STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

June 17, 2015

Mr. Sonny Pierce
Pierce Associates Inc., President
P.O. Box 258
Hollis, ME. 04093
e-mail: shybeavertrouthatchery@gmail.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0036838
Maine Waste Discharge License (WDL) Application #W008127-6E-C-R
Shy Beaver Hatchery
Final Permit

Dear Mr. Pierce:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal 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 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.
cc Stuart Rose, DEP/SMRO
Sandy Mojica, USEPA
Marelyn Vega, USEPA
Olga, Vergara, USEPA
Mark Dubois, Poland Spring

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

DEPARTMENT ORDER

IN THE MATTER OF

PIERCE ASSOCIATES, INC.		)	MAINE POLLUTANT DISCHARGE
SHY BEAVER HATCHERY		)	ELIMINATION SYSTEM PERMIT
HOLLIS, YORK COUNTY, MAINE		)	AND
FISH HATCHERY		)	
ME0036838		)	WASTE DISCHARGE LICENSE
W008127-6E-C-R	**APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, *et seq.* and Maine law 38 M.R.S.A., Section 414-A *et seq.*, and applicable regulations the Department of Environmental Protection (Department hereinafter) has considered the application of PIERCE ASSOCIATES, INC. d/b/a SHY BEAVER HATCHERY (permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee has submitted a complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036838/Maine Waste Discharge License (WDL) #W008127-5Q-A-N (permit hereinafter) issued by the Department on March 29, 2007, for a five year term. The permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of fish hatchery wastewater to Wales Pond Brook, Class B, from a commercial brook trout, rainbow trout, and brown trout hatchery and rearing facility located in Hollis, Maine. The March 29, 2007, permit was subsequently modified on February 23, 2010, by reducing the monitoring frequencies for biochemical oxygen demand (BOD) and total suspended solids (TSS) from 2/Month to 1/Month.

MODIFICATIONS REQUESTED

The permittee is requesting the Department re-evaluate the monitoring frequencies for all parameters given the historical decrease in biomass at the facility and the consistency in the test results for each parameter.

PERMIT SUMMARY

This permit is carrying forward all the terms and conditions of the previous permit except that this permit is;

1. Reducing the year-round monitoring frequencies for BOD and TSS from 1/Month to 1/Year based on the fact the concentration for both parameters has been reported at or below 2.0 mg/L for the most current five-year period of time.

2. Reducing the seasonal (June 1 – September 30) monitoring frequency for total phosphorus from 2/Month to 1/Month given the consistency in test results for the most current five-year period of time.

3. Reducing the year-round monitoring frequency for pH from 2/Month to 1/Year given the consistency in test results for the most current five-year period of time.

4. Eliminating the seasonal (June 1 – September 30) ambient dissolved oxygen and temperature monitoring in Wales Pond Brook given the consistency in test results for the most current five-year period of time.

5. Eliminating the requirement to conduct macro-invertebrate biomonitoring if requested by the Department as the Department will conduct any future biomonitoring.

6. Establishing a Special Condition entitled, *Dam Maintenance*, that includes reporting requirements to Poland Spring if there is a flow regime change in Wales Pond Brook as well as periodic checks for screening cleaning between July 1 and November 30 of each year if new screens are installed at the dam.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 27, 2015, and subject to the Conditions listed below, the Department makes the following conclusions:

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

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

3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §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) 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 PIERCE ASSOCIATES, INC. d/b/a SHY BEAVER HATCHERY to discharge a monthly average flow of up to 1.5 million gallons per day of fish hatchery wastewater to Wales Pond Brook, Class B, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent 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)].

DONE AND DATED AT AUGUSTA, MAINE, THIS 17th DAY OF June, 2015.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application March 12, 2014.

Date of application acceptance March 19, 2014.

Filed
JUN 17 2015
State of Maine
Board of Environmental Protection

Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood , BUREAU OF LAND & WATER QUALITY

ME0036838 2015 6/15/15

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **fish hatchery wastewater via Outfall #001A** to Wales Pond Brook. Such discharges shall be limited and monitored by the permittee as specified below [(1)]:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	1.5 MGD *[03]*	Report MGD *[03]*	---	---	Daily *[01/01]*	Measured *[MS]*
BOD *[00310]*	75 lbs./day *[26]*	125 lbs./day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	1/Year[(2)] *[01/YR]*	Composite [(3)] *[CP]*
TSS *[00530]*	75 lbs./day *[26]*	125 lbs./day *[26]*	6 mg/L *[19]*	10 mg/L *[19]*	1/Year[(2)] *[01/YR]*	Composite [(3)] *[CP]*
Total Phosphorus [(4)] *[00665]* **June 1 – September 30 each year**	0.93 lbs./day *[26]*	Report lbs./day *[26]*	0.074 mg/L *[19]*	Report mg/L *[19]*	1/Month *[01/30]*	Composite [(3)] *[CP]*
pH *[00400]*	---	---	---	6.0-8.5 S.U. [(5)] *[12]*	1/Year[(2)] *[01/YR]*	Grab *[GR]*

The italicized numeric values bracketed in the table above and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports (DMRs).

FOOTNOTES: See pages 6 and 7 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Footnotes:

1. **Sampling** – Sampling and analysis must be conducted in accordance with; a) methods approved in 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 Human Services. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Samples that are sent to another 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).

2. **BOD, TSS and pH-** 1/Year sampling shall be conducted at the same time samples are obtained for total phosphorus. The permittee shall take at least one sample in each of the four summer months during the five-year term of the permit.

3. **Composite Sample** – Composite sample means a sample consisting of a minimum of four grab samples collected at two-hour intervals during the working day at the facility. Alternatively, upon Department approval, the permittee may elect to use an automatic compositor for sampling.

4. **Total Phosphorous** – All total phosphorus monitoring conducted by the permittee for compliance with this permit shall be performed in accordance with **Attachment A** of this permit, *Protocol For Total P Sample Collection and Analysis for Waste Water,* May 2014, unless otherwise specified by the Department.

5. **pH Range Limitation** – The pH value of the effluent shall not be lower than 6.0 SU nor higher than 8.5 SU at any time unless these limitations are exceeded due to natural causes. The permittee shall provide oral notification of any exceedence within 24 hours from the time the permittee becomes aware of the circumstances and shall submit a written explanation of the exceedence within 5 days of the time the permittee becomes aware of the circumstances.

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 uses 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 uses designated for the classification of the receiving waters.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS (cont'd)

3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the uses 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. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on March 19, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. 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)(*Bypass*) of this permit.

