PAUL R. LEPAGE

GOVERNOR

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

PATRICIA W. AHO COMMISSIONER

May 16, 2012

Mr. Jacob van de Sande **Downeast Salmon Federation** PO Box 201 Columbia Falls, Maine 04623

RE:

Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0110523

Maine Waste Discharge License (WDL) Application # W-009088-6F-A-N

Final MEPDES Permit/Maine WDL, East Machias Aquatic Research Center

Dear Jacob:

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.

Robert D. Stratton

Division of Water Quality Management

Bureau of Land and Water Quality

Enc./cc: Matt Young, Lori Mitchell (MEDEP); Sandy Mojica (USEPA

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

BANGOR 106 HOGAN ROAD BANGOR, MAINE 04401

PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 941-4570 FAX: (207) 941-4584 (207) 822-6300 FAX: (207) 822-6303 (207) 764-6477 FAX: (207) 764-1507

PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769-2094



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

IN THE MATTER OF

DOWNEAST SALMON	FEDERATION INC)]	MAINE POLLUTANT DISCHAF	RGE
EAST MACHIAS AQUA	ATIC RESEARCH CN	TR)	ELIMINATION SYSTEM PERM	IT
EAST MACHIAS, WAS	HINGTON COUNTY,	ME)	AND	
FISH HATCHERY)		
#ME0110523)	WASTE DISCHARGE LICENS	EΕ
#W-009088-6F-A-N	APPROVAL)	NEW	

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 DOWNEAST SALMON FEDERATION INC, EAST MACHIAS AQUATIC RESEARCH CENTER (hereinafter EMARC, 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 Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for the discharge of a monthly average of 400,000 gallons per day (0.4 million gallons per day (MGD)) of fish hatchery wastewater to the East Machias River Estuary, Class SB, from a conservation finfish hatchery and fish rearing facility in East Machias, Maine. The application was assigned MEPDES Permit #ME0110523 / WDL #W-009088-6F-A-N.

PERMIT SUMMARY

This permitting action establishes effluent limitations, monitoring requirements, and operational requirements specific to this industry and site specific water quality needs.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 12, 2012, revised May 15, 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.
- 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.

ACTION

THEREFORE, the Department APPROVES the above noted application of the DOWNEAST SALMON FEDERATION INC, EAST MACHIAS AQUATIC RESEARCH CENTER to discharge fish hatchery and rearing facility wastewater consisting of a monthly average flow of 0.4 MGD to the East Machias River Estuary, Class SB, 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	A, MAINE, THIS 16^{-10} DA	Y OF May 2	012.
DEPARTMENT OF ENVIRONMEN	TAL PROTECTION	J	
BY: Michael For Patricia W. Aho, Commiss	Lulun sioner	File	d
	T	MAY 17	2012
Date of initial receipt of application: Date of application acceptance:	<u>February 21, 2012</u> <u>February 24, 2012</u>	State of Ma Board of Environmen	ine tal Protection
Date filed with Board of Environment	al Protection:		

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge fish hatchery and rearing facility wastewater from Outfall #001A to the East Machias River Estuary. 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 Page 5.

Monitoring Parameter Discharge Limitations and Reporting Requirements **Minimum Monitoring Requirements** Monthly Daily Monthly Daily Measurement Sample Average Maximum Average Maximum Frequency Type as specified as specified as specified as specified as specified as specified Flow 0.4 MGD Daily Measured **[50050]** [03] [01/01] [MS] BOD₅ 33 lbs/day 20 lbs/day 6 mg/L 10 mg/L 1/Month Composite¹ [00310] [26] [19] [19] [01/30] [CP] TSS 20 lbs/day 33 lbs/day 6 mg/L 10 mg/L 1/Month Composite¹ [00530] [26] [26] [19] [19] [01/30] [CP] Total Nitrogen² (From May 1 through report lbs/day report lbs/day report mg/L report mg/L 1/Month Grab November 30 annually) [26] [26] [19] [19] [01/30] [GR] 1006001 Fish on Hand report lbs/day report lbs/day 1/month Calculated [45604] [26] [26] [02/30] **ICAI** EHq 6.0-8.5 S.U. 1/month Grab [00400] [12] [02/30] [GR]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOOTNOTES:

Effluent Monitoring: Effluent values shall be collected at Outfall #001A, the only authorized facility discharge, following all means of wastewater treatment, prior to discharge to the receiving water. All monitoring shall be conducted so as to capture conditions representative of wastewater generating processes at the facility, such as flow-through and cleaning discharge flows, use of therapeutic and disinfecting/sanitizing agents, etc. and in consideration of settling pond/basin detention times. Any change in sampling location must be approved by the Department in writing. Sampling and analysis must be conducted in accordance with: (a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, (b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or (c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to a POTW licensed pursuant to Waste discharge licenses, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended February 13, 2000). All effluent limits are gross, end of pipe limits, unless otherwise specified.

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

- 1. <u>Composite Samples</u>: 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. <u>Total nitrogen</u>: Total nitrogen (TN) is the combination of total Kjeldahl nitrogen (TKN; made up of ammonia (NH₃) and organic nitrogen), nitrite (NO₂), and nitrate (NO₃) nitrogen. The permittee shall measure TN by summing its constituents and shall provide the constituent data in a supplemental report with the monthly DMR.
- 3. <u>pH</u>: Exceedences of the pH range limitation shall be considered permit violations unless due to natural causes. At no time that the pH falls outside of the 6.0-8.5 range shall the effluent pH exceed 0.5 standard units outside of the pH levels in the East Machias River Estuary at the point of discharge. If effluent pH falls outside of 6.0-8.5 s.u., the permittee shall provide corresponding ambient pH values with the appropriate monthly DMR.

SPECIAL CONDITIONS

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.

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 February 24, 2012; 2) the terms and conditions of this permit; and 3) only from Outfall #001A, the only authorized 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.

SPECIAL CONDITIONS E. MONITORING AND REPORTING:

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

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

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:

On or before October 1, 2012, the permittee shall submit to the Department 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 reentering the surface waters from any onsite storage. The plan shall document the recipients and methods of any offsite waste disposal.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

SPECIAL CONDITIONS

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

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

G. SETTLING BASIN CLEANING:

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

H. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS:

The permittee must comply with Maine Department of Inland Fisheries and Wildlife (MDIFW) (freshwater facilities) and Maine Department of Marine Resources (MEDMR) (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 US Environmental Protection Agency (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.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

SPECIAL CONDITIONS

H. 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. Additionally, 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 USEPA Investigational New Animal Drug (INAD) program. The permittee is required to submit information as described in Fact Sheet Section 8, incorporated herein by reference.

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 8, Diseases, Pathogens, and Therapeutic Agents..

I. 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 9, Disinfecting/Sanitizing Agents.

J. MINIMUM TREATMENT TECHNOLOGY REQUIREMENT:

Based on the information provided and Department BPJ, the permittee shall provide minimum treatment technology for the EMARC 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. EMARC 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.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

SPECIAL CONDITIONS K. SALMON GENETIC TESTING AND ESCAPE PREVENTION

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

The EMARC facility will obtain Atlantic salmon eggs of the East Machias River strain from the Craig Brook National Fish Hatchery (CBNFH) in Orland, Maine for hatching, rearing, and release within the East Machias River watershed. CBNFH operates a river strain-specific program, insuring the genetic integrity of eggs provided to EMARC. Based on its operations, mission, and USFWS' input, CBNFH is not subject to requirements for genetic testing or a containment management system. The Downeast Salmon Federation will work in close cooperation with the USFWS to implement a program to assess alternate stocking and rearing strategies for restoration of the East Machias salmon population. As EMARC will be hatching, rearing, and releasing East Machias River strain salmon to the East Machias River watershed, this permitting action does not require genetic testing or a containment management system for the EMARC facility.

Prior to raising any other strains or species at the East Machias facility, EMARC must adhere to Department standards for genetic testing and/or escape prevention or provide clear and compelling documentation from USFWS and NMFS that such requirements are not necessary. The Department guidance documents, "Genetic Testing Requirements for Non-Marine Aquaculture (non-tested) Atlantic Salmon" (Permit Attachment A) and "Escape Prevention" (Permit Attachment B) are incorporated herein by reference.

L. 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.

M. 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

(Genetic Testing Requirements for Non-Marine Aquaculture (non-tested) Atlantic Salmon)

Genetic Testing Requirements for Non-Marine Aquaculture (non-tested) Atlantic Salmon

Maine's Aquaculture general permit and individual MEPDES Permits for marine aquaculture facilities contain requirements to address the genetic integrity of Atlantic salmon raised in Maine for aquaculture. The genetic requirements are implemented at the marine sites as well as at the hatchery and rearing facilities that raise and supply salmon for marine aquaculture. Facilities that raise salmon for purposes other than marine aquaculture are not subject to these requirements through other permitting actions. If determined necessary by the Department pursuant to Permit Special Condition K, the permittee shall comply with the following requirements.

