of June 2006 through September 2011 indicates the following.

OUTFALL #005A (REARING FACILITY)
EFFLUENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	7.5 mg/L	10.0 mg/L	8.8 mg/L	24
Daily Max.	report mg/L	7.7 mg/L	10.3 mg/L	9.1 mg/L	24
Daily Min.	7.5 mg/L	7.3 mg/L	9.9 mg/L	8.4 mg/L	24

1 value below the daily minimum effluent DO concentration limit.

OUTFALL #006A (HATCHERY BUILDING)
EFFLUENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	8.7 mg/L	10.2 mg/L	9.5 mg/L	4
Daily Max.	report mg/L	9.3 mg/L	10.6 mg/L	9.9 mg/L	4
Daily Min.	7.5 mg/L	8.3 mg/L	9.8 mg/L	9.2 mg/L	4

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 Casco facility for the period of June 2006 through September 2011 indicates the following.

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

OUTFALL #005A (REARING FACILITY)
pH RANGE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	6.2 s.u.	7.2 s.u.	---	51
Daily Max.	6.0-8.5 s.u.	6.5 s.u.	7.2 s.u.	---	51

OUTFALL #006A (HATCHERY BUILDING)
pH RANGE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	---	6.2 s.u	7.1 s.u	---	27
Daily Max.	6.0-8.5 s.u.	6.4 s.u	7.1 s.u	---	27

The Department observes that MDIFW Casco 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., Section 464.4.A(1) states, "*...the department may not issue a water discharge license for... direct discharge of pollutants to waters having a drainage area of less than 10 square miles, except that discharges into these waters that were licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist*". Mile Stream has a drainage area of 7.75 square miles at the point of discharge.

The previous permitting action required MDIFW Casco to conduct and submit a study of alternatives to the discharge of hatchery wastewater to Mile 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 Casco has demonstrated to the Department's satisfaction that it currently has no practical alternative to its wastewater discharge to Mile Stream.

In keeping with the requirements of 38 M.R.S.A., § 464.4.A(1) and as described in Permit Special Condition G, on or before six-months prior to expiration of this permit, MDIFW Casco is required to submit to the Department for review, an Alternative Discharge Study (ADS) report for the Casco 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.

7. ALTERNATIVE DISCHARGE STUDY (cont'd):

Alternative Discharge Studies (ADS) 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 / SHOW POOL 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."*

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

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 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.

9. 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.

MDIFW Casco indicates that the following therapeutic agents may be used at the Casco 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 5 and Fact Sheet Section 6.f.
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 at a frequency of 2-3 times per month.
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 2,100 pounds per year is used. MDIFW Casco anticipates that a treatment would take place daily for a one week period and consist of placing two 50-pound blocks of salt in the upper pools each of three raceway lines housing brown trout for a total of 300 pounds of salt per day, applied between June 1 and September 30. 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.
Limestone, Calcium Carbonate ground calcium carbonate is added in the bottom of raceways that house 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 calcium carbonate has not recently been used at MDIFW Casco. If it is used in the future, only small amounts will be used and levels will not be permitted to exceed the natural range of calcium currently found in Maine waters. Residual calcium levels in the flow-through water will be diluted in the full facility wastewater stream 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 Department requires MDIFW Casco to report all other therapeutic agents used at the facility that have the potential to be discharged to the receiving water. 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 Casco indicates that the following disinfecting/sanitizing agents may be used at the Casco facility. These agents must be used pursuant to the requirements specified herein.

Argentyne for disinfection of nets, utensils, boots, stocking trucks, eggs, etc. Active ingredients polymeric-iodine complex (10%), inert ingredients (90%). Approximately 4 gallons used per year at a concentration of 0.8 oz (23.7 ml) per 1 gallon of water and a frequency of 2-3 times per year.

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 Casco 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 Casco 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 Casco facility. Based on limited available data and Department concerns with potential effects of the facility's effluent discharges on the aquatic life in Mile Stream, the previous permitting action required the

12. AMBIENT MACROINVERTEBRATE BIOMONITORING (cont'd):

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.

