



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

June 11, 2012

Mr. Tim Obrey
Regional Fisheries Biologist
Maine Department of Inland Fisheries and Wildlife
19 Village Street
Greenville, Maine 04441

RE: Application of Piscicides for the Control of Invasive Fishes
Big Wadleigh Pond, T8 R15 WELS, Piscataquis County, Maine
General Permit Coverage #MEG180003
Maine Waste Discharge License #W-009089-5Y-A-N

Dear Tim:

Enclosed is a Department Order granting coverage for the Maine Department of Inland Fisheries and Wildlife's (MDIFW) Big Wadleigh Pond piscicide treatment program under the General Permit for Application of Piscicides for the Control of Invasive Fishes, #MEG180000 / #W-009045-5Y-A-N. The individual permit number is #MEG180003 / Maine WDL # W-009089-5Y-A-N. These numbers will serve as the applicable reference numbers for MDIFW's coverage under this General Permit. The General Permit is valid until September 9, 2014. MDIFW's coverage under the General Permit is valid for one year from the effective date of this Order, unless renewed by the Department pursuant to the provisions of the General Permit, Part 1, Special Condition H, Continuing Coverage and Termination.

If you have any questions regarding the General Permit coverage or its terms and conditions, please do not hesitate to call me at (207) 215-1579 or Gregg Wood at (207) 287-7693.

Sincerely,

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

Enc./cc: John Boland, Michael Brown, D. Jason Seiders (MDIFW); Gregg Wood, Lori Mitchell (MEDEP);
Sandy Mojica (USEPA)

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

DEPARTMENT ORDER

IN THE MATTER OF

ME DEPT INLAND FISHERIES & WILDLIFE	)	APPLICATION OF PISCICIDES FOR THE
BIG WADLEIGH POND	)	CONTROL OF INVASIVE FISHES
T8 R15 WELS, PISCATAQUIS COUNTY, MAINE)	)	GRANTING OF COVERAGE
#MEG180003	)	#MEG180000
#W-009089-5Y-A-N	)	GENERAL PERMIT
APPROVAL)	

The Department of Environmental Protection (Department) has considered the Notice of Intent submitted by the MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE (MDIFW), with supportive data, agency review comments and other related materials on file for coverage under the Application of Piscicides for the Control of Invasive Fishes General Permit, #MEG180000, Maine Waste Discharge License #W-009045-5Y-A-N, issued by the Department on September 9, 2009, and FINDS THE FOLLOWING FACTS:

The applicant proposes to eradicate rainbow smelt (*Osmerus mordax*) in Big Wadleigh Pond, Class GPA, in T8 R15 WELS, Piscataquis County, Maine, through treatments with liquid and powder formulations of the approved piscicide rotenone. MDIFW has stated that the population of this invasive fish cannot be controlled by non-chemical means, that significant disruption of the aquatic habitat in the 157-acre pond is being caused by the invasive species, and that treatment is needed to restore habitat and/or that failure to rapidly control the invasive species threatens to result in significant environmental harm. The treatment program is part of MDIFW's management plan for restoration of native Landlocked Arctic charr (*Salvelinus alpinus oquassa*) and brook trout (*Salvelinus fontinalis*) in Big Wadleigh Pond.

The applicant has indicated that the Big Wadleigh Pond aquatic piscicide treatment program complies with the provisions of General Permit #MEG180000 for control of invasive fishes utilizing an approved aquatic piscicide and appropriate treatment methods. The treatment program will target Big Wadleigh Pond, two small inlet streams, and the outlet stream down to a physical barrier to fish migration, thus preventing a natural reintroduction of the eradicated species. The applicant has indicated it will comply with requirements for biological monitoring, piscicide monitoring, water quality monitoring, physical monitoring, computer modeling, reporting, and all other terms and conditions of the General Permit for the Application of Piscicides for the Control of Invasive Fishes.

Administered in accordance with the General Permit, the discharges identified by the applicant will not have a significant adverse effect on water quality or cause or contribute to the violation of the water quality standards of the receiving water.

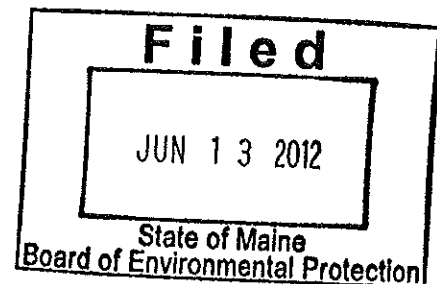
THEREFORE, the Department GRANTS coverage for MDIFW under the Application of Piscicides for the Control of Invasive Fishes General Permit, #MEG180000/ #W009045-5Y-A-N subject to the terms and conditions therein (attached). The General Permit is valid until September 9, 2014, unless reissued by the Department. The applicant's coverage under the General Permit is valid for one year from the effective date below, unless renewed by the Department pursuant to the provisions of the General Permit, Part 1, Special Condition H, Continuing Coverage and Termination.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS 16th DAY OF June, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Keenan
For Patricia W. Aho, Commissioner



Public notice of the Notice of Intent was published on or about: March 17, 2012

A Notice of Intent was received by the Department on: May 4, 2012

A Notice of Intent was accepted by the Department on: May 4, 2012

Date filed with Board of Environmental Protection: _____

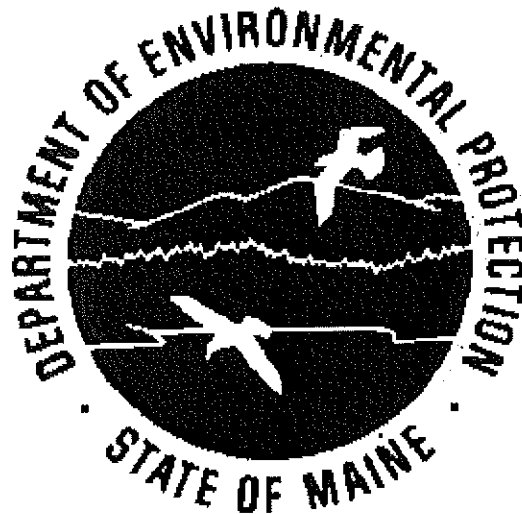
This Order prepared by Robert D. Stratton, BUREAU OF LAND & WATER QUALITY

STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

General Permit Application of Piscicides for the Control of Invasive Fishes

Maine Pollutant Discharge Elimination System
Maine Waste Discharge License Program



Bureau of Land and Water Quality
Maine Pollutant Discharge Elimination System (MEPDES) Permit
Maine Waste Discharge License (WDL)

September 1 2009
#MEG180000
#W-009045-5Y-A-N

Note: Blue, underlined text within this document signifies hyperlinks to additional informational sources relative to the indicated text. Printed copies of these materials will be maintained by MDIFW.