- 1. a. The use of Atlantic salmon eggs or fish (hereinafter referred to as Atlantic salmon) originating from non-North American stock is prohibited at the facility. Non-North American stock is defined as any Atlantic salmon (Salmo salar) that possess genetic material derived partially (hybrids) or entirely (purebreds) from any Atlantic salmon stocks of non-North American heritage, regardless of the number of generations that have passed since the initial introduction of the non-North American genetic material. For the purposes of this permit, classification of brood fish as either North American or non-North American stock will be based on genetic evaluation of each fish's DNA in accordance with the Atlantic Salmon Microsatellite Analysis Protocol (salmon testing protocol) below. The Microsatellite Protocol shall be used to classify each brood fish.
 - b. Only fish determined to be North American, according to the salmon testing protocol, can be used to produce offspring to be placed at the facility. No fish classified as non-North American can be used to create progeny for the facility.
 - c. Prior to January 1 of each year, beginning the effective date of this permit, genetic evaluation information developed pursuant to the salmon testing protocol shall be submitted to NOAA Fisheries and/or the US Fish and Wildlife Service, with confirmation sent to the Department.
 - d. Prior to April 30 of each year, beginning the effective date of this permit, the permittee shall submit to the Department confirmation from the Services demonstrating compliance with section 1. In the event any fish or gametes are found to be non-North American pursuant to the salmon testing protocol, the permittee shall also report to the Department and the Services the disposition of those fish or gametes.
 - e. As of the effective date of this permit, all Atlantic salmon kept at the facility must be of North American origin. At least 30 days prior to bringing any Atlantic salmon to the facility that are not destined for marine aquaculture and are thus not subject to the salmon testing protocol through other permit requirements, the permittee shall provide the Department with written confirmation regarding compliance with these conditions.

- 2. Transgenic salmonids are prohibited. Transgenic salmonids are defined as species of the genera *Salmo*, *Oncorhynchus* and *Salvelinus* of the family Salmonidae and bearing, within their DNA, copies of novel genetic constructs introduced through recombinant DNA technology using genetic material derived from a species different from the recipient, and including descendants of individuals so transfected. This prohibition does not apply to vaccines.
- 3. Personnel from the Department, the Department of Marine Resources, the US Environmental Protection Agency, NOAA Fisheries, and the US Fish and Wildlife Service shall be allowed to inspect the facility during normal operation hours. These personnel will provide credentials attesting to their position and will follow the site's biosecurity procedures and may, at market value, purchase random samples of salmon from the facility to monitor compliance with these conditions. Operational records regarding compliance with this permitting action shall be made available to these personnel for their inspection upon request.
- 4. The intentional release of Atlantic salmon to the receiving waters is prohibited.

Atlantic Salmon Microsatellite Analysis Protocol (salmon testing protocol)

This protocol will be used to determine which Atlantic salmon can be used for breeding and production stock pursuant to the requirements of this permitting action. The protocol describes a standardized procedure to classify fish as either North American or non-North American stock and is largely based on the procedures used by King et al. (2001; Molecular Ecology, 10: 807-821). The permittee shall be responsible for providing genotype data to the US Fish and Wildlife Service and the National Marine Fisheries Service (the "Services") for data analysis and fish classification as described herein.

DNA isolation

Genomic DNA will be isolated from tissue, fin clip or scale samples from each fish intended for use as broodstock employing either a commercially available DNA extraction, such as PureGene (Gentra Systems) or DNeasy tissue kit (Qiagen Inc.) or a phenol/chloroform based extraction system such as used in Patton et al. (1997; Can. J. Fish. Aquat. Sci., 54: 1548-1556) or, particularly for scales, a Chelex-resin based protocol such as given in King et al. (2001). DNA should be of sufficiently consistent quality and quantity to perform PCR analyses.

Microsatellite analysis

The loci used to classify brood fish as either North American or non-North American stock will be: Ssa85, Ssa171, Ssa197, and Ssa202 (O'Reilly et al. 1996); SSOSL311 and SSOSL438 (Slettan et al. 1995, 1996) and Ssa289 (McConnel et al. 1995). Additional loci are required for marking purposes via genetic parentage determination, and will be supplemental to the loci identified above that are used for continent of origin determination. Also, additional loci may be incorporated in the future by the Services to allow for unique genotypes or for additional identification purposes.

PCR conditions for the selected loci will essentially follow that of King et al. (2001) and Patton et al. (1997) with possible minor modifications for optimization of products of individual loci. The loci will be labeled with fluorescent dyes to allow for visualization, including Ned, Hex, and 6-Fam by ABI or any other comparable commercial supplier of labeled oligonucleotides. An appropriate size standard for genotyping will be used (such as the 500ROX by ABI). Microsatellite analysis will be performed using the ABI 3100 autosequencer or any other commercial system providing equivalent results. Fragment analysis will be accomplished using a combination of GENESCAN and GENOTYPER software packages from ABI, or any other commercial system providing equivalent results. The permittee will present electronic data tables from the GENOTYPER program, or in an equivalent program that is acceptable to the Services, to the Services in spreadsheet format in Excel or any other commercially available program providing equivalent results that allow the data to be easily reformatted for subsequent analyses. The output files (gel tracings) from GENESCAN and GENOTYPER will also be provided by the permittee at the same time to help the Services assure data quality. Data provided must be complete at all loci for all fish.

Size verification of allelic products

To ensure accurate sizing of allelic products from the aquaculture fish relative to the designations developed in the King laboratory (see King et al. 2001), the Services will provide an adequate supply of DNA samples from representative fish of known genotypes to enable calibration of equipment throughout the term of the controlling permit conditions. Control samples will be used at the inception of the study to set the automated allele designation/binning parameters of the GENOTYPER software or equivalent genotyping software so that all subsequent allele designations made for aquaculture fish will be sized relative to the standards.

Genetic screening

Identification of North American stock will be based on assignment tests performed with GeneClass, www.montpellier.inra.fr/URLB/geneclass/geneclass.html. Atlantic salmon for the facility will be compared to two reference groups. The first group will be comprised of samples from North America (Dennys, Ducktrap, East Machias, Machias, Narraguagus, Penobscot mainstem, Pleasant, Sheepscot, Conne, Gold, Gander, Miramichi, Saguenay, and Stewiacke rivers and aquaculture stocks derived from St John and Penobscot populations). The second group will be comprised of non-North American samples from at least 2 rivers each from Iceland, Norway, Finland, Scotland, Ireland, and Spain and the Landcatch aquaculture stock plus a hybrid stock crossing Landcatch with St John NB aquaculture salmon.

The likelihood for assigning any given fish to each reference population will be calculated using the program GeneClass. If the ratio of the likelihood scores indicates that North American origin is at least twice as likely as non-North American origin, then that fish will be considered to be of North American origin. All other fish will be classified as non-North American stock. In addition, those fish not able to be classified as either NNA or NA due to incomplete genotypes or insufficient sample size or quality will be considered non-North American. The Services will promptly report the results to the facility

ATTACHMENT B

(Escape Prevention)

Containment Management System Requirements (Escape Prevention)

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. If determined necessary by the Department pursuant to Permit Special Condition K, the permittee shall comply with the following requirements for escape prevention.

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

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

- 1. The CMS shall be audited at least once per year and within 30 days of a reportable escape (more than 50 fish) by a party other than the facility operator or owner qualified to conduct such audits and approved by the Department [63899]. A written report of these audits shall be provided to the permittee and the Department for review and approval within 30 days of the audit being conducted. If deficiencies are identified during the audit, the report shall contain a corrective action plan, including a timetable for implementation and re-auditing to verify deficiencies are addressed as in the corrective action plan approved by the Department. Additional third party audits to verify correction of deficiencies shall be conducted in accordance with the corrective action plan or upon request of the Department. The permittee shall notify the Department upon completion of corrective actions.
- 2. Facility personnel responsible for routine operation shall be properly trained and qualified to implement the CMS. Prior to any containment system assessment associated with this permit, the permittee shall provide to the Department documentation of the employee's or contractor's demonstrated capabilities to conduct such work.
- 3. The permittee shall maintain complete records, logs, reports of internal and third party audits and documents related to the CMS on site for a period of 5 years.
- 4. For new facilities, a CMS shall be prepared and submitted to the Department for review and approval prior to fish being introduced into the facility.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: April 12, 2012 Revised: May 15, 2012

MEPDES PERMIT NUMBER: MAINE WDL NUMBER:

ME0110523

W-009088-6F-A-N

NAME AND ADDRESS OF APPLICANT:

DOWNEAST SALMON FEDERATION INC

PO Box 201 Columbia Falls, Maine 04623

COUNTY: WASHINGTON

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

EAST MACHIAS AQUATIC RESEARCH CENTER

13 Willow Street East Machias, Maine 04630

RECEIVING WATER / CLASSIFICATION: East Machias River Estuary, Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Jacob van de Sande, Facility Manager (207) 483-4336, Jacob@mainesalmonrivers.org

1. APPLICATION SUMMARY

The applicant has applied for a Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for the discharge of a monthly average of 400,000 gallons per day (0.4 million gallons per day (MGD)) of fish hatchery wastewater to the East Machias River Estuary, Class SB, from a conservation finfish hatchery and fish rearing facility in East Machias, Maine. The application was assigned MEPDES Permit #ME0110523 / WDL #W-009088-6F-A-N.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

2. PERMIT SUMMARY

- 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 #ME0110523 will be utilized as the primary reference number for the East Machias Aquatic Research Center (EMARC) facility.
- b. <u>Terms and conditions</u>: This permitting action establishes effluent limitations, monitoring requirements, and operational requirements specific to this industry and site specific water quality needs.
- c. <u>History</u>: The relevant regulatory actions include the following:

2006 – Downeast Salmon Federation began operating the EMARC facility as an Atlantic salmon fish hatchery only. No disinfectants, sanitizing or therapeutic agents were discharged to the receiving water and no feeding of fish occurred on site. Based on this, the Department determined that the EMARC discharge to the East Machias River did not constitute a discharge of pollutants to a water of the State and thus no MEPDES Permit / Maine WDL was required for the operation at the time.

February 21, 2012 – Downeast Salmon Federation EMARC submitted an application for a MEPDES Permit / WDL. The application was assigned MEPDES Permit #ME010523/ WDL #W-009088-6F-A-N.

d. Source Description/ Facility Operation:

The Downeast Salmon Federation EMARC facility is planned as a conservation finfish hatchery and rearing facility. EMARC will primarily be used to rear Atlantic salmon for restoration and as part of applied research. In the future, the facility may be used to rear other species native to the region for the same purposes. Phase I of the EMARC facility consists of four stacked egg trays for incubation and hatching, four fiberglass rearing tanks for grow-out, a 60-micron drum filter, and a concrete underground wastewater settling tank. Details on these structures and their operation are provided below.

EMARC will obtain Atlantic salmon eggs of the East Machias River strain from the Craig Brook National Fish Hatchery (CBNFH) in Orland, Maine. Eggs will be obtained at the eyed-egg stage of development, hatched, raised to fall parr (0+), and released within the East Machias River watershed in the same calendar year. The Downeast Salmon Federation will work in close cooperation with the US Fish and Wildlife Service to implement a program to assess alternate stocking and rearing strategies for restoration of the East Machias salmon population. It is hoped that the EMARC facility will impart a significant advantage in fish fitness and post-stocking

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

2. PERMIT SUMMARY (cont'd)

survival through use of East Machias River water, as this is the same river, water chemistry, and thermal regimes in which the reared fish will be stocked.

Influent Water: The EMARC facility occupies a former Bangor Hydro-Electric Company building adjacent to the East Machias River. The influent water is supplied through two, 4-inch diameter, 500-foot long HDPE intake pipes installed in the river upstream of the facility in 2007. EMARC is a flow-through facility with flows through its hatchery and rearing facilities discharged to the East Machias River Estuary (Class SB), as described below.

Hatchery Facilities: In January of each year, EMARC obtains up to 400,000 eyed East Machias strain Atlantic salmon eggs from CBNFH. EMARC's hatchery facilities will consist of up to 12 stacks of 8 of egg trays (total 96 maximum egg trays) for incubation and hatching. The flow through rate for the egg trays is 3 gallons per minute through each stack. When EMARC uses more than 6 stacks, they are installed two stacks high. Thus, the maximum water use would be 18 gpm with 6 or more stacks in operation. During incubation, dead eggs are removed every two days. The eggs will typically hatch in February to March to yolk-sac fry and are transferred to substrate incubators. Fry will emerge from substrate incubators into rearing tanks of their own volition in late April or early May and begin being fed. Flow-through and cleaning wastewaters are routed directly to the facility drum filter.

The egg trays are then cleaned and shut down until the following January.

Rearing Facilities: EMARC's Phase I rearing facilities consist of four, 79.5 inches x 79.5 inches x 22- inches (operational depth), 600-gallon fiberglass rearing tanks. Salmon fry emerge from substrate incubators to the rearing tanks in late April or May for grow-out. EMARC's Phase 2 build-out will include adding six more rearing tanks for a total of ten tanks on site. EMARC projects using a maximum of 88 pounds (40 kg) of food per day with a peak period of feeding during October. Fish are fed by hand and by automatic belt feeders. EMARC projects a maximum quantity of fish on station of 400,000 first-year fish weighing approximately 4,409 pounds at full facility build-out. Fall parr are released within the East Machias watershed in November of each year at a size of approximately 5 grams/fish.

Rearing tanks are operated in parallel, with flow-through and cleaning wastewaters discharged to an in-floor wastewater channel and routed directly to the facility drum filter. The rearing tanks will be cleaned daily with a soft-bristled push broom. The tanks have vertical screen center drains that make them self cleaning for most solids. Drain screens will be cleaned daily with a scrub brush.

e. Wastewater Treatment:

Egg incubation trays are cleaned of sediment and accumulated materials every two weeks during normal conditions and at a greater frequency at times of high river flow events that provide greater sediment loads in the intake water. Substrate incubators are not cleaned while

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

2. PERMIT SUMMARY (cont'd)

in use, but sediment scour valves are opened once / day to discharge sediment that collects in the bottom of the incubators. Rearing tanks and drain screens will be cleaned once / day during the rearing season. At the end of season for each rearing phase, all rearing vessels will be hosed down and scrubbed with brush or abrasive pads. At the end of the season, the substrate incubator box and media will be taken outside, pressure washed, and allowed to air dry.

All cleaning and flow-through wastewater will flow by gravity to a 60-micron drum filter and 5 mm screen. Solid materials captured on the drum filter screens will be removed through filter backwashing and gravity fed to two, 1,400-gallon concrete tanks installed in series for settling. Supernatant from the settling tank will be injected back into the facility wastewater stream ahead of the drum filter. After the drum filter, facility wastewater will go through the 5 mm screen, and be discharged through an 8-inch diameter PVC pipe to Outfall #001A on the East Machias River below the head of tide. Outfall #001A is a previous Bangor Hydro concrete water intake structure that outlets to the river bank between the normal high water and low water lines. During high water conditions, EMARC's discharge will flow directly into the side of the river. During low water conditions, the discharge will flow across approximately 30-feet of rocky substrate before it reaches the East Machias River Estuary.

The facility settling tank will be pumped out when accumulated solids reach 20% of its storage capacity and waste materials will be taken offsite for proper disposal. 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 467.3(A)(2) classifies the main stem of the East Machias River "From a point located 0.25 miles above the Route 1 bridge to tidewater – Class B. Further, the Legislature finds that the free-flowing habitat of this river segment provides irreplaceable social and economic benefits and that this use must be maintained". The point of discharge is located downstream of this segment, below tidewater. The East Machias River Estuary at the point of discharge is addressed in Maine law, 38 M.R.S.A., Section 469.7 which states, "All estuarine and marine waters lying within the boundaries of Washington County and that are not otherwise classified are Class SB waters". Maine law, 38 M.R.S.A., Section 465-B(2), describes the standards for Class SB 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 Machias — East Machias Rivers (Waterbody ID 709-1, DMR Area 55), listed in Category 2, Estuarine and Marine Waters Attaining Some Designated Uses — Insufficient Information for Other Uses. The listing identifies a 729-acre (1.14 sq.mi.) segment of Class SB water with the reason for DMR closure indicated as OBDs (and STP). Maine DMR Chapter 95.09(E) Area No. 55, Section A states, "Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats, and waters of the Machias and East Machias Rivers (Machias, East Machias, Machiasport): north and west of a line beginning at the high tide line on the southwest tip of Randall Point (Machiasport), and extending northwest across the river to the Machiasport Town Landing ramp (adjacent to the Machiasport Historical Society). This area includes all of the upper Machias and East Machias Rivers."

All estuarine and marine waters in Maine capable of supporting American lobster are listed as only partially supporting fishing ("shellfish" consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley. (Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants)

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.