D. NOTIFICATION REQUIREMENTS

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

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

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

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

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

E. SETTLING BASIN CLEANING

All wastewater settling structures shall be cleaned when accumulated materials occupy 20% of a basin's 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.

SPECIAL CONDITIONS

F. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain 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 discharged to surface waters. Among other items, the plan shall describe in detail efficient feed management and feeding strategies to minimize discharges of uneaten feed and waste products, how and when the accumulated solids are to be removed, dewatered, and methods of disposal. The plan shall also describe where the removed material is to be placed and the techniques used to prevent it from re-entering the surface waters from any onsite storage. The plan shall document the recipients and methods of any offsite waste disposal.

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

Any significant changes to the dam structure on Wales Pond or changes that will significantly affect flow in Wales Pond Brook must be communicated to Poland Springs within 72 hours of the changes. Any grates that are changed or removed, flashboards added or removed, flows diverted, cleaning operations occur or any other major change that affects flow, the event shall be logged, and the date and time communicated to Poland Spring with 72 hours of the event.

If the existing screen structure at the Wales Pond outlet/start of Wales Pond Brook just upstream of Flume #1 is replaced with new screens, the permittee is required to conduct inspections at least once week (1/Week) with at least three days between inspections between July 1 – November 30 of each year to ensure the maintenance of downstream flows at Flumes #1 and #2 and to keep a log of said inspections.

SPECIAL CONDITIONS

H. DISEASE AND PATHOGEN CONTROL NOTIFICATION

The permittee must comply with Maine Department of Inland Fisheries and Wildlife and Maine Department of Marine Resources salmonid fish health rules (12 M.R.S.A., §6071; 12 M.R.S.A., §§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 the event of a catastrophic pathogen occurrence, the permittee shall submit to the Department for review, information on the proposed treatment including materials/chemicals to be used, material/chemical toxicity to aquatic life, the mass and concentrations of materials/chemicals as administered, and the concentrations to be expected in the effluent. The Department will address such occurrences through administrative modifications of the permit.

I. DISINFECTING/SANITIZING AGENTS

The permittee neither applied for nor does this permit authorize the discharge of waste waters that have been treated with disinfectants and/or sanitizing agents.

J. THERAPEUTIC AGENTS

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. 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 when they are the only feasible treatments available and only under the authority of a veterinarian. **The permittee shall notify the Department in writing within 24-hours prior to such use.** This notification must be provided by the veterinarian involved and must include the agent(s) used, the concentration and mass applied, 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, the likely need of repeat treatments, and information on aquatic toxicity. If, upon review of information regarding the use of a drug pursuant to this section, the Department determines that significant adverse effects are likely to occur, it may restrict or limit such use.

K. 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 any time and with notice to the permittee, modify this permit to; (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

SPECIAL CONDITIONS

L. 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 and postmarked on or before the thirteenth (13^{th}) day of the month or hand-delivered to a Department regional office such that the DMR's are received by the Department on or before the fifteenth (15^{th}) 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's assigned compliance inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Southern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
312 Canco Road
Portland, Maine 04103

Alternatively, if you are submitting an electronic DMR (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 15^{th} day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13^{th}) 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 (15^{th}) 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 15^{th} day of the month following the completed reporting period.

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

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water

Approved Analytical Methods: EPA 200.7 (Rev. 44), 365.1 (Rev. 2.0), (Lachat), 365.3, 365.4; SM 3120 B, 4500-P B.5, 4500-P E, 4500-P F, 4500-P G, 4500-P H; ASTM D515-88(A), D515-88(B); USGS I-4471-97, I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **March 27, 2015**

MEPDES PERMIT NUMBER: **ME0036838**
WASTE DISCHARGE LICENSE: **W008127-6E-C-R**

NAME AND ADDRESS OF APPLICANT:

PIERCE ASSOCIATES, INC. d/b/a SHY BEAVER HATCHERY
P.O. Box 258
West Buxton, Maine 04093

COUNTY: **York**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

SHY BEAVER HATCHERY
161 Shy Beaver Road
Hollis, Maine 04093

RECEIVING WATER / CLASSIFICATION: **Wales Pond Brook/Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Sonny Pierce**
President
Pierce Associates Inc.
(207) 229-3003
e-mail: shybeavertrouthatchery@gmail.com

1. APPLICATION SUMMARY

a. Application: Pierce Associates Inc. (permittee hereinafter) d/b/a Shy Beaver Hatchery has submitted a complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0036838/Maine Waste Discharge License (WDL) #W008127-5Q-A-N (permit hereinafter) issued by the Department on March 29, 2007, for a five year term. The permit authorized the monthly average discharge of up to 1.5 million gallons per day (MGD) of fish hatchery wastewater to Wales Pond Brook, Class B, from a commercial brook trout, rainbow trout, and brown trout hatchery and rearing facility located in Hollis, Maine. The March 29, 2007, permit was subsequently modified on February 23, 2010, by reducing the monitoring frequencies for biochemical oxygen demand (BOD) and total suspended solids (TSS) from 2/Month to 1/Month.

1. APPLICATION SUMMARY (cont'd)

b. Source Description/ Facility Operation: Shy Beaver Hatchery is a commercial fish hatchery located in Hollis, Maine, and was first established in the 1870s. See **Attachment A** of this Fact Sheet for a map created by the Department showing the location of the facility, and **Attachment B** for a schematic of the facility. Shy Beaver raises brook trout, rainbow trout and brown trout, and obtains eyed eggs from certified brood stock facilities. Prior to 2007, Shy Beaver Hatchery raised approximately 15,000 fish per year for brood stock maintenance and private pond stocking and approximately 15,000 fish per year for bioassays. The facility no longer maintains broodstock and has cut the biomass at the facility to maintain a standing crop biomass of 1,500 – 2,000 pounds throughout the year.

Shy Beaver is a flow-through facility, obtaining source water from natural springs and from two wells of depths of 60 feet and 30 feet deep, respectively. During high flow times (winter, storms, etc.) the water flow-through rate is approximately 1,500 gallons per minute (gpm) (2.16 million gallons per day, mgd), while during drought conditions (summer) it is approximately 800 gpm (1.15 mgd). Shy Beaver has an influent emergency bypass to route excess influent flows, if necessary, directly to Wales Pond Brook. Biomass on station is highest from April through June. Biomass is lowest in the summer as the raceways are mostly empty following stocking.

Hatchery / Rearing: The hatchery operation consists of three stacks of eight incubator trays for a total of 24 trays. The hatchery/rearing facility utilizes well water as its source water. Shy Beaver typically isolates the fish to one species per stack. Eggs/fish are kept in the incubator trays through hatching until the fish reach the swim-up stage. Then, they are transferred to twenty-four aluminum troughs that are 10-feet long by 1-foot wide by 8-inches deep. There is no water reuse between individual egg tray stacks or between troughs; all are set up as parallel flow pass-through systems.