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

DEPARTMENT ORDER

IN THE MATTER OF

GENERAL PERMIT	) MAINE POLLUTANT DISCHARGE
PISCICIDES FOR THE CONTROL	) ELIMINATION SYSTEM PERMIT
OF INVASIVE FISHES)
STATE OF MAINE	) AND
#W-009045-5Y-A-N	) WASTE DISCHARGE LICENSE
#MEG180000	) APPROVAL
NEW	

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Maine law, 38 M.R.S.A. §414-A et seq., and applicable regulations, the Department of Environmental Protection (Department, MEDEP) has considered the issuance of a Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for the **APPLICATION OF PISCICIDES FOR THE CONTROL OF INVASIVE FISHES (GENERAL PERMIT)**, with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

PERMIT SUMMARY

Pursuant to applicable laws and rules of the State's Maine Pollutant Discharge Elimination System (MEPDES) / Maine Waste Discharge License (WDL) Program, the Department's Bureau of Land and Water Quality, Division of Water Quality Management has developed a general permit for the application (discharge) of piscicides for the control of invasive fishes. This general permit authorizes the Maine Department of Inland Fisheries & Wildlife (MDIFW) and its qualifying agents to directly discharge authorized aquatic piscicides to Class GPA, AA, A, B and C waters of the State, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles, that contain populations of invasive fishes.

CONCLUSIONS

Based on the findings in the attached Fact Sheet dated July 21, 2009 and revised September 1, 2009, and subject to the conditions listed in Part I and Part II of this general permit, 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) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S.A. §414-A(1)(D).
5. The discharge of authorized aquatic piscicides in accordance with the terms and conditions of this general permit will provide adequate protection of non-target species.
6. The discharge of authorized aquatic piscicides in accordance with the terms and conditions of this general permit will not have a significant adverse effect on receiving water quality or violate the standards of the receiving water's classification.

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES this Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License General Permit for the APPLICATION OF PISCICIDES FOR THE CONTROL INVASIVE FISHES to Class GPA, Class AA, A, B, and C waters, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles, that contain populations of invasive fishes, SUBJECT TO THE ATTACHED CONDITIONS, 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 included as Part I of this general permit.
3. The attached Standard Conditions included as Part II of this general permit.

The expiration date of this general permit is five (5) years from the date of signature below.
PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES
DONE AND DATED AT AUGUSTA, MAINE THIS 9TH DAY OF SEPTEMBER, 2009
DEPARTMENT OF ENVIRONMENTAL PROTECTION.

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

PART I – SPECIAL CONDITIONS

A. AUTHORITY

A permit is required for the direct or indirect discharge of pollutants to waters of the State pursuant to Maine law, 38 M.R.S.A. §413. The Maine Department of Environmental Protection (Department, MEDEP) may issue a general permit authorizing the discharge of certain pollutants pursuant to Chapter 529 of Department rules. The similarity of discharges for the application of authorized aquatic piscicides for the control of invasive fishes has prompted the Department to issue this general permit for those receiving waters not otherwise prohibited by Maine law and which contain populations of invasive fishes as determined by MDIFW pursuant to 38 MRSA §466, sub-§8-A. A violation of a condition or requirement of a general permit constitutes a violation of the State's water quality laws, and subjects the discharger to penalties under Maine law, 38 M.R.S.A. §349. Nothing in this general permit is intended to limit the Department's authority under the waste discharge and water classification statutes or rules. This general permit does not affect requirements under other applicable Maine statutes and Department rules.

B. SPECIALIZED DEFINITIONS

In addition to the definitions found in Department rule Chapter 520 and in the waste discharge and water classification laws, the following terms have the following meanings when used in this general permit.

1. Authorized Aquatic Piscicide. "Authorized aquatic piscicide" means granular, solid, powder, liquid, or other formulations of piscicides whose sole active ingredients are registered with both the United States Environmental Protection Agency (USEPA) and Maine Board of Pesticides Control (BPC) and are applied in accordance with USEPA approved label use by a licensed applicator to control invasive fishes. Specifically, the formulations that may be used under this permit are those below, or successor formulations with substantially the same constituents. From time to time, formulations may be re-registered or minor modifications, including product names, may be made subject to EPA and Maine BPC registration. If new formulations replace these listed below, the Notice of Intent (NOI) will include those formulations proposed for use, their specifications, and information sufficient to allow the Department to conclude that conditions and safeguards in this permit will be met.
 - a. PRENTOX Prenfish Toxicant Liquid E.C. (EPA Reg No. 655-422) (5% rotenone).
 - b. PRENTOX Rotenone Fish Toxicant Powder (EPA Reg No. 655-691) (7.4% rotenone).
 - c. PRENTOX CFT Legumine™ Fish Toxicant (EPA Reg No. 75338-2). (5% rotenone) (upon registration with Maine BPC)
2. Booster Treatment. "Booster treatment" means one or more piscicide applications which are planned and executed as part of a comprehensive treatment program following an initial application within the same season.
3. Department. "Department" and "MEDEP" mean the Maine Department of Environmental Protection.

B. SPECIALIZED DEFINITIONS (cont'd)

4. Invasive Fishes. "Invasive fishes" means a fish species considered invasive as determined by MDIFW pursuant to 38 MRSA §466, sub-§8-A. A species may be determined to be invasive for all waters or for specific waters.
5. Licensed Applicator. "Licensed applicator" means a person licensed by the State of Maine Department of Agriculture Board of Pesticides Control to apply aquatic piscicides.
6. MDIFW. "MDIFW" means the Maine Department of Inland Fisheries and Wildlife.
7. Notice of Intent ("NOI"). "Notice of Intent" or "NOI" means a notification of intent to seek coverage under this general permit, submitted by MDIFW to the Department on a form provided by the Department.
8. Notice of Termination ("NOT"). "Notice of Termination" or "NOT" means a notification of intent to end coverage of a piscicide treatment program for a waterbody licensed under this general permit, submitted by MDIFW on a form provided by the Department.
9. Public Water Supplier. "Public water supplier" means water systems which regularly serve 25 or more people per day or which have at least 15 service connections as defined in Chapter 22 M.R.S.A. § 2601 and 10-144 CMR 231 Section 2 in the State of Maine Rules Relating to Drinking Water.
10. Treatment Area. "Treatment Area" means a defined waterbody containing identified invasive fishes with boundaries extending to identifiable physical obstructions beyond which unaided reestablishment of the invasive fishes is not anticipated by MDIFW. A treatment area typically includes an additional defined secondary effects zone downstream determined through modeling, in which decreasing concentrations of rotenone may be detected but which also provides opportunities for escape, refuge, and/or other means of non-target species protection.
11. Treatment Program. "Treatment Program" means an initial piscicide application and any booster applications within the same season and/or follow-up applications which are planned for subsequent years at rates and intervals specified in an NOI. It may also include the use of other non-chemical methods which will be used in combination with piscicide applications to enhance its efficacy.
12. Waters of the State. "Waters of the State" means any and all surface and subsurface waters that are contained within, flow through, or under or border upon this state or any portion of the state except such waters as are confined and retained completely upon the property of one person and do not drain into or connect with any other waters of the state, as defined at 38 M.R.S.A., §361-A.7.