- a. <u>Flow</u>: This permitting action establishes a monthly average discharge limit of 400,000 gallons per day (0.4 MGD), representative of the design criteria of the facility, and a required daily minimum measurement frequency, consistent with Department guidelines for wastewater treatment facility discharges.
- b. Dilution Factors: Dilution factors associated with wastewater discharges are derived in accordance with protocols established in Department Rule 06-096 CMR 530, Surface Water Toxics Control Program, October 2005. 06-096 CMR 530.4.B indicates, "For estuaries where tidal flow is not dominant and fresh waters, stream design flows used in the analyses of dilution factors from dilution models must be consistent with the exposure of the population at risk to any and all toxic pollutants." MEDEP DEA has determined that the receiving water at the EMARC facility outfall location is predominated by freshwater flows from the East Machias River. For such conditions, in addition to the protocols referenced above, the Department also utilizes 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 EMARC facility will discharge its treated effluent via a discharge pipe into the side of the East Machias River estuary at the mean high water level. During low water conditions, the discharge will flow across approximately 30 feet of rocky substrate prior to contact with the East Machias River. 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. Based on the location and configuration of the facility outfall pipe as well as the physical properties of the East Machias River estuary, the Department has determined the dilution factors for the discharge of a monthly average of 0.4 MGD from the EMARC facility to be calculated as follows:

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

Mod. Acute: $\frac{1}{4} 1Q10 = 4.35 \text{ cfs}$ $\Rightarrow \underbrace{(4.35 \text{ cfs})(0.6464) + 0.4 \text{ MGD}}_{0.4 \text{ MGD}} = 8.0:1$ Acute: 1Q10 = 17.4 cfs $\Rightarrow \underbrace{(17.4 \text{ cfs})(0.6464) + 0.4 \text{ MGD}}_{0.4 \text{ MGD}} = 29.1:1$ Chronic: 7Q10 = 19.5 cfs $\Rightarrow \underbrace{(19.5 \text{ cfs})(0.6464) + 0.4 \text{ MGD}}_{0.4 \text{ MGD}} = 32.5:1$ Harmonic Mean = 58.5 cfs $\Rightarrow \underbrace{(58.5 \text{ cfs})(0.6464) + 0.4 \text{ MGD}}_{0.4 \text{ MGD}} = 95.5:1$

06-096 CMR 530.4.B(1) states that analyses using numeric acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. As stated above, EMARC's discharge does not achieve rapid and complete mixing, thus the Department is utilizing the default stream flows of ¼ of the 1Q10 pursuant to 06-096 CMR 530 in acute evaluations. If the location or positioning of EMARC's discharge changes in the future, such as extension to below the low water level, this determination may be revisited.

c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): This permitting action establishes monthly average and daily maximum concentration limits of 6 mg/L and 10 mg/L respectively for BOD₅ and TSS based on Department BPJ of Best Practicable Treatment (BPT) for flow-through fish hatcheries and rearing facilities. These limits are 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 BOD₅, and consideration of effluent quality from facilities utilizing the Department's BPJ of minimum treatment technology. Mass limits are established based on the monthly average flow limit, the appropriate concentration limit, and a standard conversion factor of 8.34 lbs/gallon, as shown below:

 $0.4 \ MGD \ x \ 6 \ mg/L$ monthly average x $8.34 \ lbs/gal = 20 \ lbs/day$ monthly average limit $0.4 \ MGD \ x \ 10 \ mg/L$ daily maximum x $8.34 \ lbs/gal = 33 \ lbs/day$ daily maximum limit

This permitting action establishes a minimum monitoring frequency requirement of once per month for effluent BOD₅ and TSS based on Department best professional judgement (BPJ) of monitoring frequencies necessary to characterize facility effluent conditions.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

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

d. Total Nitrogen (TN): Nitrogen and phosphorus are nutrients that encourage excessive growth of phytoplankton and macroalgae, impacting water quality and aquatic resources. Typically, nitrogen is the controlling nutrient in marine environments, phosphorus is the controlling nutrient in freshwater environments, and either or both can affect estuarine environments depending upon the characteristics of the resource involved. The primary symptoms of nutrient over-enrichment include an increase in the rate of organic matter supply, changes in algal dominance, and loss of water clarity and are followed by one or more secondary symptoms such as loss of submerged aquatic vegetation, nuisance/toxic algal blooms and low dissolved oxygen (EPA, 2001). In U.S. coastal waters, nutrient over-enrichment is a common thread that is thought to tie together a diverse suite of coastal problems such as red tides, fish kills, some marine mammal deaths, outbreaks of shellfish poisonings, loss of seagrass and bottom shellfish habitats, coral reef destruction, and hypoxia and anoxia now experienced as the Gulf of Mexico's "dead zone" (EPA, 2001).

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 can result in reductions in aquatic macro-invertebrate species diversity, an indicator of the overall health of a receiving water. Excess nutrients 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 nutrient content in a receiving water has the potential to cause or contribute to non-attainment of classification standards. Pursuant to Maine law (38 MRSA § 414-A.1), the Department shall only authorize discharges to Maine 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 Department is currently involved in developing statewide ambient water quality criteria (AWQC) for nitrogen, as there are none in place at this time. In this permitting action, the Department is establishing monthly monitoring and reporting requirements for monthly average and daily maximum total nitrogen mass and concentration. The monitoring requirements will be in place from May 1 through November 30, based on the Department's BPJ of likely seasonal concerns of nitrogen discharges in the receiving water as well as operational considerations at EMARC. Currently there is no approved laboratory method for TN. However, TN can be measured through the combination of its constituents: total Kjeldahl nitrogen (TKN; made up of ammonia (NH₃) and organic nitrogen), nitrite (NO₂), and nitrate (NO₃) nitrogen. The permittee shall measure TN by summing its constituents and shall provide the constituent data in a supplemental report with the monthly DMR. It is noted that the Department is currently undergoing rulemaking to establish new nutrient criteria. The adoption of Department Rule 06-096 CMR 583, Use Attainment Evaluation Using Nutrient Criteria for Surface Waters, may, or may not, effect future limits for nitrogen.

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

- e. <u>Fish on Hand</u>: This permitting establishes a reporting requirement for monthly average and daily maximum mass of fish on hand at a minimum frequency of once per month. 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.
- f. pH: This permitting action establishes a daily maximum pH range limit of 6.0 8.5 standard units (su), considered by the Department as a best practicable treatment standard for fish hatcheries and rearing facilities. Based on Department BPJ, as a portion of the influent water consists of water extracted from the receiving water, this permitting action further specifies "Exceedences of the pH range limitation shall be considered permit violations unless due to natural causes. At no time that the pH falls outside of the 6.0-8.5 range shall the effluent pH exceed 0.5 standard units outside of the pH levels in the East Machias River estuary at the point of discharge. If effluent pH falls outside of 6.0-8.5 s.u., the permittee shall provide corresponding ambient pH values with the appropriate monthly DMR." This permitting action establishes a minimum pH monitoring frequency requirement of once/month to provide for characterization of facility effluent conditions.

7. SETTLING BASIN CLEANING:

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

This permitting action establishes 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.

8. DISEASES, PATHOGENS, AND THERAPEUTIC AGENTS:

This permitting action establishes 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

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

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

culture and movement of live salmonids and gametes." Further, both agencies' rules define Diseases of Regulatory Concern as "... infectious agents that have been demonstrated to cause a significant increase in the risk of mortality among salmonid populations in the State of Maine. Diseases of Regulatory Concern are classified by the Commissioner into three (3) disease categories: exotic, endemic (limited distribution) and endemic based on an annual review and analysis of epidemiological data."

In the June 30, 2004, USEPA <u>Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category</u> (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 US Food and Drug Administration (USFDA) pursuant to the 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 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.

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

The permittee shall notify the Department in writing within 24-hours following such use, with information on the conditions necessitating off-label or extra-label drug use, necessary control measures, and the veterinarian involved.

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

EMARC indicates that the following therapeutic agents may be used at the East Machias facility. These agents must be used pursuant to the requirements specified herein.

Sodium Chloride treated with Yellow Prussiate of Soda (YPS). EMARC may use sodium chloride (NaCl, salt) as a treatment for bacterial gill disease. Salt is also used to assist fish in times of high stress. It induces additional slime production to aid in combat against fungal infections or naturally occurring external parasites. EMARC indicates that it may use up to 2 liters per tank up to four times per day if/when it is needed for the above uses.

The average concentration of NaCl in seawater is estimated at 35 parts per thousand (ppt) or 35,000 ppm. The Department's Division of Environmental Assessment (MEDEP DEA) reports that sampling results in Maine marine waters indicate salinity levels of approximately 30 ppt or 30,000 ppm. The DEA further reports that instream NaCl levels of between 1 and 5 ppt (1,000 and 5,000 ppm) can potentially result in harm to freshwater aquatic life. Effluent salt levels at EMARC would be subject to further dilution upon entering the receiving water. Based on analysis of typical salt use at similar facilities, 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 de minimis discharge. The Department is not establishing specific limitations or monitoring requirements for NaCl in this permitting action. Instead, use of NaCl shall be consistent with the use and record keeping requirements for therapeutic agents specified above.