Fish are kept in the troughs until they reach approximately 2-3 inches in length, which first occurs for the rainbow trout between January and March and slightly later for other species raised. Fish are then transferred to circular tanks located outside.

Outside Tanks: Outside tanks utilize well water as the source water. The tanks consist of eleven 8-foot diameter by 20-inch deep (approximately 627-gallon) tanks and four 15-foot diameter by 32-inch deep (approximately 8,378-gallons) tanks. The 8-foot tanks are made of fiberglass, while the 15-foot tanks are made of corrugated steel with a concrete floor. All circular tanks have center drains for cleaning. There is no water reuse between individual circular tanks; all are set up as parallel flow pass-through systems. Fish are held in the outside tanks until they reach approximately 6-inches in length. Fish are then transferred to outside raceways.

1. APPLICATION SUMMARY (cont'd)

Raceways: The raceways utilize a combination of well water and spring water as the source water. One raceway is located above the hatchery and is 12-feet wide by 70-feet long by 16-inches deep. Other raceways are located below the hatchery and are 14-feet wide by 150-feet long by 16-inches deep. Water flow from the hatchery/rearing and outside tank portions of the facility enters the raceway portion and subsequently flows through the remainder of the facility in series flow. All raceways are earthen with wooden sides and are covered with screen to discourage predators. Fish attain a size of approximately 8-10-inches in length in the raceways.

Shy Beaver does not use chemicals of any kind to ensure the fish may be used for bioassays. This permit does not authorize the use of disinfectants at this facility that may carry over to the effluent. Shy Beaver has fish escape prevention screens in place. Shy Beaver stocks several hundred fish per week in Wales Pond Brook for a private fishing club. Shy Beaver typically sells or stocks all fish each year. A minimal number of hold-over fish may be retained for the private fishing club.

c. Wastewater: Shy Beaver stated that it vacuums fish containment structures as needed with a pool vacuum. Extracted solid waste materials are deposited on the ground surface in various areas of the facility's 250-acre property. Water extracted during vacuuming is returned to the facility flow. Shy Beaver reports that raceways are typically cleaned twice per year. When tanks are emptied of fish, they are cleaned by pressure washing. As described above, all facility flow-through water is combined in the raceway portion of the facility. A former production pool is utilized as a settling basin. Wastewater flows from this structure to the impounded headwaters of Wales Pond Brook, which is a tributary to the Saco River.

2. PERMIT SUMMARY

a. Modifications requested: The permittee is requesting the Department re-evaluate the monitoring frequencies for all parameters given the historical decrease in biomass at the facility and the consistency in the test results for each parameter.

b. Terms and Conditions - This permit is carrying forward all the terms and conditions of the previous permit except that this permit is;

1. Reducing the year-round monitoring frequencies for BOD and TSS from 1/Month to 1/Year based on the fact the concentration for both parameters has been reported at or below 2.0 mg/L for the most current five-year period of time.

2. Reducing the seasonal (June 1 – September 30) monitoring frequency for total phosphorus from 2/Month to 1/Month given the consistency in test results for the most current five-year period of time.

3. Reducing the year-round monitoring frequency for pH from 2/Month to 1/Year given the consistency in test results for the most current five-year period of time.

2. PERMIT SUMMARY (cont'd)

4. Eliminating the seasonal (June 1 – September 30) ambient dissolved oxygen and temperature monitoring in Wales Pond Brook given the consistency in test results for the most current five-year period of time.

5. Eliminating the requirement to conduct macro-invertebrate biomonitoring if requested by the Department as the Department will conduct any future biomonitoring.

6. Establishing a Special Condition entitled, *Dam Maintenance*, that includes reporting requirements to Poland Spring if there is a flow regime change in Wales Pond Brook as well as periodic checks for screening cleaning between July 1 and November 30 of each year if new screens are installed at the dam.

c. History – This section provides a summary of significant licensing, permitting, and other events affecting the Shy Beaver Hatchery.

December 20, 2000 – The Department notified Pierce Associates, Inc. of the need to apply to the Department for a Waste Discharge License for the discharge of fish hatchery wastewater.

February 20, 2001 – Pierce Associates, Inc./Shy Beaver Hatchery submitted a General Application to the Department for a new WDL. The application was accepted for processing on February 20, 2001 and was assigned WDL #W008127-5Q-A-N.

March 29, 2007 – The Department issued combination MEPDES permit #ME0036838/WDL #W008127-5Q-A-N for a five-year term.

February 23, 2010 – The Department issued modification #ME0036838/WDL #W008127-6F-B-M that reduced the monitoring frequencies for biochemical oxygen demand (BOD) and total suspended solids (TSS) from 2/Month to 1/Month.

March 12, 2014 – Pierces Associates Inc. submitted a complete application to the Department for the renewal of the combination MEPDES permit/WDL.

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

The impounded headwaters of Wales Pond Brook, which is referred to as Wales Pond, and the brook itself are "waters of the State" as defined by Maine law, 38 M.R.S.A. §361-A sub-section 7. Maine law, 38 M.R.S.A. §467 sub-section 12.B. classifies tributaries of the Saco River, unless otherwise classified, which includes Wales Pond Brook at the point of discharge, as Class B waters. Maine law 38 M.R.S.A. §465 sub-section 3 describes the standards of classification for Class B waters as follows:

A. *Class B waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired.*

B. *The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 236 per 100 milliliters.*

C. *Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.*

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report lists Wales Pond Brook (ME0106000211_616R) as "Category 5-A: Rivers and Steams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)." Impairment in this context refers to the impairment of the aquatic life standard for Class B waters. Benthic macroinvertebrate samples were collected between calendar years 2000 through 2005. The "Upstream" station sampled is located approximately 110 meters below the impounded headwaters of the brook, commonly referred to as Wales Pond, while the "Downstream" station is located approximately 900 meters below the impounded headwaters of the brook. The "Upstream" station sampled in 2005 was in non-attainment of the minimum Class C aquatic life standard. There has been very little variability in the sampling results. The "Upstream" station has never attained the Class B aquatic life standard but has fluctuated between the minimum Class C aquatic life standard (2001, 2003, 2004) or non-attainment (2000, 2002, 2005). The "Downstream" station met the Class B aquatic life standard in 2000, 2001, 2003, and 2005 and the Class C aquatic life standard in 2002 and 2004.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department has identified the discharge from Shy Beaver Hatchery as a potential source for the non-attainment status of the brook. Application of appropriate pollution control technologies to the discharge from Shy Beaver Hatchery is anticipated to result in improvement of receiving water quality and, ultimately, attainment of all standards of classification for Class B waters.