C. APPLICABILITY AND COVERAGE

Coverage under this general permit is limited to those receiving waters that conform to the Area of Coverage described below and that have had a completed NOI accepted by the Department. Applicability of this general permit is limited to activities described in the NOI that are in conformance with the terms and conditions of this general permit.

C. APPLICABILITY AND COVERAGE (cont'd)

1. **Area of Coverage.** The geographic area covered by this general permit is the entire State of Maine. This general permit covers application of authorized aquatic piscicides by a licensed applicator to fresh waters of the State classified by Maine's water classification laws as Class GPA, Class AA, Class A, Class B, Class C, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles, that contain populations of invasive fishes. No waterbody that serves as a Public Water Supply is eligible for coverage under this General Permit.
2. **General Restrictions.** Authorized piscicides may only be used where the hydrology of the receiving waterbody proposed for treatment allows for sufficient contact to prove effective against the target species. Aerial spraying of aquatic piscicides from fixed wing or rotary wing aircraft is not authorized under this general permit. **The Department may deny applications when the Department determines that proposed aquatic piscicide treatments are duplicative or ineffective in controlling the target species or that the methods and materials proposed do not adequately ensure protection of non-target resources or organisms.**
3. **Applicant.** MDIFW shall be the only approved general permit licensee. However, MDIFW may use qualified agents under its direct supervision and control in conducting activities approved by this general permit.
4. **Concentrations and Application Rates.** Maximum application rates and water concentrations shall comply with amounts specified on USEPA registered product labels and as specified in this permit. MDIFW will calculate actual dosages based upon the particular species pursuant to the tables of target concentrations in the Environmental Assessment, target species, site conditions, and other appropriate factors, and shall supply this information with the NOI. MDIFW shall comply with all applicable state laws.
5. **Treatment Plan.** Prior to piscicide application, MDIFW shall develop a treatment plan specifying the treatment program for the infested water body as directed in MDIFW's Rapid Response Plan for Invasive Aquatic Plants, Fish, and Other Fauna, Part 2: Fish and other Fauna Protocol and will retain the treatment plan at the MDIFW office in Augusta, available for inspection.
6. **Application Methods.** MDIFW shall use methods and rates optimal for successful treatment while limiting impacts to non-target resources and organisms. Specific application methods are described in the Fact Sheet. An application will consist of either a whole lake treatment, where the objective is to remove all fish species throughout a defined treatment area, or a spot or area treatment, where the objective is to remove specific populations of fish when concentrated in a limited area of the treatment area.

MDIFW shall provide details of the proposed treatment program demonstrating accommodations incorporated to ensure protection of non-target resources and organisms such as indicated below. If aquatic piscicide toxicity is anticipated to extend beyond the defined treatment area based on modeling or other predictive tools, MDIFW shall provide a clear demonstration of the significant need to conduct the program as designed as well as measures taken to ensure protection of non-target resources and organisms.

C. APPLICABILITY AND COVERAGE (cont'd)

Table 1. Application Methods for Protecting Non-target Resources and Organisms

Description (provide details for each with NOI)	Indicate
Well defined treatment area with no toxic discharge beyond physical obstructions.	
Well defined treatment area & minimized secondary effects zone with provisions for non-target protection.	
Summer treatment program with provisions for non-target protection..	
Fall/winter treatment program with provisions for non-target protection..	
Physical drawdown of treatment area planned.	
Provisions to treat/recycle/retain treated discharges until nontoxic.	
Limited spot/area treatments based on life histories of target species.	
Protection ensured for non-target resources and organisms by other means.	

D. DISCHARGE CONCENTRATION LIMITS

In conducting an approved invasive fish treatment program, average piscicide concentrations within the treatment area and secondary effects zone shall at no time exceed USEPA approved label rates. Further, to achieve greater protection of non-target resources and organisms while still achieving treatment efficacy, the treatment program shall be designed so that average concentrations of piscicides after dilution and dispersion shall not exceed the following concentrations which are all at or below label rates, as described in the Fact Sheet.

Fish designated by the MDIFW as invasives pursuant to 38 MRSA §466, sub-§8-A may be treated with an authorized piscicide provided that all conditions of this General Permit are met including that at no time shall the average concentration within the treatment area and secondary effects zone exceed the highest specified for the applicable piscicides in Table 2.

Table 2. Maximum permitted piscicide application rates authorized in this general permit.

Maximum Permitted Concentration	PRENTOX Prenfish Toxicant Liquid E.C.	PRENTOX CFT Legumine Fish Toxicant	PRENTOX Rotenone Fish Toxicant Powder
	2.0 mg/L	2.0 mg/L	2.0 mg/L

E. MONITORING

All sampling and analysis must be conducted in accordance with: (a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, (b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or (c) as otherwise specified by the Department. Routine water quality samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services (DHHS). Monitoring requirements are described in summary below and in further detail in the Fact Sheet and constitute minimum monitoring requirements. **Additional monitoring will be based on waterbody specific and treatment specific conditions and properties and will be**

E. MONITORING (cont'd)

specified in the NOI as needed. MDIFW's monitoring plans shall also consider information received from consultation with the MDIFW Non-game Program, MDIFW Regional Wildlife Biologist, MDOC Natural Areas Program, MDMR Bureau of Sea-Run Fisheries and Habitats, US Fish and Wildlife Service, and US NOAA Fisheries.

To determine the effectiveness of the piscicide treatment program, the need for booster piscicide treatments, and effects on non-target resources and organisms, monitoring efforts shall consist of biological, piscicide, chemical, and physical monitoring and computer modeling for the treatment area and downstream. The following tables provide the types of monitoring in each of these categories, to be indicated by the permittee in the NOI and reviewed and approved by the Department.