The Department requires EMARC 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.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

9. DISINFECTING/SANITIZING AGENTS:

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

Argentyne for disinfection of fish eggs, hatchery equipment pre and post rearing, and stocking equipment pre and post stocking. Active ingredients polymeric-iodine complex (10%), inert ingredients (90%), planned use at 100-300 ppm. The portion of iodine use that will result in discharge to the receiving water will be subject to further dilution upon entering the receiving water. Based on analysis of typical iodine use at similar facilities, the Department has determined that iodine discharges are likely to be de minimus. At this time, there are no ambient water quality criteria for iodine. Therefore, this permitting action is not establishing effluent limitations or monitoring requirements for iodine.

This permitting action establishes 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 de minimis 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.

10. 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 this permitting action, based on the information provided and Department BPJ, the Department requires that the permittee shall provide minimum treatment technology for the EMARC facility that shall consist of treatment equal to or better than 60-micron microscreen filtration of the effluent, wastewater settling/clarification, removal of solids. EMARC 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.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

11. SALMON GENETIC INTEGRITY AND HATCHERY ESCAPE PREVENTION:

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

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

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

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.

The EMARC facility will obtain Atlantic salmon eggs of the East Machias River strain from the Craig Brook National Fish Hatchery (CBNFH) in Orland, Maine for hatching, rearing, and release within the East Machias River watershed. CBNFH operates a river strain-specific program, insuring the genetic integrity of eggs provided to EMARC. Based on its operations, mission, and USFWS' input, CBNFH is not subject to requirements for genetic testing or a containment management system. The Downeast Salmon Federation will work in close cooperation with the USFWS to implement a program to assess alternate stocking and rearing strategies for restoration of the East Machias salmon population. As EMARC will be hatching, rearing, and releasing East Machias River strain salmon to the East Machias River watershed, this permitting action does not require genetic testing or a containment management system for the EMARC facility.

Prior to raising any other strains or species at the East Machias facility, EMARC must adhere to Department standards for genetic testing (Permit Attachment A) and/or escape prevention (Permit Attachment B), or provide clear and compelling documentation from USFWS and NMFS that such requirements are not necessary.

12. DISCHARGE IMPACT ON RECEIVING WATER QUALITY:

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

13. PUBLIC COMMENTS:

Public notice of this application was made in the Downeast Coastal Press newspaper on or about February 13, 2012. 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.

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

14. 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

15. RESPONSE TO COMMENTS:

During the period of April 12, 2012 through May 11, 2012, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License to be issued to the East Machias Aquatic Research Center for the proposed discharge. On May 9, 2012, the Department received comments from the National Marine Fisheries Service (NMFS). A summary of NMFS' comments and the Department's responses are provided below.

Comment 1, Permit Special Condition A, <u>Effluent Limitations and Monitoring Requirements</u>, BOD₅ and TSS: NMFS comments, "The daily and monthly discharge limitations on BOD₅ and TSS are clearly specified in the table. What's the average monthly removal percentage for each of the constituents? The 30-day average percent removal of BOD₅ and TSS should also be included in the table."

Response 1: As noted in Fact Sheet Section 6.c., Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS), the effluent limitations for these parameters are established based on Department best professional judgement (BPJ) of best practicable treatment (BPT) for flow-through fish hatcheries and rearing facilities. The limits are based on USEPA recommendations and the Department's experience with regulating and monitoring effluent from state, federal, and commercial fish hatchery and rearing facilities throughout Maine. BOD₅ and TSS percent removal has not been determined to be a necessary parameter for this industry to date and thus has not been included in the BPT standards. BPT-based limits can certainly be supplemented if warranted by site-specific water quality-based concerns, but the Department is not aware that this is the case at the EMARC site. Therefore, the Department is maintaining the BPT standards described, but notes that if NMFS would like to determine BOD₅ and TSS percent removal separate from this permitting action, it could conduct or request EMARC to conduct influent sampling at the same time as the effluent sampling and determine these values.

15. RESPONSE TO COMMENTS (cont'd)

Comment 2, Permit Special Condition A, <u>Effluent Limitations and Monitoring Requirements</u>, Footnote 3, <u>pH</u>: NMFS comments, "As pH is a primary factor in the health of aquatic environments, we believe that a single monthly sample is an inadequate representation of the effects of the EMARC effluent."

Response 2: The Department agrees that pH is an important factor for aquatic habitats and aquatic life. The minimum monitoring frequency of once per month is based on Department BPJ of the frequency necessary to characterize the facility's effluent conditions, based on its maximum effluent discharge of 0.4 MGD. The Department has reviewed numerous years of effluent pH monitoring data for permitted fish hatcheries and rearing facilities in Maine and has found consistent effluent quality with very little variability in pH. These findings have led the Department to begin removing pH effluent limitations and monitoring requirements from permits in this industry. However, as the EMARC facility is new and does not have historical effluent data, the Department decided to establish pH limits and monitoring requirements according to its established BPT standards. The monitoring is intended to provide information on this facility's effluent trends and the minimum monitoring frequency has been determined to be sufficient to provide this information given the consistency typically exhibited.

Comment 3, Permit Special Condition F., <u>Operation & Maintenance (O&M) Plan</u>: NMFS comments, "Without reviewing the proposed O&M Plan, we cannot assess its efficacy. Some of the most pressing issues regarding fish hatcheries are the discharge of drugs, pesticides, excess feed, and feces."

Response 3: As noted in Permit Special Condition F, the O&M Plan is intended to "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." O&M Plans are required for all permitted facilities to ensure operational, effluent, and ambient consistency and quality through all conditions and is a tool for use by the facility and Department compliance staff. The O&M Plan requirements in EMARC's permit were modified specifically to the fish hatchery and rearing facility industry. The Department notes that NMFS and other review agencies are not typically asked to review O&M Plans. The Department is aware of the pressing issues noted in NMFS comments, agrees that they are significant, and addresses these issues through specific effluent limitations, operational and monitoring requirements, and through permit compliance monitoring.

Comment 4, Permit Special Condition G., <u>Settling Basin Cleaning</u>: NMFS comments, "As the accumulated solid material is removed, its toxicity and final disposition are not addressed. A toxicity test of removed material should be conducted so as to determine how/where the material should be disposed."

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

15. RESPONSE TO COMMENTS (cont'd)

Response 4: The Department notes that disposal of materials is governed by solid waste disposal rules and not by the rules and laws addressed by this permitting action.

Comment 5, Permit Special Condition H., <u>Diseases, Pathogens, and Therapeutic Agents</u>: NMFS comments, "As 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), and the preliminary draft permit suggests that routine offlabel or extra-label drug use is prohibited <u>except</u> in emergency situations when approved under the authority of a Maine licensed veterinarian, we suggest that any off-label or extralabel drug dosage is prohibited until the Department is duly advised."

Response 5: The Department revised previous industry permitting requirements related to diseases, pathogens, and therapeutic agents with the assistance of a state veterinarian and fish health pathologist and has established the revised requirements consistently through the industry upon facility permit renewal. The Department made the BPJ determination that it did not wish to interfere with or delay the necessary actions by a licensed veterinarian under emergency conditions. The Department was not confident that it could consistently provide a thorough and qualified review in the timeframe necessary for emergency veterinary action. Instead, the Department required notification within 24-hours following said action and submittal of information specific to the action, as noted in the referenced section. "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 Department considers this to be the appropriate action for the scenario described.

Comment 6, Permit Special Condition I, <u>Disinfecting/Sanitizing Agents</u>: NMFS comments, "The disposal of disinfecting/sanitizing agents into designated critical habitat of Atlantic salmon is of great concern to us. The preliminary draft permit states that the discharged iodine will be subject to further dilution upon entering the receiving water. During periods of low water, the iodine could be discharged into the intertidal and result in deleterious effects to benthic organisms. Iodine and similar disinfecting/sanitizing agents should undergo significant dilution prior to its discharge."

Response 6: EMARC has applied for the discharge of only one disinfecting/sanitizing agent. The Department notes that there are no ambient water quality criteria for iodine. Only a portion of the iodine planned for use at the facility will be used in a manner that results in discharge to the receiving water. That iodine is diluted for use and further diluted in the total facility waste-stream of up to 0.4 million gallons per day or 278 gallons per minute. If discharge occurs when the effluent pipe is submerged, it is further diluted in the full flow of the East Machias River Estuary. The minimum acute critical flow of the river is calculated to be 4.35 cubic feet per second or 1,952 gallons per minute. If the effluent pipe is not submerged at the time of discharge, the full facility wastewater flow including the

EAST MACHIAS ARC #ME0110523 #W-009088-6F-A-N

15. RESPONSE TO COMMENTS (cont'd)

diluted iodine would traverse approximately 30-feet of rocky intertidal area before reaching the river. The Department reviewed these scenarios and determined "that iodine discharges are likely to be deminimus". As for other potential agents, Permit Special Condition I states, "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."