Chlorophyll-a level is used by the Department to determine if a waterbody has a reasonable potential to cause an algae bloom. When chlorophyll-a levels are high enough, the water may begin to appear green tainted from plankton that are floating in the water. The plankton may also be visible within the water column. Based on Department research, an in-stream concentration of 0.035 mg/L of total phosphorus corresponds to the maximum level at which algae blooms will not typically occur in a receiving river or stream under normal circumstances.

Based on aerial (from fixed wing aircraft on June 16, 2006) and ground observations (July 6, 2006) conducted by Department staff, the Department has documented the occurrence of heavy algae growth in Wales Pond Brook in and below the impoundment. Analytical test results for two water samples collected from Wales Pond Brook by Department staff on July 6, 2006 for total phosphorous were 25 parts per billion (ppb) and 34 ppb and chlorophyll-a results were 6.9 ppb and 14 ppb. Analytical test results for water samples collected from the impounded portion of the brook by the Department in calendar years 2000, and 2005 for total phosphorous were 34 ppb and 43 ppb, respectively. Analytical test results for chlorophyll-a were 3.1 ppb, 11.0 ppb, and 16.0 ppb, respectively for years 1999, 2000, and 2005. On August 24, 2005 and August 25, 2005, the Department measured dissolved oxygen (DO) in the impounded portion of the brook. On 8/25/05, the DO measurement at a depth of 2 meters was 5.3 parts per million (ppm), which is below the minimum DO standard of 7 ppm for Class B waters. Dissolved oxygen measurements ($n = 5$) conducted by Department staff in free-flowing portions of Wales Pond Brook at approximately 1:30 p.m. on July 6, 2006 ranged from 13.1 ppm to 13.6 ppm. These results are consistent with expectations for DO levels occurring in a nutrient-rich receiving water at mid-afternoon as aquatic plants are producing oxygen in during photosynthesis.

Based on these observations, test results, and monitoring results, the Department is making a best professional judgment determination in this permitting action that Wales Pond Brook is not attaining the designated use of "recreation in and on the water" for Class B waters due to the heavy algae growth. This determination is supported by the ambient water quality data, which indicate phosphorous and chlorophyll-a levels have been documented above the thresholds indicating algae blooms may occur.

Application of appropriate pollution control technologies to the discharge from Shy Beaver Hatchery and the reduction in biomass at the facility will provide reasonable assurance in the improvement of receiving water quality and, ultimately, attainment of all standards of classification for Class B waters.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists all of Maine's fresh waters as, "*Category 4-A: Waters Impaired With Impaired Use, TMDL Completed, Waters Impaired by Atmospheric Deposition of Mercury*. The report states the impairment is caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.

The Department has no information that the discharge from the permittee's facility is causing or contributing to the impairment.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Applicability of National Effluent Guidelines: On June 30, 2004, USEPA finalized the Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category (National Effluent Guidelines). The earlier September 12, 2002 proposed National Effluent Guidelines (NEGs) and subsequent working draft NEGs established numerical limitations for the discharge of total suspended solids (TSS) and requirements for facilities to develop and implement best management practices (BMP) plans for control of other pollutants.

In the final NEGs, EPA expressed effluent limitations in the form of narrative standards, rather than as numerical values. The final NEGs require facilities to develop and implement BMPs regarding operation and maintenance of the facility, as does this permitting action.

b. Flow: The March 29, 2007, permit established a monthly average discharge flow limitation of 1.5 MGD that is being carried forward in this permit. The flow limitation is based on information provided by the permittee in the 2007 permitting process and is considered representative of the design capacity of the facility at full production. This permitting action is carrying forward a daily, measured discharge flow monitoring requirement consistent with Department guidelines for wastewater treatment facility discharges.

A review of the Discharge Monitoring Report (DMR) data for the period January 2010 – November 2014 indicates values have been reported as follows:

Flow (DMRs=47)

Value	Limit (MGD)	Range (MGD)	Average (MGD)
Monthly Average	1.5	0.54-1.14	0.76
Daily Maximum	Report	0.64-1.5	0.89

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

c. Dilution Factors: The chronic dilution factor associated with this facility was derived in accordance with Department rule, 06-096 CMR, Chapter 530 Section 4.A *Surface Water Toxics Control Program* and were calculated as follows.

$$\text{Chronic: } 7Q10 = 2.5 \text{ cfs} \quad \Rightarrow \frac{(2.5 \text{ cfs})(0.6464) + (1.5 \text{ MGD})}{(1.5 \text{ MGD})} = 2.1{:}1$$

d. Biochemical Oxygen Demand (BOD_5) Total Suspended Solids (TSS): According to EPA's final NEGs, effluent from fish hatcheries and rearing facilities can contain *"...high concentrations of suspended solids and nutrients, high BOD and low dissolved oxygen levels. Organic matter is discharged primarily from feces and uneaten feed."* As stated in the 2002 proposed NEGs, "*elevated levels of organic compounds contribute to eutrophication and oxygen depletion.*" This is expressed as BOD *"...because oxygen is consumed when microorganisms decompose organic matter."* *"The greater the BOD, the greater the degree of pollution and the less oxygen available."* The discharge of high BOD wastewater to small receiving waters with insufficient dilutions can result in formation of oxygen deficient areas known as sag points. Oxygen sag points represent both localized impacts to habitat and aquatic life as well as barriers to migration throughout the receiving water. Based on this premises and a long standing practice of regulating effluent BOD, the Department considers BOD a significant pollutant and therefore is establishing effluent limitations and monitoring requirements for this parameter in this permitting action.

The previous permit established monthly average and daily maximum effluent concentration limitations of 6 mg/L and 10 mg/L, respectively, for BOD_5 and TSS based on a Department best professional judgment (BPJ) determination of best practicable treatment (BPT) for the discharge of fish hatchery wastewater from fish hatchery facilities. Department rule 06-096 CMR Chapter 523 subsection 6 f states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. With a monthly average discharge flow limit of 1.5 MGD, the previous permit established monthly average and daily maximum technology-based mass limits for BOD_5 and TSS as follows:

Monthly Average Mass Limit: (6 mg/L)(8.34 lbs./gallon)(1.5 MGD) = 75 lbs./day
Daily Maximum Mass Limit: (10 mg/L)(8.34 lbs./gallon)(1.5 MGD) = 125 lbs./day

A review of the DMR data for the period January 2010 – November 2014 indicates values have been reported as follows:

BOD mass (DMRs = 47)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	75	<9 – 22	6
Daily Maximum	125	<9 - 22	6

BOD concentration (DMRs=47)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	6	<2 – 3.2	1
Daily Maximum	10	<2 – 3.2	1

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

TSS mass (DMRs=47)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	75	<4.9 – 15	4
Daily Maximum	125	<4.9 - 15	4

TSS concentration (DMRs = 47)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	6	<1 – 2.3	0.5
Daily Maximum	10	<1 – 2.3	0.5

The February 23, 2010 permit modification reduced the monitoring frequency for BOD and TSS from 2/Month in March 29, 2007, to 1/Month given the excellent compliance date for the previous three-year period. The permittee has requested the Department eliminate the monitoring requirements all together given the discharge concentrations are at or below the level of detection of 2.0 mg/L for the last five-year period. The Department agrees continued monitoring of BOD and TSS is of little value given the consistency of results being at or below the level of detection for the most current five year period.