Table 3. Proposed monitoring activities within treatment area associated with rotenone treatment of freshwater lake. The permittee shall provide justification for proposed monitoring choices with the NOI.

Monitoring Within the Treatment Area			
Description	Before Treatment	During Treatment	After Treatment
Biological Monitoring - Conduct all surveys indicated unless extenuating circumstances and justification provided			
Treatment area fish survey	X	---	X
Treatment area visual invertebrate survey	X	---	X
Area non-game, threatened or endangered species survey.	X	---	---
PEARL species research	X	---	---
Piscicide Monitoring			
Sentinel fish cages in treatment area (standard, other options must be justified)	---	---	X
Sentinel fish tested offsite with water samples from treatment area using <i>S. fontinalis</i> or other MEDEP approved species.	---	---	
Indirect rotenone levels using <i>C. dubia</i> or other MEDEP approved species.	---	---	
Direct rotenone levels (not currently available in Maine)	---	---	
Water Quality Monitoring - Conduct all monitoring indicated unless extenuating circumstances and justification provided			
Dissolved oxygen profiles	X	---	X
Water temperature profiles (degrees C)	X	---	X
Secchi Disk transparency	X	---	X
pH	X	---	X
Alkalinity	X	---	X
Phosphorus	X	---	X
Conductivity	X	---	X
Physical Monitoring - drawdown and intermittent outlet conditions only			
Water level	X	X	X
Outlet flow	X	X	X
Computer Modeling of Rotenone Degradation and Dispersal -conduct and provide both models unless extenuating circumstances and justification provided.			
Computer modeling of treatment area	X	---	---
Computer modeling of outlet	X	---	---

E. MONITORING (cont'd)

Table 4. Proposed monitoring activities downstream of treatment area associated with rotenone treatment of freshwater lake. The permittee shall provide justification for proposed monitoring choices with the NOI.

Monitoring Within the Secondary Effects Zone and Downstream of Treatment Area			
Description	Before Treatment	During Treatment	After Treatment
Biological Monitoring - Conduct all surveys indicated unless extenuating circumstances and justification provided			
Secondary effects zone and downstream fish composition using IFW Stream Survey Protocol Level 1, Level 2 or Level 3	X	---	X
Secondary effects zone and downstream habitat composition		---	
Secondary effects zone and downstream visual invertebrate survey	X	---	X
Area non-game, threatened or endangered species survey.	X	---	---
PEARL species research	X	---	---
Piscicide Monitoring			
Sentinel fish cages in secondary effects zone and downstream area(s) (standard, other options must be justified)	---	---	X
Sentinel fish tested offsite with water samples from downstream area using <i>S. fontinalis</i> or other MEDEP approved species.	---	---	
Indirect rotenone levels using <i>C. dubia</i> or other MEDEP approved species.	---	---	
Direct rotenone levels (not currently available in Maine)	---	---	
Water Quality Monitoring - Conduct all monitoring indicated unless extenuating circumstances and justification provided			
Dissolved oxygen profiles	X	---	X
Water temperature profiles (degrees C)	X	---	X
Secchi Disk transparency	X	---	X
pH	X	---	X
Alkalinity	X	---	X
Phosphorus	X	---	X
Conductivity	X	---	X
Physical Monitoring - drawdown and intermittent outlet conditions only			
Water level	X	X	X
Outlet flow	X	X	X
Computer Modeling for Rotenone Degradation and Dispersal - conduct and provide both models unless extenuating circumstances and justification provided.			
Computer modeling of treatment area	X	---	---
Computer modeling of secondary effects zone and downstream areas.	X	---	---

E. MONITORING (cont'd)

1. Biological Monitoring. Aquatic community monitoring shall be conducted as follows:

- a. **Treatment Area.** MDIFW will monitor the fish populations within the treatment area at least once before each initial annual treatment and within one year after the treatment program ends to evaluate treatment efficacy and effects on non-target fish species.
- b. **Downstream Areas.** For treatment with outflow during the period when the piscicide is active within the treatment area, MDIFW shall monitor fish populations in one representative area within the secondary effects zone and one representative area further downstream below the outlet once before treatment and within one year after the treatment program ends.

Treatment area and downstream fish monitoring shall be conducted during the field season and at a time chosen to be representative of normal conditions. Monitoring methods shall consist of visual shoreline surveys followed by one or more of the following: angler surveys, seine, gillnet, minnow trap, electrofishing, or other appropriate methods. MDIFW shall record fishes found by scientific name and report any evidence of negative effects of the treatment program on those fishes to the Department.

- c. **Non-Target Fauna.** MDIFW will consult with HMAP and the MDIFW Reptile, Amphibian, and Invertebrate Group Leader before filing a general permit NOI to determine the presence, composition, and relative abundance of any known non-target fauna in the treatment area and outlet areas. MDIFW will also conduct visual observations in the treatment area, secondary effects zone, and further downstream throughout the treatment program for treatment-related effects on macroinvertebrates, fish, and other aquatic organisms. MDIFW shall report the occurrence and significance of any adverse findings within 24-hours. MDIFW and the Department shall evaluate the occurrence and determine an appropriate course of action. MDIFW shall also report observations on recovery of non-target faunal communities after treatment.
- 2. Piscicide Concentration Monitoring.** Unless otherwise designated and adequately justified in the NOI, piscicide sampling will be conducted through sentinel fish testing. The permittee shall conduct monitoring within the treatment area once within 30-hours of each initial annual treatment to determine the concentration (mg/L) of rotenone at the time of treatment, at the time of testing, and the necessity of additional (booster) treatments. A minimum of three grab samples shall be collected for water column profile analysis from the surface to the bottom. Analyses shall be conducted using bioassay methods described in Demong (1992) using a minimum of three 3-6-inch long live brook trout per profile depth, with trout responses used to calculate rotenone concentrations. Results shall be reported to the Department in writing pursuant to Permit Special Condition F. Under unusual conditions and Department approval, sentinel cages may be proposed to be replaced with collection of treated water and laboratory sentinel fish (*Salvelinus fontinalis*) testing or testing on

E. MONITORING (cont'd)

Ceriodaphnia dubia according to standard toxicity testing methods, proper sample handling requirements, etc. The monitoring location shall be specified on a map submitted with the NOI. When ambient conditions do not favor brook trout health and survival, MDIFW may propose indigenous sentinel species instead. MDIFW computer models of rotenone dilution and decomposition can be used to predict treatment times and detoxification rates, subject to Department approval. Sentinel cage testing must be used to determine the toxicity of discharge water and effects on non-target resources and organisms.