Macroinvertebrate biomonitoring conducted in 2006 by the MEDEP Division of Environmental Assessment (DEA) indicated that the receiving water below the MDIFW Casco facility did not attain its Class B aquatic life standards at that time. Because recently installed facility upgrades were not functioning as intended and repairs subsequently undertaken, the MEDEP DEA conducted additional macroinvertebrate biomonitoring in Mile Stream below MDIFW Casco in 2010. As noted in Fact Sheet Section 5 above, the additional monitoring indicated that in 2010, the receiving water below the MDIFW Casco facility still did not attain the Class B aquatic life criteria. MEDEP DEA notes that generic richness and diversity were found to be low and the number of sensitive organisms collected indicated some detrimental change. At the time of monitoring, the receiving water only attained Class C criteria for aquatic life. The Department has determined that MDIFW Casco caused or contributed to this non-attainment of standards. Normally, this condition would be sufficient to consider establishing or revising effluent limitations, monitoring and operational requirements accordingly, including requirements for additional ambient macroinvertebrate biomonitoring. The Department notes that MDIFW Casco undertook additional facility upgrades in the fall of 2011. This permitting action establishes requirements for further macroinvertebrate biomonitoring. However, as noted in Permit Special Condition L, the resumption of macroinvertebrate biomonitoring to reassess aquatic life conditions in Mile Stream is required for 2013 to enable the facility to fully utilize the updated infrastructure, improve operations and maintenance, and improve effluent and ambient quality prior to the assessment.

Mile Stream consists of several small, braided channels in the vicinity of MDIFW Casco. MDIFW has long expressed concern that the aquatic macroinvertebrate biomonitoring location accurately assess the effects of its discharge to Mile Stream. MEDEP DEA reports that the 2010 assessment monitoring location was established based on the characteristics of Mile Stream, wastewater flow patterns, and that it was further downstream than the 2006 monitoring location. MEDEP DEA maintains that the 2010 monitoring location was appropriately established but, it will again assess the location for future monitoring efforts.

Based on data from 2010 macroinvertebrate biomonitoring and Department concerns with potential effects of the facility's effluent discharges on the aquatic life in Mile Stream, this permitting action requires MDIFW Casco to conduct additional macroinvertebrate biomonitoring to determine aquatic life conditions in Mile Stream during the summer of 2013, consistent with "*Methods for Biological Sampling and Analysis of Maine's Rivers and Streams*" (DEP #LW0387-B2002, August 2002). The permittee shall submit results to MEDEP DEA and to the Department Compliance Inspector in a biomonitoring report by December 15, 2013 for review and approval. If results indicate that Mile Stream below the MDIFW Casco facility is attaining its Class B water quality standards and designated uses,

12. AMBIENT MACROINVERTEBRATE BIOMONITORING (cont'd):

this requirement shall cease. If results indicate that the non-attainment conditions indicated in the 2010 monitoring persist, this permitting action may be reopened pursuant to Permit Special Condition M to establish requirements for modification of MDIFW Casco's infrastructure, Operation and Maintenance practices, and/or other factors potentially causing or contributing to non-attainment, followed by resumed macroinvertebrate biomonitoring.

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 MDIFW Casco's effluent on the water quality of its receiving water, the previous permitting action required the permittee to seasonally monitor ambient dissolved oxygen and temperature levels at two locations in Mile 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 Pleasant Lake dam and the head of the MDIFW Casco facility in an area representing free-flowing conditions and (2) below the MDIFW Casco outfalls in an area representing the dissolved oxygen sag point, unless revised by the Department. A review of the DMR data for the IFW Casco facility for the period of June 2006 through September 2011 indicates the following.

AMBIENT LOCATION 1 – UPSTREAM MONITORING
AMBIENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	5.3 mg/L	9.3 mg/L	7.5 mg/L	24
Daily Max.	report mg/L	5.8 mg/L	9.6 mg/L	8.2 mg/L	24
Daily Min.	report mg/L	4.4 mg/L	9.2 mg/L	6.8 mg/L	24

AMBIENT WATER TEMPERATURE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report deg C	8.3 deg C	24.8 deg C	18.2 deg C	24
Daily Max.	report deg C	16.0 deg C	28.0 deg C	20.8 deg C	24
Daily Min.	report deg C	7.6 deg C	22.6 deg C	16.5 deg C	24

AMBIENT LOCATION 2 – DOWNSTREAM MONITORING
AMBIENT DISOLVED OXYGEN CONCENTRATION

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report mg/L	6.9 mg/L	9.9 mg/L	8.5 mg/L	24
Daily Max.	report mg/L	6.9 mg/L	10.2 mg/L	8.9 mg/L	24
Daily Min.	report mg/L	6.8 mg/L	9.9 mg/L	8.1 mg/L	24