06-096 CMR Chapter 523, §5(i) states that for parameters limited in a permit, *"the requirement to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and the effect of the discharge but in no case less than once per year."* Therefore, the Department is making a best professional judgment to reduce the monitoring frequencies for BOD and TSS to 1/Year based on the most current five years of test results for both parameters.

However, pursuant to Special Condition D, *Notification Requirement*, of this permit, any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system or significant increase in biomass at the facility must be reported to the Department as soon as the permittee is aware of the situation. Pursuant to Special Condition K, *Reopening of Permit For Modifications*, the Department reserves the right to change monitoring requirements or limitations based on new information.

e. Total Phosphorus and Orthophosphate: Phosphorus is a nutrient that encourages the growth of plants such as planktonic algae and macrophytes in northern waters. Oxygen levels in the water are reduced in the early morning hours due to extended nighttime respiration of algae. The decomposition of excess plant material further reduces the amount of available oxygen in the water through biochemical oxygen demand. Lowering oxygen levels in a receiving water impacts the aquatic life in that water, making it unfit for some forms of life. Further, enrichment from excess nutrients, such as phosphorus, can result in reductions in aquatic macro-invertebrate species diversity, an indicator of the overall health of a receiving water. Excess phosphorus can also result in undesirable aesthetic conditions in a receiving water, impacting that water's ability to meet standards for maintaining recreational use, a designated use by law. Therefore, any increase in the

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

phosphorus content in a receiving water has the potential to cause or contribute to non-attainment of classification standards. Orthophosphate (ortho-P) is the portion of total phosphorous (total-P) that is readily available for uptake by aquatic plants. It is important to be able to characterize the facility effluent in terms of the relationship between ortho-P and total-P in order to better understand the effects on the receiving water. It is noted ortho-P monitoring was only required during the summer of 2007 and the permittee complied with the requirement.

For discharges to rivers and streams, the Department typically utilizes an in-stream total phosphorus concentration threshold of 0.035 mg/L (35 parts per billion, µg/L) and the dilution provided by a receiving water to calculate water quality-based effluent limits. At this time, the Department has not adopted nutrient criteria for phosphorous. Based on Department research, an in-stream concentration of 0.035 mg/L corresponds to the maximum level at which algae blooms will not typically occur in a receiving river or stream under normal circumstances. The Department has insufficient ambient water quality data at this time to determine site-specific phosphorous criteria for Wales Pond Brook.

Phosphorus is typically of concern under chronic (7Q10 stream design flow) conditions during the summer months. With a chronic dilution factor of 2.1:1 and a monthly average discharge flow limit of 1.5 MGD, seasonal (June 1 through September 30 of each year) monthly average water quality-based concentration and mass limits for total phosphorous in the 2007 permit were derived as follows:

Monthly Average Concentration = (ambient water quality threshold)(chronic dilution)
= (0.035 mg/L)(2.1) = 0.074 mg/L

Monthly Average Mass = (monthly average concentration)(conversion factor)(discharge flow limit)
= (0.074 mg/L)(8.34 lbs./gallon)(1.5 MGD) = 0.93 lbs./day

A review of the DMR data for the period June 2010 – September 2014 indicates values have been reported as follows:

Total phosphorus mass (DMRs=20)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	0.93	0.08 – 0.27	0.14
Daily Maximum	Report	0.11 – 0.32	0.17

Total phosphorus concentration (DMRs = 20)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.074	0.01 – 0.04	0.03
Daily Maximum	Report	0.01 – 0.05	0.03

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

The March 29, 2007, permit established a minimum monitoring frequency requirement of twice per month and a composite sample type for total phosphorus based on a Department best professional judgment of the minimum monitoring and sample type necessary to accurately characterize the discharge from this facility.

The permittee has requested the Department eliminate total phosphorus monitoring requirements all together given the expense associated with the monitoring. Given the continued non-attainment issues associated with Wales Pond Brook, the Department maintains total phosphorus limitations and monitoring requirements remain appropriate for this discharge. However, the Department believes it is reasonable to reduce the seasonal monitoring frequency from 2/Month to 1/Month given the lack of variability in the data and the fact the concentration results are approximately 60% lower than the concentration limit in the permit and the mass results are 80% lower than the mass limit in the permit. Therefore this permit establishes a 1/Month monitoring frequency for total phosphorus.

f. pH: The March 29, 2007 permit established a pH range limitation of 6.0-8.5 standard units. The pH value of the effluent shall not be lower than 6.0 SU nor higher than 8.5 SU at any time unless these limitations are exceeded due to natural causes. The permittee shall provide oral notification of any exceedence within 24 hours from the time the permittee becomes aware of the circumstances and shall submit a written explanation of the exceedence within 5 days of the time the permittee becomes aware of the circumstances. This permit established a minimum monitoring frequency requirement twice per month for pH based on the Department's BPJ of monitoring frequencies necessary to more accurately characterize facility effluent conditions.

A review of the DMR data for the period January 2010 – November 2014 indicates the following;

pH (DMRs = 45)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 8.5	6.2	6.4

The permittee has requested the Department eliminate pH monitoring requirement given the time and expense associated with the monitoring. The Department believes it is reasonable to reduce the monitoring frequency from 2/Month given the lack of variability in the data. To be consistent with BOD and TSS, the Department is reducing the monitor frequency to 1/Year.

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. Special Condition E of this permit establishes a requirement that any settling structures be cleaned when accumulated materials occupy 20% of a basin's 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.