- a. **Summer treatments:** During summer treatments, rotenone degradation in surface waters occurs more rapidly, typically less than seven days at 70 degrees F. MDIFW will monitor rotenone levels in a treatment area with sentinel cages. **Summer treatments are preferred by the Department when feasible based on the developmental stage of target species, because of more rapid rotenone decomposition and a greater ability to protect non-target resources and organisms.**
- b. **Fall/winter treatments:** During fall and winter treatments, rotenone degradation occurs more slowly, typically between three and twelve weeks depending on water conditions such as temperature, depth, organic matter and light intensity. MDIFW anticipates detoxification during the spring snow melt and turnover at the latest. Sentinel cages will be used to determine when the lake is safe to restock. **Fall and winter treatments will only be considered when there are no other practical alternatives and when it can be clearly demonstrated and verified by sentinel cage testing and other available methods that non-target resources and organisms will be protected to the extent possible and not unreasonably adversely impacted.**
- c. **Downstream Monitoring.** Secondary effects zone and downstream monitoring is required when a whole lake treatment is performed and there is anticipated to be outflow during the time of effective piscicide concentrations within the treatment area. The permittee shall conduct residual rotenone toxicity testing within the secondary effects zone and in proximity to the downstream boundary of the secondary effects zone immediately upon occurrence of post-treatment outlet flow. This analysis shall utilize 48-hour toxicity tests on five live brook trout placed in sentinel cages and timed so that completion of the test shall occur no less than 48-hours before outlet flow. When ambient conditions do not favor brook trout health and survival, MDIFW may propose indigenous sentinel species instead. Analyses shall be repeated at one-week intervals until tests indicate 100% survival of the sentinel fish, regardless of the status of outlet flow. Results shall be reported to the Department in writing pursuant to Permit Special Condition F. The sampling location will be designated on a map submitted with the NOI and will be representative of downstream conditions. Additional downstream sentinel locations may be required to demonstrate protection of sensitive non-target resources and organisms.

E. MONITORING (cont'd)

Requirements for secondary effects zone and downstream monitoring for spot or area treatment shall be based on the dilution within the receiving water and whether the discharge is anticipated to result in the release of detectable piscicide concentrations downstream. This determination shall be made by the Department based on the extent of spot or area treatments proposed.

- d. **Duration of Piscicide Monitoring.** MDIFW will monitor piscicide levels in the treatment area to determine when the water is sufficiently nontoxic to restock with fishes and will monitor piscicide levels within the secondary effects zone and further downstream to demonstrate that non-target resources and organisms within are protected. Monitoring will be conducted until it is clearly demonstrated that the discharge is non-toxic to non-target resources and organisms.
3. **Water Quality Monitoring.** MDIFW will sample lake water quality at least twice per field season, separated by approximately 60-days (i.e. spring/summer and fall) timed to entail pre and post-treatment during years in which treatment occurs, for the following parameters: dissolved oxygen profiles (mg/L), temperature profiles (degrees C), Secchi disk transparency (m/ft), pH (s.u., at surface and within 1-meter of bottom), alkalinity (mg/L CaCO_3 , at surface and within 1-meter of bottom), total phosphorous (mg/L), and conductivity (umhos/cm). Monitoring shall conform to the Department's Standard Field Methods for Lake Water Quality Monitoring and shall be reported to the Department in writing pursuant to Permit Special Condition F.
4. **Physical Monitoring.** For treatment programs involving a drawdown and for those with intermittent outlet conditions, MDIFW will propose a frequency for, and conduct, physical monitoring based on site specific hydrologic factors, with a minimum frequency consisting of once per month during the active period for the piscicide.
5. **Computer Modeling.** MDIFW will conduct and provide results of computer modeling predictions of rotenone degradation and dispersal in treatment areas and downstream areas.

F. REPORTING

MDIFW shall conduct monitoring programs as described in Part I- Special Conditions. MDIFW shall report monitoring results to the Department as follows:

Piscicide concentration monitoring results shall be reported on a quarterly basis, with the results of monitoring conducted from January through June each year (2 quarters) reported to the Department on or before July 15; the results of monitoring conducted from July through September each year reported on or before October 15; and the results of monitoring conducted from October through December reported on or before January 15.

Biological, water quality, and physical monitoring results for each calendar year in which treatments occur shall be reported on an annual basis in a report to the Department submitted on or before January 15 of the following year.

F. REPORTING (cont'd)

Computer modeling results shall be provided with the NOI and immediately upon discovery that modeling predictions have changed from previously submitted model results.

A signed copy of all reports required herein shall be submitted to the Department's assigned compliance inspector (unless otherwise specified) at the appropriate DEP regional office (Portland, Augusta, Bangor, Presque Isle), to be assigned upon approval of the NOI, based on the location of the treatment program.

G. NOTIFICATION AND ACCEPTANCE

1. **NOI Required.** MDIFW shall submit a completed Notice of Intent (NOI) with the appropriate initial permit fee to the Department for review and approval. NOI forms may be obtained from, and completed forms must be sent or hand delivered to:

Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management, Permitting Section
17 State House Station, Augusta, ME 04333-0017

The Department reserves the right to request additional information from MDIFW as necessary to determine if the application of authorized aquatic piscicides is warranted and justified.

2. **Required NOI Information.** A complete NOI must contain the following information for each individual piscicide treatment program the applicant proposes to conduct.
 - a. The legal name, mailing address and telephone number (e-mail address optional) and signature of MDIFW staff member responsible for the invasive fishes control project.
 - b. The legal name, mailing address, telephone number (e-mail address optional) and affiliation of any agents assisting, in full or in part, with the application of piscicides acting as agents of the MDIFW.
 - c. The legal name, mailing address, telephone number and Maine Board of Pesticides Control license number (e-mail address optional) of the licensed applicator to perform the aquatic piscicide treatment.
 - d. A statement demonstrating a significant need to control the invasive species and why application of the authorized aquatic piscicides is the most effective means of fish control. The statement must provide reasonable justification for the proposed treatment. Significant need to control the target species includes, but is not limited to:
 1. demonstration that a target population of aquatic fishes cannot be controlled by non-chemical means;
 2. the potential for the invasive fish populations to spread rapidly;
 3. any significant disruption of aquatic habitat caused by the invasive species;