Comment 7, Permit Special Condition J, <u>Minimum Treatment Technology Requirement</u>: NMFS comments, "The reference to the potential for 'additional treatment' is vague. Should minimum treatment technology not be adequate, remedial actions should be included in the permit."

Response 7: As noted in Permit Special Condition J, the Department requires that each permittee in this industry "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". Effluent limitations are established based on the more stringent of industry BPT-based standards or site specific water quality-based standards. The Department established the minimum treatment requirement in this way to ensure that each permittee would be able to address its specific conditions and needs without being hampered by the imposition of a Department mandated technology that may be outdated or inappropriate for the situation. The final sentence in the referenced section is, "Additional treatment may be necessary to achieve specific water quality based limitations." EMARC is currently not operating or discharging as proposed and this sentence does not refer to a specific condition that must be remedied.

The intent is to remind the permittee of the higher burden that, regardless of compliance with effluent limits, monitoring or other requirements in the permit, Maine Law (38 M.R.S.A., §414-A.1) states, "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". Since there is no condition at this time that needs to be corrected, we are not in a position to prescribe a solution. If such a condition occurs in the future, it will be dealt with accordingly.

Comment 8, Fact Sheet Section 2.e., <u>Wastewater Treatment</u>: NMFS comments, "Effluent discharged onto a rocky intertidal area at low tides does not constitute in-stream mixing."

Response 8: The Department agrees with NMFS' comment and has stated the same in the Permit and Fact Sheet. For example, in Fact Sheet Section 6.b., <u>Dilution Factors</u>, it states, "The EMARC facility will discharge its treated effluent via a discharge pipe into the side of the East Machias River estuary at the mean high water level. During low water conditions, the discharge will flow across approximately 30 feet of rocky substrate prior to contact with

15. RESPONSE TO COMMENTS (cont'd)

the East Machias River. Typically, these types of discharges do not achieve rapid and complete mixing with the receiving water... " "As stated above, EMARC's discharge does not achieve rapid and complete mixing, thus the Department is utilizing the default stream flows of ¼ of the 1Q10 pursuant to 06-096 CMR 530 in acute evaluations. If the location or positioning of EMARC's discharge changes in the future, such as extension to below the low water level, this determination may be revisited." This issue is addressed further in the next comment and response.

Comment 9, Fact Sheet Section 6.b., <u>Dilution Factors</u>: NMFS comments, "As written in CMR 06-096, Chapter 530(4)(A)-

'With a non-continuous discharge (such as a lagoon which can be impounded or a continuous discharge prohibited from discharging under specified conditions), the dilution factors can be based on a guaranteed minimum stream flow or tidal stage below which a discharge will not occur. The discharger must submit a request for a license modification that reflects a different minimum stream flow. If the Department approves an alternate stream flow, the license must include a monitoring and reporting requirement, and must include an accurate means of measuring stream flow that is calibrated annually.'

The calculation of dilution factors assumes a guaranteed minimum stream flow. The effluent, as proposed, would be discharged into the intertidal zone during periods of low water where there was no receiving water within 30 feet. Therefore, as required by CMR, the applicant 'must submit a request for a license modification that reflects a different minimum stream flow'. The Draft Permit should address the license modification and develop calculations to accurately reflect the mixing.

As written in CMR 06-096, Chapter 530(4)(B)(1)

'Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. 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 flow, up to and including all of it, as long as the required zone of passage is maintained. Flows that allow bioaccumulation of compounds to levels that are toxic, carcinogenic, mutagenic or teratogenic are not to be used in setting effluent limits.'

The mixing calculations are based on the assumption that the effluent is actually discharged into a body of flowing/receiving water. The default calculation of mixing factors (1/4 1Q10) is not guaranteed minimum stream flow, e.g., low tide. Just as CMR 06-096, Chapter 530(4)(B)(1) acknowledges highly effective mixing and allows for adjustments to the proportional use of a stream, I would submit that the regulation also acknowledges the opposite end of the spectrum and that the permit should reflect reduced ($< \frac{1}{4} 1Q10$) receiving water."

15. RESPONSE TO COMMENTS (cont'd)

Response 9: A non-continuous discharge refers to the situation in which a discharger holds its wastewater in lagoons, basins, tanks, etc. and only discharges effluent at certain times of the year, tidal phases, minimum receiving water flow levels, etc. It typically refers to situations in which the activity that generates the wastewater is intermittent in nature and/or the storage capacity at the facility is greater than the volume of wastewater generated. It does not apply to a flow-through fish hatchery and rearing facility with a continuous discharge of up to 400,000 gallons per day, such as EMARC.

EMARC's proposal was reviewed by the Department's project manager, engineer, and marine biologist. The Department agrees that the discharge, either to the side of the river or to the intertidal area above mean low water, does not constitute rapid and complete mixing. In this case, the appropriate dilution for acute evaluations pursuant to 06-096 CMR 530..4.B(1) is ¼ 1Q10, ensuring "a zone of passage of at least 3/4 of the cross-sectional area.." It also should be noted, that none of the pollutants for which effluent limitations are established in this permitting action are established based upon acute toxicity. Therefore, though the absence of complete and rapid mixing of EMARC's effluent is important to acknowledge, it has no bearing on establishing BPT-based limits.

The Department reviewed the location of the discharge pipe above mean low water, river and estuary flow characteristics, and the characterization of the substrate. The Department determined that it entails less environmental impact to the East Machias River and estuary to allow the discharge across approximately 30-feet of rocky substrate during times of low tide than to excavate the river/estuary substrate, extend the discharge pipe below grade, and install a diffuser structure at the center of the river channel at this location.

Comment 10, Fact Sheet Section 6.c, <u>Biochemical Oxygen Demand (BOD₅)</u> and <u>Total Suspended Solids (TSS)</u>: NMFS comments, "Considering the East Machias River is designated critical habitat for the Gulf of Maine Distinct Population of Atlantic salmon, and a migratory route for naturally spawning fish, we believe that a more rigorous schedule for sampling should be instituted so as to more closely monitor a federally protected waterway."

Response 10: Information on the derivation of effluent limits for BOD₅ and TSS is provided in Fact Sheet Section 6.c and summarized in the Response to Comment #1. As noted in Fact Sheet Section 6.c, the minimum monitoring frequency of once per month is based on Department BPJ of the frequency necessary to characterize the facility's effluent conditions, based on its maximum effluent discharge of 0.4 MGD. Though the East Machias River and estuary provide unique habitat and concerns for Atlantic salmon, the EMARC facility's maximum discharge of 0.4 MGD is among the lowest of the state, federal, and commercial facilities permitted to discharge to waters of the State of Maine. The Department has reviewed numerous years of effluent monitoring data for fish hatcheries and rearing facilities in Maine and has found consistent effluent BOD₅ and TSS quality with very little variability.

15. RESPONSE TO COMMENTS (cont'd)

The Department believes this consistency is due to the limits on pollutants discharged, facility operations and maintenance, minimum treatment requirements, etc. established in the permits. The monitoring is intended to provide information on this facility's effluent trends and the minimum monitoring frequency has been determined to be sufficient to provide this information given the consistency typically exhibited. These requirements are consistently applied to similarly sized facilities in Maine. If events occur in the future that cause the Department to view this situation otherwise, effluent limitations, monitoring and operational requirements may be reassessed and addressed through Permit Special Condition L, Reopening of Permit for Modifications.

Comment 11, Fact Sheet Section 6.d, <u>Total Nitrogen</u>: NMFS comments, "While the process of eutrophication is well explained, no actual nitrogen discharge guidance or limitation is introduced. Standards for nitrogen based constituents in effluent should be established."