8. DISEASE AND PATHOGEN CONTROL AND REPORTING

Maine Department of Inland Fisheries and Wildlife (MDIFW) Rules (Chapter 2.03-A) and Maine Department of Marine Resources (MeDMR) Rules (Chapter 24.21) state that *"the transfer and/or introduction of organisms fall within the jurisdiction of the Department of Marine Resources (12 MRSA, §6071) into coastal waters within the State of Maine and the Department of Inland Fisheries and Wildlife (12 MRSA, §§7011, 7035 and 7201, 7202) into public and/or private waters within the State of Maine. These rules are intended to protect wild and farmed salmonid fish populations and shall be applicable to all individuals involved in the culture and movement of live salmonids and gametes."* Further, both agencies' rules define Diseases of Regulatory Concern as *"...infectious agents that have been demonstrated to cause a significant increase in the risk of mortality among salmonid populations in the State of Maine. Diseases of Regulatory Concern are classified by the Commissioner into three (3) disease categories: exotic, endemic (limited distribution) and endemic based on an annual review and analysis of epidemiological data."* In this permitting action, as a salmonid aquaculture facility, Shy Beaver Hatchery must comply with MDIFW and MeDMR salmonid 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 the event of a catastrophic pathogen occurrence, the permittee shall submit to the Department for review, information on the proposed treatment including materials/chemicals to be used, material/chemical toxicity to aquatic life, the mass and concentrations of materials/chemicals as administered, and the concentrations to be expected in the effluent. The Department will address such occurrences through administrative modifications of the permit.

9. AMBIENT DISSOLVED OXYGEN AND TEMPERATURE MONITORING

The March 29, 2007, Fact Sheet contained the following italicized text;

On June 16, 2006 and July 6, 2006, the Department documented heavy algae growth in Wales Pond Brook, especially in the area immediately surrounding the outfall from Shy Beaver Hatchery and at the dam on the Wales Pond Brook impoundment. Shy Beaver Hatchery is the only known point source discharge to Wales Pond Brook. The previously unregulated discharge from Shy Beaver Hatchery is suspected as a potential source of excess nutrient loading to the receiving water.

Based on the low effluent dilution provided in the receiving water and the need for additional data on the effects of Shy Beaver Hatchery's discharge on water quality, this permitting action requires the permittee to seasonally monitor ambient dissolved oxygen and temperature levels in Wales Pond Brook as specified in Special Condition L of this permit.

A review of the 1/week seasonal DMR data for the period June 2010 – September 2014 indicates the following;

Dissolved oxygen (DMRs=20)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Minimum	Report	7.4 – 13.0	9.1
Average	Report	7.8 – 13	10.0
Maximum	Report	8.3 – 14.0	10.8

Temperature (DMRs=20)

Value	Limit (°C)	Range (°C)	Average (°C)
Minimum	Report	13 - 22	18.1
Average	Report	16 - 25	19.9
Maximum	Report	17 - 27	21.8

The permittee has requested the Department eliminate the ambient water quality monitoring requirement given the time and expense associated with the monitoring and that sufficient data has been collected for the Department to determine if water classification standards are being attained. The Department agrees that the permittee has provided the Department with sufficient ambient water quality data to determine if standards are being attained. The dissolved oxygen values cited above do attain the Class B dissolved oxygen standards. Therefore, the requirement to continue to monitor Wales Pond Brook for dissolved oxygen and temperature is not being carried forward in this permitting action.

10. MACROINVERTEBRATE BIOMONITORING

Macroinvertebrate communities provide indications of the overall ecological health of a receiving water. Based on marcoinvertebrate monitoring data from calendar years 2000-2005 at two locations in Wales Pond Brook, the Department has determined that Wales Pond Brook did not met the aquatic life standard for Class B waters during calendar years 2000, 2002, and 2004. These data were utilized in classifying Wales Pond Brook as an impaired waterbody. The Department has determined that the discharge from the Shy Beaver Hatchery is a potential source for the non-attainment status of the brook.

In order to evaluate attainment of the stream water classification standards and designated uses, resource impacts, and to identify corrective measures when necessary, the Department's Division of Environmental Assessment (DEA) will conduct macroinvertebrate biomonitoring in the receiving water once during the term of this permitting action to determine attainment of the aquatic life standards. The March 29, 2007 required that in the event that biomonitoring results indicate non-attainment of aquatic life standards in the receiving water, Shy Beaver Hatchery would be required to conduct ambient macroinvertebrate biomonitoring annually thereafter as specified in Special Condition K of the March 29, 2007 permit. If the receiving water was subsequently determined by the Department to be meeting criteria, standards, and designated uses for its assigned water quality class, the Department would reopen the permit pursuant to permit Special Condition M, to modify or discontinue the biomonitoring requirement.

As of the date of this permit renewal, the Department does not have any new biomonitoring results for Wales Pond Brook. As a result, the Shy Beaver Hatchery is still only considered a potential source for the non-attainment status of the brook. If additional information collected by the Department determines the Shy Beaver facility is indeed causing or contributing to non-attainment of aquatic life standards, the permit will be reopened to pursuant to Special Condition K, *Reopening of Permit For Modifications*, to change monitoring requirements or limitations based on new information.

11. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

12. PUBLIC COMMENTS

Public notice of this application was made in the *Journal Tribune* newspaper on or about March 10, 2014. 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.

13. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

14. RESPONSE TO COMMENTS

During the period of March 27, 2015, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the Shy Beaver facility. The Department only received comments from Poland Springs in a letter dated April 29, 2015. The Department's responses to the comments are as follows:

Comment #1: Poland Springs has indicated clogged screens at the dam for Wales Pond, the headwaters of Wales Pond Brook, have been problematic for years. The clogged screens reduce flows due to inadequate maintenance of the gates or flows are reduced by the sudden and unexpected addition of flashboards to raise the water levels in Wales Pond. These actions have a direct impact on Poland Springs' ability to monitor stream flows as required by its Site Location of Development permit. The commenter is requesting that the Department condition the permit to require that if the permittee changes or removes a grate, adds or removes flashboards, diverts flow, conducts cleaning operations or makes major changes that affect flow from Wales Pond, the event shall be logged and the date and time communicated to Poland Springs within 72 hours.