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

AMBIENT WATER TEMPERATURE

Value	Limit	Minimum	Maximum	Average	# Values
Monthly Avg.	report deg C	12.3 deg C	19.7 deg C	16.5 deg C	24
Daily Max.	report deg C	13.0 deg C	23.0 deg C	18.0 deg C	24
Daily Min.	report deg C	11.0 deg C	18.0 deg C	15.2 deg C	24

As noted above, macroinvertebrate biomonitoring conducted in 2010 indicated that the receiving water below the MDIFW Casco facility did not attain the Class B aquatic life criteria. However, the monitoring data presented above indicates improving conditions for ambient DO and temperature between the upstream and downstream monitoring locations. The Department is not able at this time to draw a correlation between ambient DO and ambient temperature and the aquatic life non-attainment conditions noted above. The Department has determined that further information is not needed on these parameters at this time and is therefore eliminating the ambient dissolved oxygen and temperature monitoring requirements in this permitting action.

14. 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*

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

hatcheries is likely to significantly impair the growth, reproduction and habitat of wild salmon, thereby impairing the viability of the DPS." "EPA has analyzed current information, including these findings, and based on this information believes that this remnant population constitutes an existing instream use of certain Gulf of Maine rivers and considers that the above-described impacts to the population would be inconsistent with Maine's water quality standards. Assuming the information discussed above does not significantly change, EPA will utilize its authorities to ensure compliance with Maine water quality standards by ensuring that conditions to protect the remnant population of Atlantic salmon are included in NPDES permits for salmon fish farms and hatcheries, which are subject to regulation as concentrated aquatic animal production facilities." "In view of the substantial danger of extinction to the DPS described by the Services, it is EPA's view that proposed permits authorizing activities that would adversely affect the population, as described earlier in this letter, would be inconsistent with Maine's water quality standards and objectionable under the CWA."

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.

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

Escapement: MDIFW Casco discharges its effluent to Mile Stream, which in turn flows to the Crooked River, Sebago Lake, and the Presumpscot River. None of these receiving waters are designated DPS waters. Therefore, a CMS plan is not required for the protection of endangered Atlantic salmon. However, NOAA Fisheries generally comments that from an ecosystem perspective, fish containment would certainly help protect native fauna in receiving waters. In this permitting action, as in the previous permitting action, the Department is not requiring genetic testing or a CMS for MDIFW Casco.

15. DISCHARGE IMPACT ON RECEIVING WATER QUALITY:

As noted in Fact Sheet Section 5, macroinvertebrate biomonitoring conducted in 2010 indicated that the receiving water below the MDIFW Casco facility did not attain the Class B aquatic life criteria. The Department notes that MDIFW Casco undertook additional facility upgrades in the fall of 2011. As outlined in Permit Special Condition L and Fact Sheet Section 12, MDIFW Casco is required to conduct additional ambient macroinvertebrate

15. DISCHARGE IMPACT ON RECEIVING WATER QUALITY (cont'd)

biomonitoring during the term of this permit. Data collected will be used to evaluate attainment of water classification standards and designated uses, resource impacts, and corrective measures when necessary. The resumption of macroinvertebrate biomonitoring in Mile Stream is required for 2013 to enable the facility to fully utilize the updated infrastructure, improve operations and maintenance, and improve effluent and ambient quality prior to the assessment.

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 Mile Stream to meet standards for Class B classification, the Crooked River to meet standards for Class AA classification, or Sebago Lake to meet the standards for its GPA classification.

If monitoring conducted pursuant to this permitting action indicates that non-attainment conditions persist in the receiving water(s) and that MDIFW Casco causes or contributes to those conditions, this permitting action may be reopened pursuant to Permit Special Condition M and effluent limitations, monitoring and operational requirements, and/or wastewater treatment requirements adjusted accordingly.

16. PUBLIC COMMENTS:

Public notice of this application was made in the Sun Journal newspaper on or about May 13, 2011. 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.