G. NOTIFICATION AND ACCEPTANCE (cont'd)

4. if treatment is required to enable a broader scale fish control project under an aquatic fish management plan;
5. if treatment is needed to restore habitat and/or that failure to rapidly control the invasive species threatens to result in significant environmental harm to this or other natural resources.
- e. Justification for the project discussing why piscicide use is proposed over other treatment options which were considered, attempted, or are being used secondarily. Include a statement as to whether the proposed waterbody has been treated with aquatic piscicides in the past, and if so, dates, amounts, and identification of the aquatic piscicide(s) applied.
- f. A statement whether the proposed aquatic piscicide application(s) will be performed:
 1. as a rapid response project requiring immediate action to contain a newly identified invasive fish population, and why the response is necessary;
 2. in conjunction with a specific written management plan for the receiving water and including a reference to that plan; or
 3. pursuant to other resource management tools or objectives, details provided.
- g. A detailed project timeline describing proposed before, during, and after treatment data collection and monitoring.
- h. A topographic or similar type map, or copy thereof, extending approximately one mile beyond the proposed treatment site and specific detailed written directions to the proposed treatment site. The extent of the defined treatment area and secondary effects zone shall be indicated.
- i. A map of the waterbody to be treated showing monitoring location(s) and the area(s) to be treated if spot treatments are proposed. The extent of the defined treatment area and secondary effects zone shall be indicated.
- j. A description of each area to be treated, including, but not limited to, range of depths, average depth, substrate character (sand, gravel, mud/organic, etc), identification of any intermittent or permanent inlets to or outlets from the waterbody, presence or absence and characterization of non-target fish species within the waterbody, and any physical aspects of the site(s) to be treated that affect operations. The estimated size of the area(s) to be treated reported in square meters or acres. The estimated volume(s) to be treated reported in cubic meters or acre-feet.
- k. The USEPA registration number, formulation, concentration, maximum application rate, and frequency of application for all authorized aquatic piscicides proposed for use.
- l. Project modifications for protection of non-target resources and organisms. The treatment area must be defined in terms of the presence of identified invasive fishes, with the boundaries extending to identifiable physical obstructions beyond which unaided reestablishment of the invasive fishes is not anticipated. The piscicide treatment program shall be designed to limit toxic piscicide discharges

G. NOTIFICATION AND ACCEPTANCE (cont'd)

to within the defined treatment area or shall adequately demonstrate to the Department's satisfaction, project modifications that otherwise ensure protection of non-target resources and organisms. MDIFW shall provide information on the extent of any secondary effects zone and opportunities for escape, refuge, etc.

- m. Selection of the appropriate biological monitoring regime for the effects of the piscicide(s) on aquatic communities, including non-target species, pursuant to Part I – Special Conditions of this general permit. Monitoring shall be sufficient to evaluate the community of fishes as to species present and relative abundances before and after the treatment program. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI.
- n. Selection of the appropriate piscicide monitoring regime for the piscicide used and type of treatment pursuant to Part I – Special Conditions of this general permit. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI.
- o. Selection of the appropriate water quality monitoring regime pursuant to Part I – Special Conditions of this general permit. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI.
- p. Selection of the appropriate physical monitoring regime pursuant to Part I – Special Conditions of this general permit. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI.
- q. Selection of the appropriate computer modeling regime pursuant to Part I – Special Conditions of this general permit. Any deviations from these standard protocols will be detailed and a justification for deviation supplied with the NOI.
- r. Submit a statement that the MDIFW Non-Game Program, MDIFW Regional Wildlife Biologist, Maine Department of Conservation-Natural Areas Program, Maine Department of Marine Resource-Bureau of Sea-Run Fisheries and Habitats, USFWS, and US NOAA Fisheries (for projects affecting estuarine or marine habitats) have received notice of the proposed treatment and have responded that no elements of special concern for rare, threatened, or endangered species or natural communities are known in the affected area or that the treatment as proposed is considered to not significantly threaten the species or natural communities in question.
- s. A statement demonstrating notification of abutting landowners to all affected resources (efforts to notify when unsuccessful), lake associations / watershed associations, and the municipality, counties and/ or LURC Regional Offices.
- t. A copy of the press release or advertisement publication, date, and name of newspaper with general circulation in the area of the proposed treatment program.
- u. Signatures of the MDIFW Division Contact and Managing Agent certifying that the NOI were prepared with direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Failure to submit all required NOI information may result in finding the NOI incomplete for processing and may delay processing or result in denial of the NOI.

G. NOTIFICATION AND ACCEPTANCE (cont'd)

- 3. Public Informational Meeting, Filing of a NOI, Public Notice Required.** Prior to submitting a NOI for an invasive fish control project under this General Permit, MDIFW must hold a public informational meeting in the vicinity of the treatment area or, if the treatment area is extremely remote, in a location convenient to most abutting landowners to all affected resources. The purpose of the meeting is for MDIFW to inform the public of the project and its anticipated environmental impacts, and to educate the public about the opportunities for public comment to the Department during the application process. At least 10 days prior to the public informational meeting, notice of the meeting must be mailed to abutting landowners to all affected resources, the civil jurisdiction (for example, municipal office or in LURC jurisdiction, the LURC regional office and County Commissioners' office) in which the treatment will be located, and any affected lake associations / watershed associations. Notice of the meeting must also be published once in a newspaper of general circulation in the project area. MDIFW shall compile a record of all attendees, comments received, and resulting actions.

A copy of the NOI must be filed with each civil jurisdiction in which the treatment will be located, and with the MDIFW Non-Game Program, MDIFW Regional Wildlife Biologist, MDOC Natural Areas Program, MDMR Bureau of Sea-Run Fisheries and Habitats, USFWS, US NOAA Fisheries (for projects affecting estuarine or marine habitats), and lake associations / watershed associations in proximity to the treatment area, at the time it is submitted to the Department. Further, notice that MDIFW is applying to conduct the proposed project must be provided to abutting landowners to all affected resources. A press release must be issued or an advertisement must be published in a newspaper having general circulation in the area of the treatment program within the 30-day period prior to submittal of the NOI to the Department. Information to be provided in the press release or advertisement will include treatment purpose, treatment methods and materials, treatment location, date, and duration, how to get more information, and any applicable cautionary notes regarding human water consumption, water contact, livestock use, and irrigation. **Note, no waterbody that serves as a public water supply is eligible for coverage under this general permit.**

In addition, the treatment area(s) will be posted at likely access points with information about the treatment including advisories against swimming, drinking, and eating dead fish. **All known public access points to areas affected by the treatment must be closed during the period in which the authorized piscicide is active.**

- 4. Review of NOI and Other Information.** Upon review of a NOI for determination of coverage under this general permit, the Department may, at its discretion, require an applicant to apply for an individual permit for any proposed treatment. In making such a determination, the Department may consider factors including, but not limited to, the location of the waterbody and water quality issues particular to that area, expressed comments from state or federal agencies or the general public, consideration of invasive fish control strategies in or surrounding the proposed treatment sites, and potential effects on non-target resources and organisms.