Response #1: Given Poland Spring has a requirement to monitor stream flows pursuant to its Site Location of Development permit and the operation and or maintenance of the dam has a direct impact on its ability to do so, the Department has established a new Special Condition G, Dam Maintenance, in this permit that reads in part as follows:

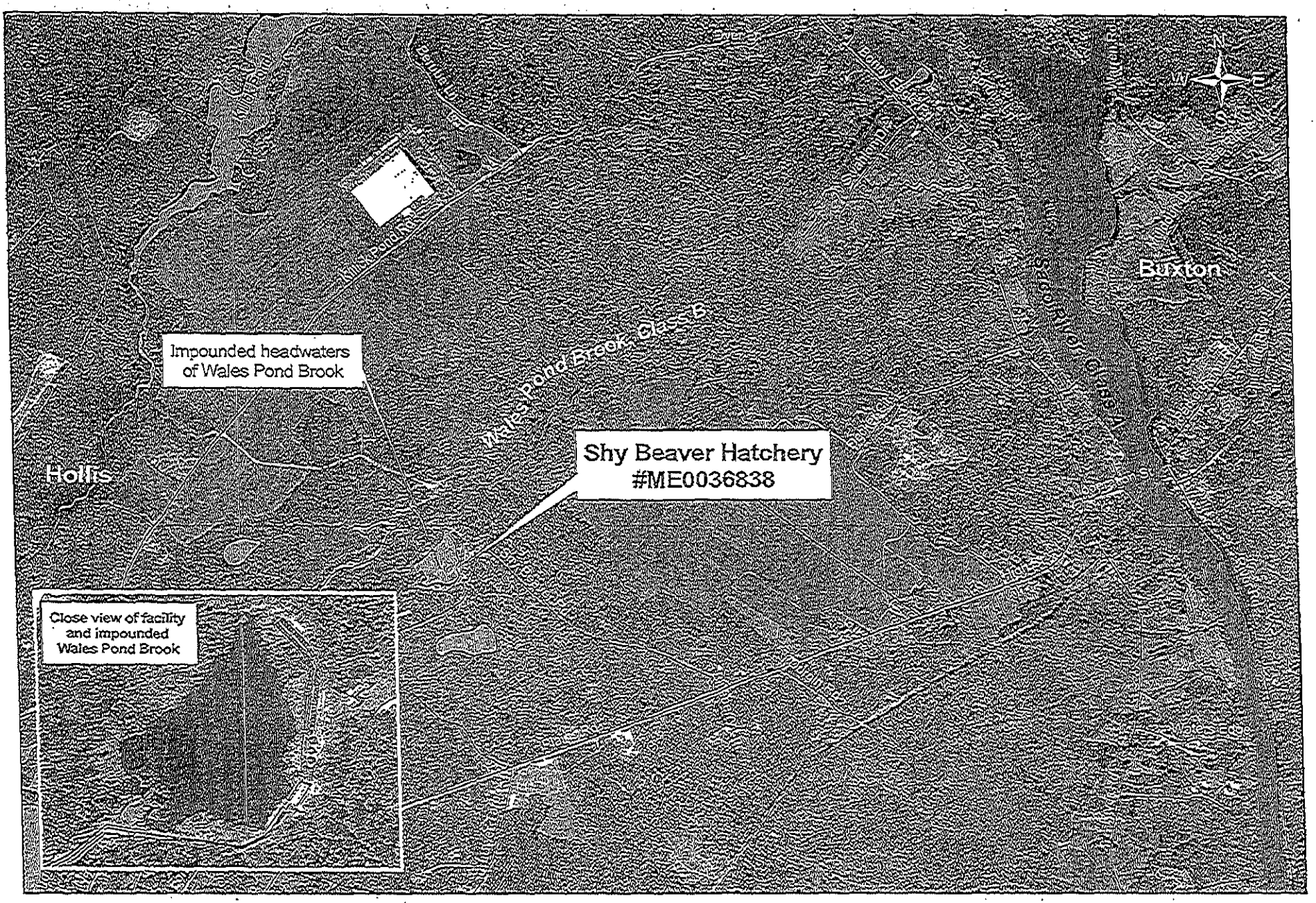
Any significant changes to the dam structure on Wales Pond or and changes that will significantly affect flow in Wales Pond Brook must be communicated to Poland Springs within 72 hours of changes. Any grates that are changed or removed, flashboards added or removed, flows diverted, cleaning operations occur or any other major change that affects flow, the event shall be logged, and the date and time communicated to Poland Spring with 72 hours of the event.

14. RESPONSE TO COMMENTS (cont'd)

Comment #2: With respect to cleaning of hatchery screens to ensure maintenance of downstream flows at Flumes #1 and #2, Poland Spring is requesting the Department establish a requirement to check the screens daily (Monday – Friday) if the new structure in place is replaced by new screens. Poland Spring states that if the requirement is incorporated into the permit, it would be willing to continue with its daily cleanings such that cleanings would generally occur twice per day (Shy Beaver in the morning and Poland Spring in the afternoon) during leaf off in the fall.

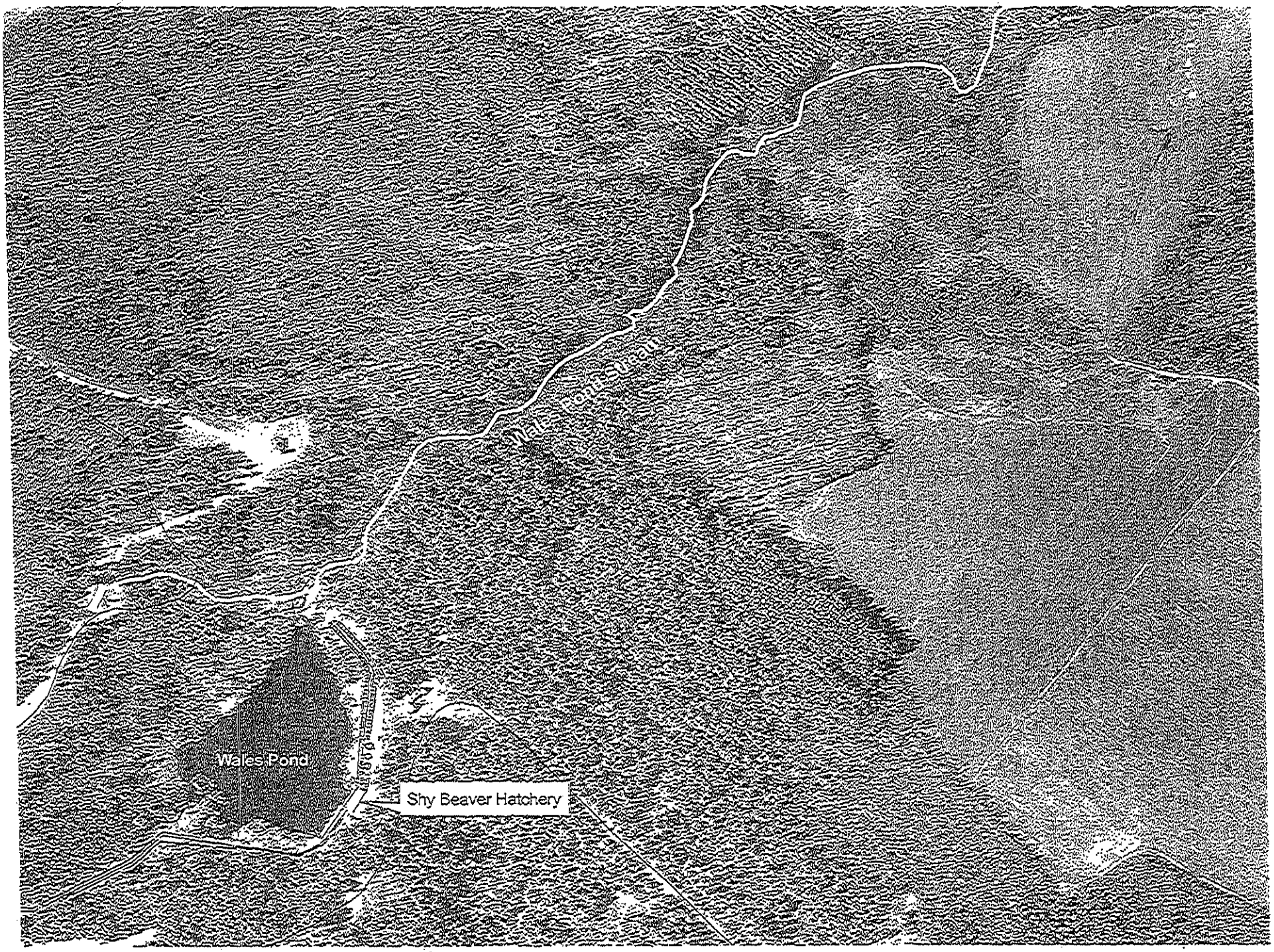
Response #2: After a subsequent phone conversation with the commenter, the request cited above was modified to limit the permittee's responsibility to check the screens 1/Week between the period July 1 – November 30 of each year to encompass the algae growing season and fall leaf-off. Therefore, the Department established a new Special Condition G, *Dam Maintenance*, in this permit that reads in part as follows:

If the existing screen structure at the Wales Pond outlet/start of Wales Pond Brook just upstream of Flume #1 is replaced with new screens, the permittee is required to conduct inspections at least once week (1/Week) with at least three days between inspections between July 1 – November 30 of each year to ensure the maintenance of downstream flows at Flumes #1 and #2 and to keep a log of said inspections.



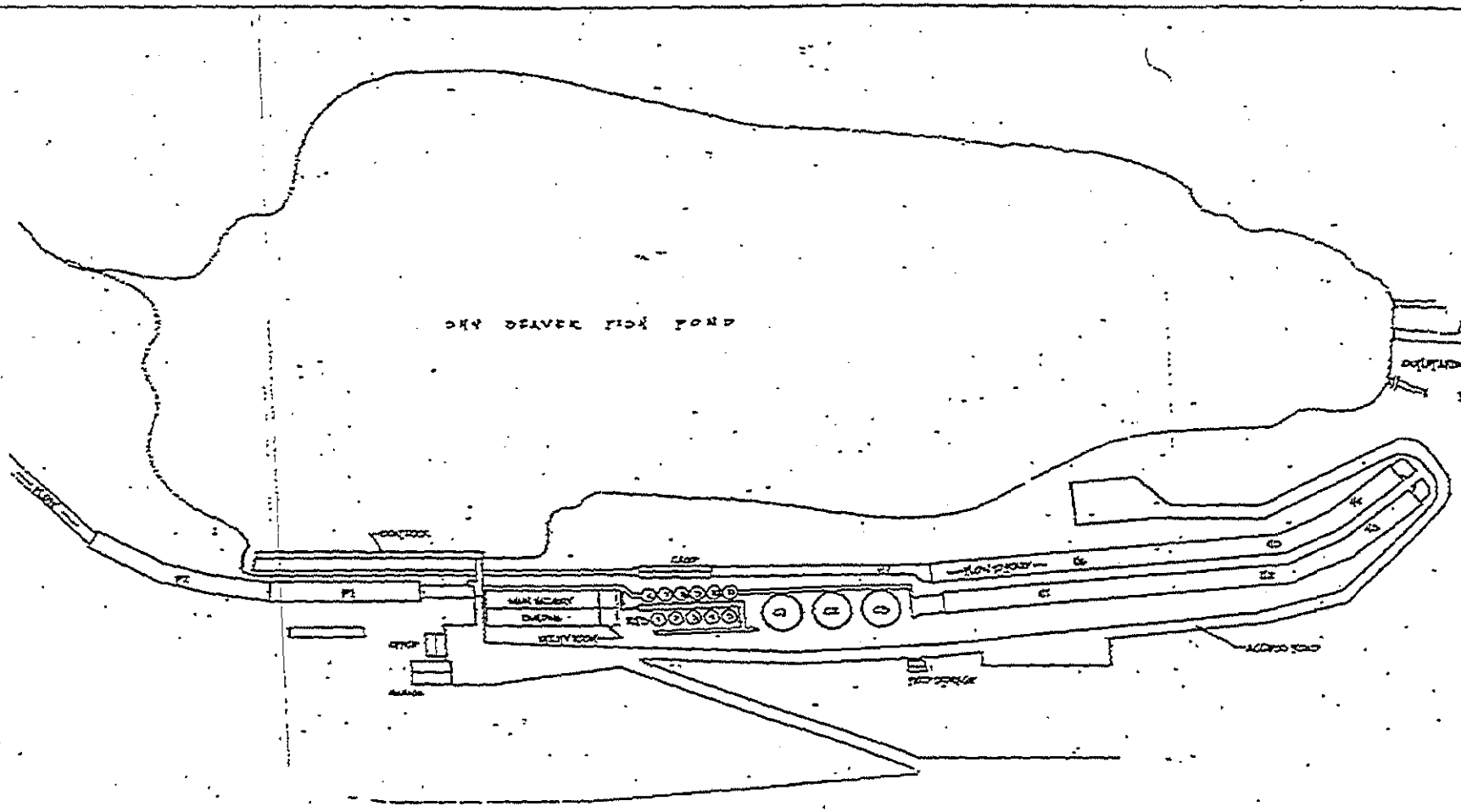
Shy Beaver Hatchery at Hollis, Maine

Map created by Maine DEP
March 7, 2007


Wales Pond Outlet
Wales Pond
Shy Beaver Hatchery

ATTACHMENT B

ATTACHMENT 6 / CODE



CUSTOMER PIERCE ASSOCIATES, INC.

PROJECT [illegible] DWG NO. 205

SPEC LOT PLAN SCALE N.T.S.

DEP INFORMATION SHEET

Appealing a Department Licensing Decision

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

SUMMARY

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

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

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

II. JUDICIAL APPEALS

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

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

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

ADDITIONAL INFORMATION

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

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