17. 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

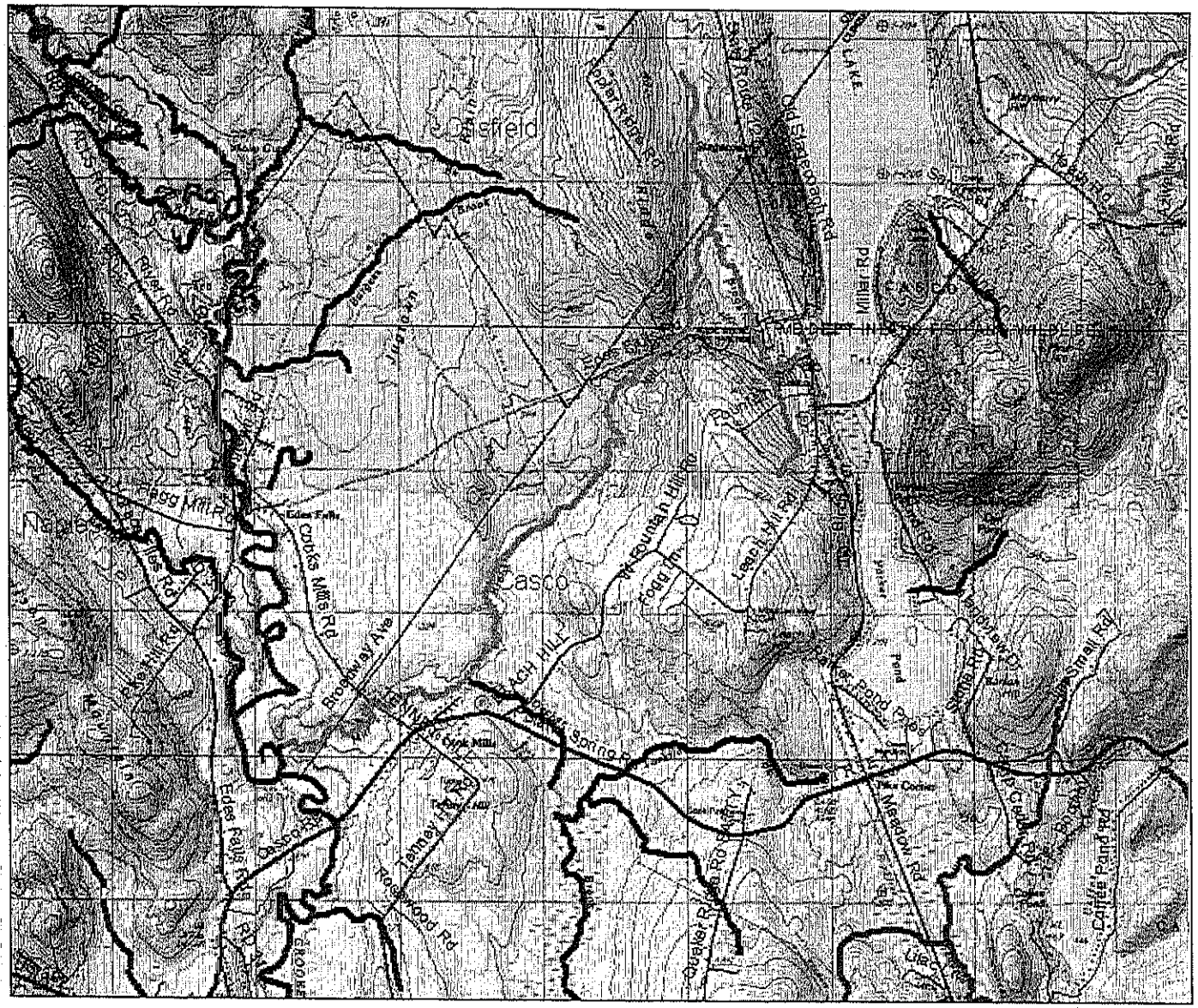
Telephone: (207) 215-1579
Fax: (207) 287-3435
email: Robert.D.Stratton@maine.gov

18. RESPONSE TO COMMENTS:

During the period of March 26, 2012 through April 25, 2012, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License to be issued to MDIFW Casco 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)



Legend

River_polygons

RIVCLASS

- AA
- A
- B
- C
- 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 Wade State Hatchery and Rearing Station Casco, ME