G. NOTIFICATION AND ACCEPTANCE (cont'd)

- 5. Effective Date of Coverage.** The Department shall notify an applicant of coverage under this general permit within 30 days of receipt of each complete NOI as to whether or not coverage for the specific discharge is permitted. If the Department does not notify the applicant within 30 days, the NOI is accepted and coverage is granted. In the event coverage is not granted, the Department shall notify the applicant of the reason(s) for not granting coverage. MDIFW may apply for issuance of an individual waste discharge license if the proposed discharge(s) is not acceptable for coverage under this general permit.

Pursuant to the Department's administrative Rule Concerning the Processing of Applications and other Administrative Matters (06-096, Chapter 2, section 24.B.1), *"(w)ithin 30 days of the filing of a license decision by the Commissioner with the Board (of Environmental Protection), an aggrieved person may appeal to the Board for review of the Commissioner's decision."* The Department notes that a permittee has the legal authority to proceed with an approved project upon approval by the Commissioner and subject to any conditions established. However, the Department advises that **if MDIFW proceeds with an approved project prior to the end of the 30-day appeal period, it assumes all risks and responsibilities in the event that the Commissioner's decision is overturned or modified on appeal.**

- 6. Changed Conditions.** In the event that MDIFW proposes to make significant changes in the nature or scope of the aquatic piscicide treatment(s) described in a NOI previously submitted and approved, MDIFW shall notify the Department as soon as becoming aware of and before implementing such changes. Based on its evaluation of proposed changes, the Department may require the submission of a new NOI or application for an individual waste discharge license. Significant changes include, but are not limited to, changes in the extent of the waterbody or areas to be treated, changes in the hydrology in and surrounding the treatment area, changes in methods or materials used, changes in facts or information described in the NOI previously submitted and approved, or changes in anticipated impacts to non-target resources or organisms.
- 7. Notice of Termination (NOT).** The permittee holding approval to discharge pursuant to this general permit may submit a Notice of Termination (NOT) on a form provided by the Department at any time to voluntarily terminate coverage. Authorization to discharge under this general permit terminates on the day the signed NOT is received by the Department.

H. CONTINUING COVERAGE AND TERMINATION

- 1. Notices By Applicant and Payment of Annual Fees.** The term of this general permit is five years, and coverage for an individual project under this general permit lasts for a period of 12 months from the date the NOI is approved by the Department or through the expiration date of this general permit, whichever period is shorter. MDIFW may continue project coverage under this general permit from one year to the next, contingent upon compliance with the terms and conditions of the general permit, payment of an annual fee pursuant to 38 M.R.S.A. §353-B, demonstration of

H. CONTINUING COVERAGE AND TERMINATION (cont'd)

a continuing significant need to control the target species and provided there are no significant changes in the discharge as described in the NOI. **A statement demonstrating a significant need to control the target species and coordination with a management strategy must accompany MDIFW's annual fee for continuing coverage.** The demonstration of significant need shall also be sent to the MDIFW Non-Game Program, MDIFW Regional Wildlife Biologist, MDOC Natural Areas Program, MDMR Bureau of Sea-Run Fisheries and Habitats, USFWS, US NOAA Fisheries (for projects affecting estuarine or marine habitats), abutting landowners to all affected resources (describe efforts to notify when unsuccessful), and affected lake associations / watershed associations. Failure to pay the annual fee within 30 days of the anniversary date of previous NOI coverage is sufficient grounds for revocation or suspension of coverage. If changes occur or are proposed, MDIFW shall notify the Department as specified in Part I.G.6 of this general permit.

- 2. Individual Permit Coverage.** The Department may require that MDIFW apply for an individual permit to apply aquatic piscicides for the following reasons:
 - a. The aquatic piscicide application project is not in compliance with the conditions of this general permit.
 - b. The aquatic piscicide application project is a significant contributor of pollutants. In making this determination, the Department may consider the following factors:
 1. the location of the project with respect to waters of the State;
 2. the size of the discharge;
 3. the quantity and nature of the pollutants discharged to waters of the State; or
 - c. The project as proposed is determined to present significant adverse impacts on non-target resources and/or organisms.
 - d. Any other factors the Department determines are relevant, including information pursuant to Part I, §3 and §5, and pursuant to Department Rules, Chapter 529.
- 3. Exclusion from Coverage.** When an individual MEPDES Permit / Maine WDL is issued to MDIFW, the applicability of this general permit to MDIFW for that project is automatically terminated on the effective date of the individual Permit/WDL.

PART II – STANDARD CONDITIONS

The application of authorized aquatic piscicides for invasive fish control under this general permit must, at all times, comply with the State's water quality laws, including, the following restrictions, limitations and conditions.

A. NARRATIVE EFFLUENT LIMITATIONS.

This permit is subject to the following conditions outside of the defined treatment area and a minimized secondary effects zone:

- 1 The discharge shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.
2. The discharge shall not contain materials in concentrations or combinations which pose unacceptable risks to non-target species or resources or which would impair the usages designated by the classification of the receiving waters.
3. The discharge may not impart color, taste, turbidity, radioactivity, settleable materials, floating substances or other properties that cause the receiving water to be unsuitable for the designated uses ascribed to its classification.
4. Notwithstanding specific conditions of this general permit, the discharge 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.

B. MONITORING REQUIREMENT

The Department may require, following approval of a NOI, any monitoring of an individual discharge in addition to the standard protocols contained in this permit as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.

C. OTHER INFORMATION

When MDIFW becomes aware that it has failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Department, MDIFW shall promptly submit such facts or information.

D. OTHER APPLICABLE CONDITIONS

The conditions applicable to all permits in Department rule Chapter 523 sections 2 and 3 also apply to discharges pursuant to this general permit and are incorporated herein as if fully set forth.

E. ACCESSIBILITY

Employees and agents of the Department may enter any property at reasonable hours in order to determine compliance with water quality laws or this general permit.