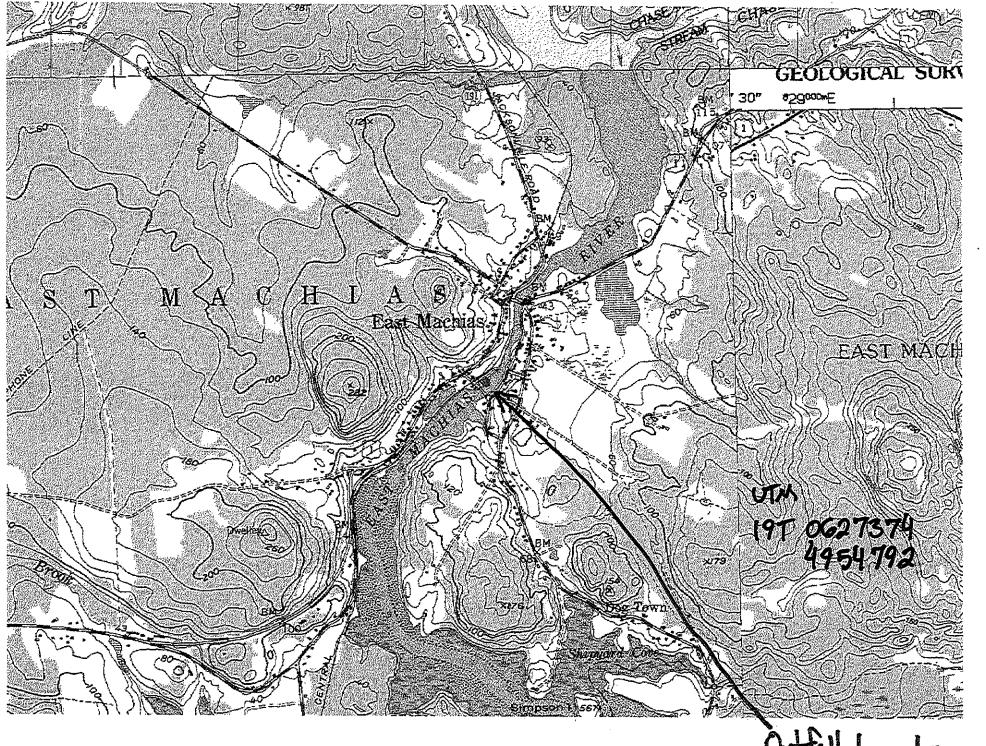
Response 11: The Department notes that Fact Sheet Section 6.d states, "The Department is currently involved in developing statewide ambient water quality criteria (AWQC) for nitrogen, as there are none in place at this time. In this permitting action, the Department is establishing monthly monitoring and reporting requirements for monthly average and daily maximum total nitrogen mass and concentration. ... It is noted that the Department is currently undergoing rulemaking to establish new nutrient criteria. The adoption of Department Rule 06-096 CMR 583, Use Attainment Evaluation Using Nutrient Criteria for Surface Waters, may, or may not, effect future limits for nitrogen." The Department has neither data identifying a water quality problem and recommending effluent nitrogen limits that will address it, nor ambient water quality criteria on which to basis a nitrogen limit.

Comment 12, Fact Sheet Section 12, <u>Discharge Impact on Receiving Water Quality</u>: NMFS comments, "Without a viable O&M Plan, the permit is incomplete. With the facility's outfall exposed at low tide the effluent could be discharged into the intertidal zone whereby negatively affecting designated critical habitat (benthos) and the lack of clearly defined limits on nitrogen and sanitizing agents, we are reluctant to endorse your claim that this permitted action will not cause or contribute to the reduction in water quality adjacent to the EMARC facility."

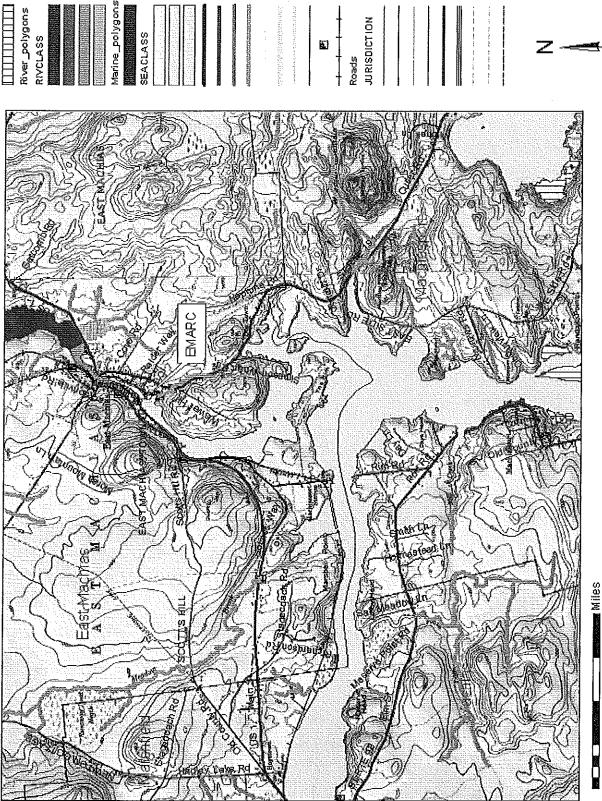
Response 12: The Department has addressed the individual concerns in previous responses and in the Permit Fact Sheet. The Department stands by the statement in Fact Sheet Section 12, "As permitted, based on the information available to date and best professional judgement, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the East Machias River Estuary to meet standards for Class SB classification." The permittee is expected to comply with the limitations and requirements of the permit and to ensure that the provisions of this statement are met. The Department's compliance, technical assistance, and enforcement staff are also available to assist.

ATTACHMENT A

(Facility Location Maps)



Outful Location



Town Road -Simmer

Town Road

State-aided Highway Town Road - Wilter

State Highway

Private Road

YEM LEI HILOT

Seasonal Parkway Resemation Road

Wastewate LO I talk

Roads_E911

«allothe rualnes»

Et grass_Beds

Legend





Map created by: Bob Stratton

Division of Water Quality Management Maine Department of Environmental Protection

East Machias Aquatic Research Center

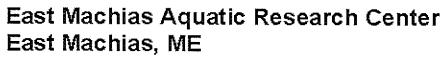
East Machias, ME

0.9

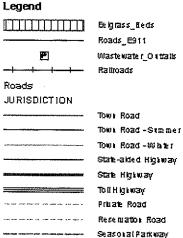
9.0

0 0.15 0.3





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

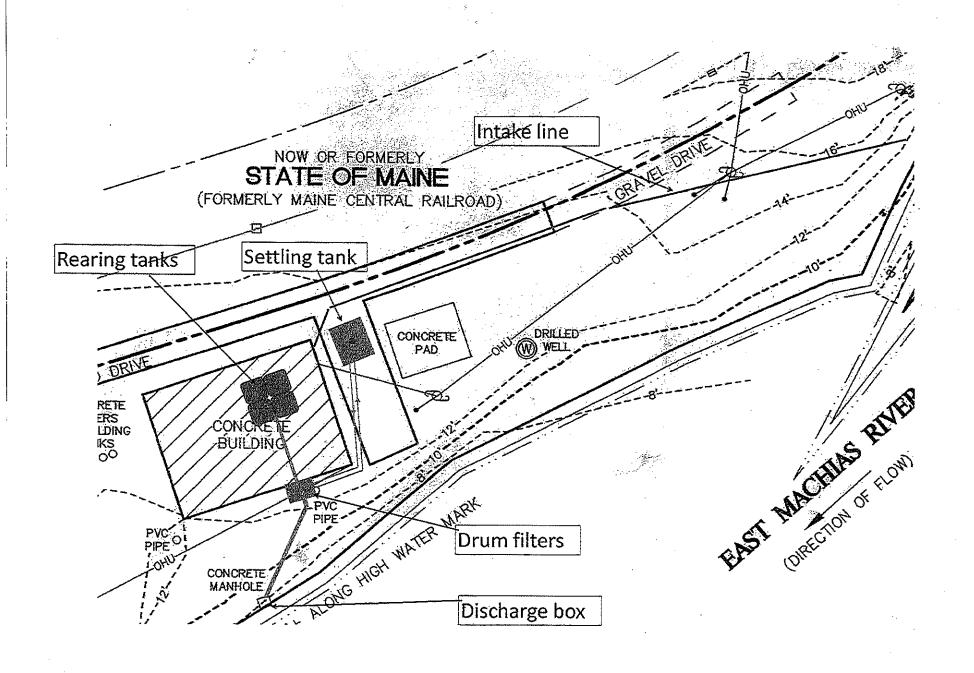




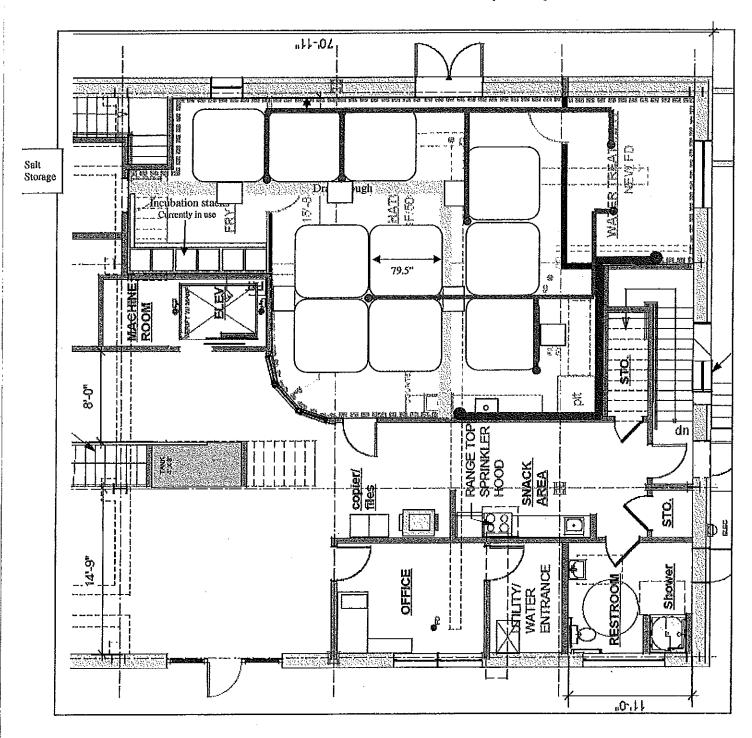


ATTACHMENT B

(Facility Site Plans)