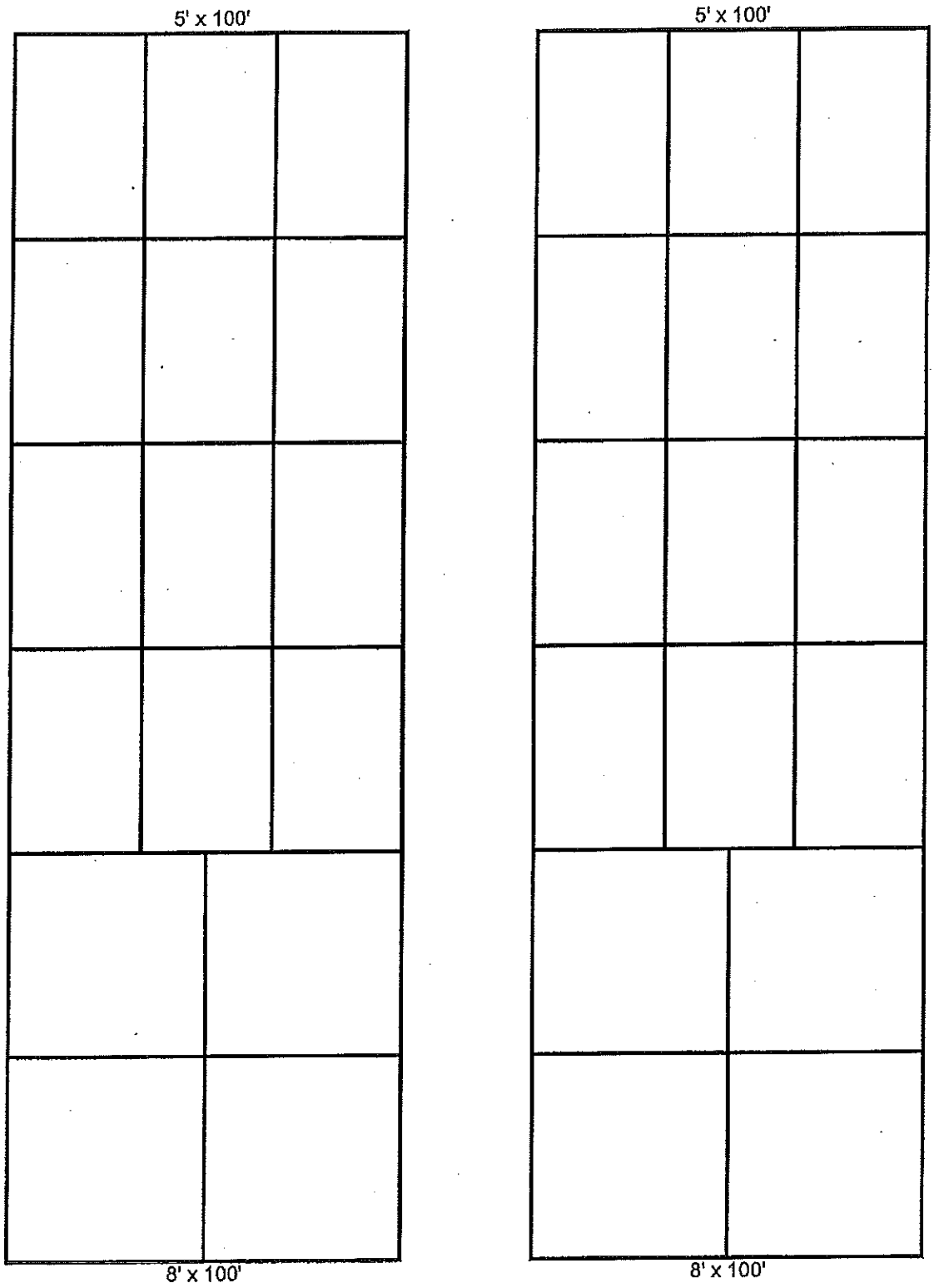
Map created by:
Bob Stratton
Division of Water Quality Management
Maine Department of Environmental Protection

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF MAINE

ATTACHMENT B

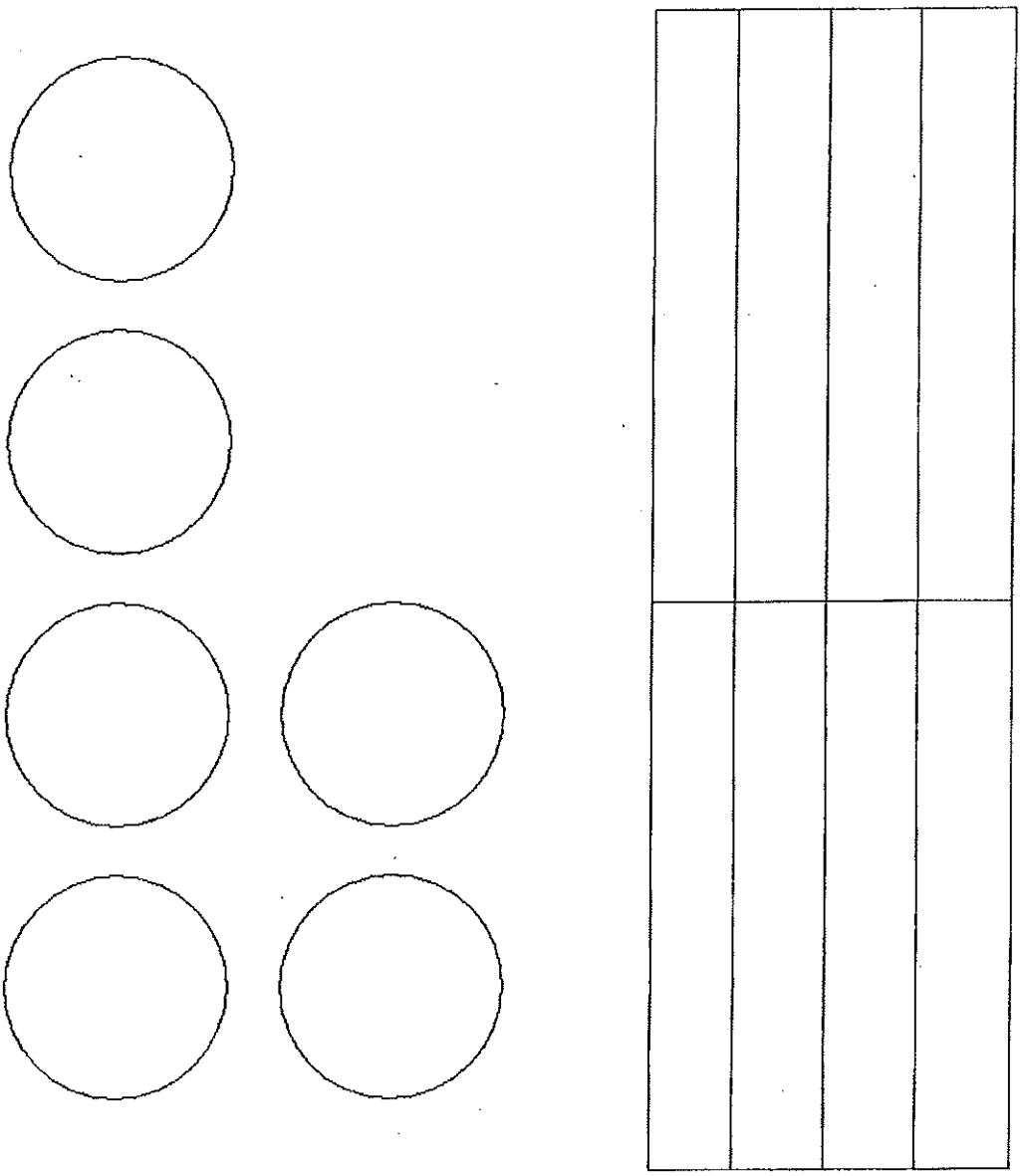
(Facility Site Plans)

CASCO RACEWAY POOL SETUP



Raceways
(24) 5x100 ft pools
(8) 8x100 ft pools

CASCO HATCH HOUSE SETUP



(8) troughs (120"L x 13.5"W x 7.5"D)
(6) 5ft tanks (~28" deep)

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

SECTION		TOPIC	PAGE
A		GENERAL PROVISIONS	
	1	General compliance	2
	2	Other materials	2
	3	Duty to Comply	2
	4	Duty to provide information	2
	5	Permit actions	2
	6	Reopener clause	2
	7	Oil and hazardous substances	2
	8	Property rights	3
	9	Confidentiality	3
	10	Duty to reapply	3
	11	Other laws	3
	12	Inspection and entry	3
B		OPERATION AND MAINTENANCE OF FACILITIES	
	1	General facility requirements	3
	2	Proper operation and maintenance	4
	3	Need to halt reduce not a defense	4
	4	Duty to mitigate	4
	5	Bypasses	4
	6	Upsets	5
C		MONITORING AND RECORDS	
	1	General requirements	6
	2	Representative sampling	6
	3	Monitoring and records	6
D		REPORTING REQUIREMENTS	
	1	Reporting requirements	7
	2	Signatory requirement	8
	3	Availability of reports	8
	4	Existing manufacturing, commercial, mining, and silvicultural dischargers	8
	5	Publicly owned treatment works	9
E		OTHER PROVISIONS	
	1	Emergency action - power failure	9
	2	Spill prevention	10
	3	Removed substances	10
	4	Connection to municipal sewer	10
F		DEFINTIONS	10

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 Department Licensing Decision

Dated: March 2012 **Contact: (207) 287-2811**

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

Other Considerations in Appealing a Decision to the Board

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

What to Expect Once You File a Timely Appeal with the Board

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

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