EMARC Phase 2 Hatchery Layout



ATTACHMENT C

(MEDMR Closure Information)

NOTICE OF EMERGENCY RULE-MAKING

AGENCY: Department of Marine Resources STATUTORY AUTHORITY: 12 M.R.S. §§6172, 6192, 6193 & 6194 Struck text is being removed, and underlined text is being added

BASIS STATEMENT

The Commissioner of the Maine Department of Marine Resources amends the emergency DMR Chapter 95.09(E) Area No. 55, Machias and East Machias Rivers, Machias Bay and vicinity (Machias, East Machias, Machiasport), previously amended on December 28, 2011. This amendment opens the Randall Point Flats and Sanborn Cove Conditionally Approved areas and the Sanborn Cove Conditionally Restricted areas due to shellfish meats and water quality meeting approved standards. All existing pollution and red tide/PSP closures remain in effect. As authorized by 12 M.R.S. §§6172, 6192, 6193 & 6194 the Commissioner of Marine Resources adopts emergency amendments to Chapter 95.09(E).

RULE TITLE AND SUBJECT: DMR Chapter 95.09(E) Area No. 55, Machias and East Machias Rivers, Machias Bay and vicinity (Machias, East Machias, Machiasport), previously amended on December 28, 2011, is amended as follows:

TITLE & TEXT OF RULE: DMR Chapter 95.09(E) Area No. 55, Machias and East Machias Rivers, Machias Bay and vicinity (Machias, East Machias, Machiasport).

- A. Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats, and waters of the Machias and East Machias Rivers (Machias, East Machias, Machiasport): north and west of a line beginning at the high tide line on the southwest tip of Randall Point (Machiasport), and extending northwest across the river to the Machiasport Town Landing ramp (adjacent to the Machiasport Historical Society). This area includes all of the upper Machias and East Machias Rivers.
- B. Effective immediately, because of non-point source pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats, and waters of Larrabee Cove (Machiasport): west of a line beginning at the east tip of 'L' Point and then running 1925 feet southeast, across the mouth of the cove, to a red-painted marker on the northern tip of an un-named point on the northern side of Low Cove, Indian Point. This area is classified as "Restricted," and harvesting requires a special MDMR permit.
- C. Effective immediately, because of proximity to a WWTP, the shores, flats, and waters of the following area are classified as "Conditionally Approved," and shall be closed to all harvest of clams, quahogs, oysters or mussels following a malfunction/CSO event of the Machias Wastewater Treatment Plant: Sanborn Cove (Machiasport), south of a line beginning at the high tide line on the southwest tip of Randall Point (Machiasport), and extending northwest across the river to the Machiasport Town Landing ramp (adjacent to the Machiasport Historical Society); AND west of a line beginning at the high tide line on the southwest tip of Randall Point, then running in a southwesterly direction to USCG navigation buoy N"6", then running southeast to USCG navigation buoy N"4", then continuing southeast to the eastern tip of Birch Point; AND north of a line beginning at the northwestern most point of land on Birch Point, then running in a westerly direction to the north tip of an un-named point of land 820 yards to the west; AND east of a line beginning at the northern tip of Evergreen Point, then running north to a red-painted post adjacent to a large boulder on the north shore of the cove. This area is currently OPEN-CLOSED.

- D. Effective immediately, because of proximity to a WWTP, the shores, flats, and waters of the following area are classified as "Conditionally Approved," and shall be closed to all harvest of clams, quahogs, oysters or mussels following a malfunction/CSO event of the Machias Wastewater Treatment Plant: Randall Point Flats (Machiasport), south and east of a line beginning at the high tide line on the southwest tip of Randall Point, then running in a southwesterly direction to USCG navigation buoy N"6", then running southeast to USCG navigation buoy N"4", then continuing southeast to the eastern tip of Birch Point; AND northwest of a line starting at the eastern tip of Birch Point, then running northeast to a red-painted post, located on the most southern tip of an unnamed point of land approximately 600 yards west of the eastern tip of Holmes Point (at Cottage Cove). This area is currently OPEN_CLOSED.
- E. Effective immediately, because of non-point source pollution, and proximity to a WWTP, the following area is classified as "Conditionally Restricted," and shall be closed to all harvest of clams, quahogs, oysters or mussels following a malfunction/CSO event of the Machias Wastewater Treatment Plant: the shores, flats, and waters of Sanborn Cove (Machiasport), west of a line beginning at the northern tip of Evergreen Point, then running north to a red-painted post adjacent to a large boulder on the north shore of the cove. When in the open status, harvesting in this area requires a special MDMR permit. This area is currently OPEN_-CLOSED.
- F. Effective immediately, because of non-point source pollution, and proximity to a WWTP, the following area is classified as "Conditionally Restricted," and shall be closed to all harvest of clams, quahogs, oysters or mussels following a malfunction/CSO event of the Machias Wastewater Treatment Plant: the shores, flats, and waters of Sanborn Cove (Machiasport), south of a line beginning at the northwestern most point of land on Birch Point, then running in a westerly direction to the north tip of an un-named point of land 820 yards to the west. When in the open status, harvesting in this area requires a special MDMR permit. This area is currently **OPEN CLOSED**.

EFFECTIVE DATE: January 13, 2012 EFFECTIVE TIME: 10:57 AM

AGENCY CONTACT PERSON: Kohl Kanwit, Department of Marine Resources, 194 McKown Point Road, W. Boothbay Harbor, Maine 04575 http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm

EMAIL: Kohl.Kanwit@maine.gov

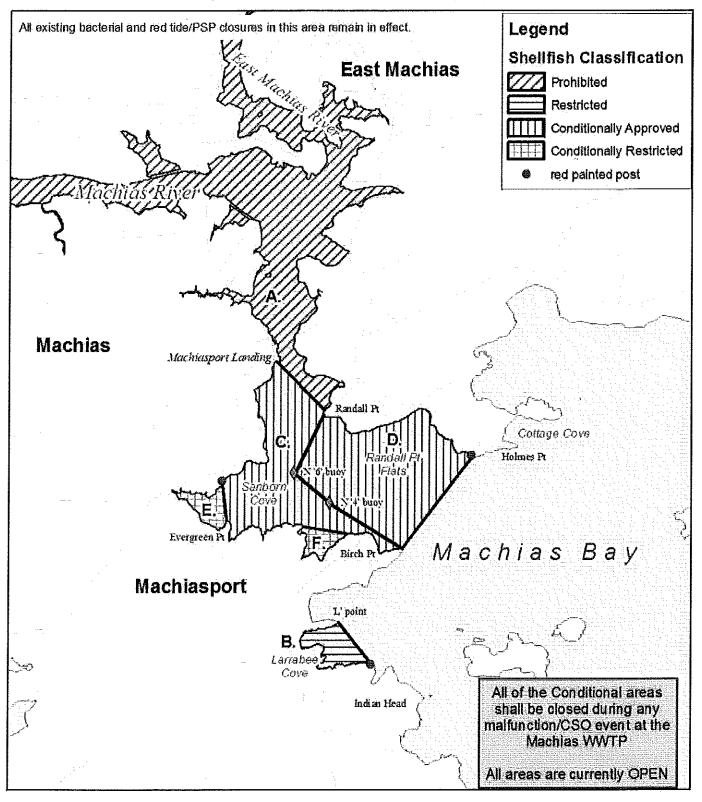


Maine Department of Marine Resources

Pollution Area No. 55



Machias and East Machias Rivers, Machias Bay and vicinity (Machias, East Machias, Machiasport)



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

SECTION		TOPIC	PAGE
Α		GENERAL PROVISIONS	
	1	General compliance	2
	2	Other materials	2
	3	Duty to Comply	2
٠	4	Duty to provide information	2
	5	Permit actions	2
	6	Reopener clause	2
	7	Oil and hazardous substances	2 2 2 2 3
	8	Property rights	
	9	Confidentiality	3
	10	Duty to reapply	3
	11	Other laws	3
	12	Inspection and entry	3
В		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
С		MONITORING AND RECORDS	
	1	General requirements	6
	2	Representative sampling	6
	3	Monitoring and records	6
D		REPORTING REQUIREMENTS	_
	l	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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.
- 8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- 9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."
- 10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- 11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.
- 12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENACE OF FACILITIES

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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 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.

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

(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.

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- 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.

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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:

OCF/90-1/r95/r98/r99/r00/r04/r12

- 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

- 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.