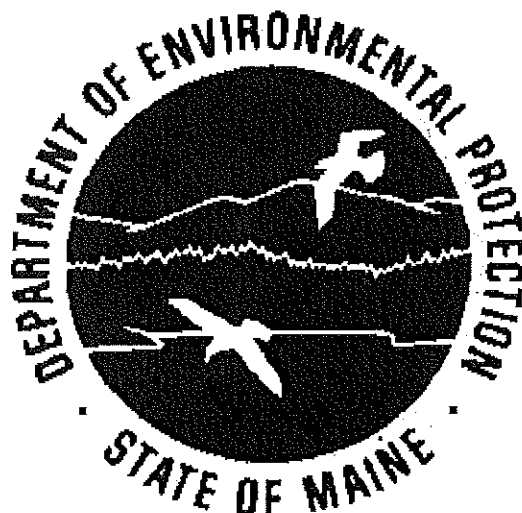
F. SEVERABILITY

In the event that any provision or part thereof, of this general 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.

PART III – FACT SHEET

Application of Piscicides for the Control of Invasive Fishes

**Maine Pollutant Discharge Elimination System
Maine Waste Discharge License Program**



DATE: July 21, 2009
REVISED: September 1, 2009

MEPDES Permit: #MEG180000
Maine WDL: #W-009045-5Y-A-N

Note: Blue, underlined text within this document signifies hyperlinks to additional informational sources relative to the indicated text. Printed copies of these materials will be maintained by MDIFW.

A. AREA OF COVERAGE AND RECEIVING WATER CLASSIFICATION

The area of coverage under this general permit is the entire state of Maine. This general permit covers the direct discharge of authorized aquatic piscicides, as defined in Part I.B.1. of the general permit, to fresh waters classified by Maine law as Class GPA, AA, A, B, C, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles, that contain populations of invasive fishes. No waterbody that serves as a public water supply is eligible for coverage under this general permit.

B. APPLICATION SUMMARY

The Maine Department of Environmental Protection (Department, MEDEP) has issued this general permit authorizing direct discharges of aquatic piscicides by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and its qualifying agents to certain waters of the State. MDIFW shall file a separate Notice of Intent (NOI) for each individual piscicide treatment program. A copy of the NOI must also be sent to the civil jurisdiction in which the treatment program will be located; to the MDIFW Non-Game Program, MDIFW Regional Wildlife Biologist, MDOC Natural Areas Program, MDMR Bureau of Sea-Run Fisheries and Habitats, US Fish and Wildlife Service, US NOAA Fisheries (for projects affecting estuarine or marine habitats), and lake associations /watershed associations in proximity to the treatment area. Further, notice of the proposed project must be provided to abutting landowners to all affected resources. Coverage under this general permit is dependent upon the ability to meet the eligibility, and the special, standard, and general conditions of the general permit. Continuing coverage is contingent upon compliance with the terms and conditions of the general permit, payment of an annual fee, demonstration of a continuing significant need to control the target species, and provided there are no significant changes in the discharge as described in the NOI. Coverage for MDIFW or the waterbody may be terminated in the event of non-compliance with the terms and conditions of the general permit or based on a Department determination that the discharge is having an unreasonable adverse impact on receiving water quality, non-target resources or organisms. MDIFW may apply for an individual Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for waterbodies or activities that are not covered by this general permit.

C. REGULATORY SUMMARY

A permit is required for the discharge of aquatic piscicides pursuant to Maine law,

38 M.R.S.A. §413(1) and Department rule, Chapter 514. A general permit authorizing the discharge of certain pollutants may be issued pursuant to Department rule Chapter 529. The similarity of discharges resulting from the application of authorized aquatic piscicides for the control of invasive fishes prompted the Department to issue this general permit for those receiving waters not otherwise prohibited by Maine law and that contain population(s) of invasive fishes.

A violation of a condition or requirement of a general permit constitutes a violation of the State's water quality laws, and subjects the discharger to penalties under Maine law, 38 M.R.S.A. §349.

C. REGULATORY SUMMARY (cont'd)

Pursuant to Maine law, 22 M.R.S.A. §1471-A, the Maine Board of Pesticides Control within the Maine Department of Agriculture, Food and Rural Resources regulates the sale and application of chemical insecticides, fungicides, piscicides and other chemical pesticides. Maine law, 22 M.R.S.A. §1471-D requires certification of commercial and private applicators for the use of any piscicide within the State.

On January 12, 2001, the MEDEP received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, USEPA extended Maine's NPDES program delegation to all but tribally owned discharges. That decision was subsequently appealed. On August 8, 2007, a panel of the U.S. 1st Circuit Court of Appeals ruled that Maine's environmental regulatory jurisdiction applies uniformly throughout the State.

On November 27, 2007, the USEPA issued a final rule stating that pesticides applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) were exempt from the federal Clean Water Act's NPDES permitting requirements. The USEPA's determination specifically referenced the application of pesticides directly to waters of the United States in order to control pests that are present in those waters. On January 7, 2009, the US 6th Circuit Court of Appeals (*National Cotton Council, et al. v. EPA*) vacated USEPA's 2007 rule. On June 8, 2009, the 6th Circuit granted a two year stay of its mandate that USEPA issue NPDES permits for the pesticide discharges described. USEPA sought the stay to provide time to develop a suitable permit program for state and tribal areas that do not have delegated permit authority.

It is noted that Maine law, 38 MRSA, Section 413, *Waste discharge licenses*, and MEDEP rule 06-096 CMR Chapter 514, Regulations Concerning the Use of Aquatic Pesticides, already provide MEDEP with the authority to regulate such discharges. Therefore, this General Permit is being issued pursuant to the Maine Pollutant Discharge Elimination System (MEPDES) permit and Maine Waste Discharge License (WDL) program and Maine's delegated permit authority.

Nothing in this general permit is intended to limit the Department's authority under the waste discharge and water classification statutes or rules. This general permit does not affect requirements under other applicable Maine statutes and Department rules.

D. PROJECT AUTHORITY AND NEED

MDIFW was established by the Maine Legislature "*to preserve, protect and enhance the inland fisheries and wildlife resources of the State*" and as such to develop policies and programs for the management of Maine's inland fisheries. The State of Maine Action Plan for Managing Invasive Species charges MDIFW as being responsible for coordinating the State's efforts to prevent, limit the spread, and reduce the harmful effects of invasive fish species; and for preventing, controlling, and managing invasive aquatic fish populations. Invasive fishes are determined by

D PROJECT AUTHORITY AND NEED (cont'd)

MDIFW pursuant to 38 MRSA §466, sub-§8-A. A species may be determined to be invasive for all waters or for specific waters. Invasive fish species includes, but is not limited to:

common carp *Cyprinus carpio* Linnaeus, 1758

goldfish *Carassius auratus* Linnaeus, 1758

northern pike *Esox lucius* Linnaeus, 1758

rainbow smelt *Osmerus mordax* Mitchill, 1814

smallmouth bass *Micropterus dolomieu* Lacepède, 1802

white sucker *Catostomus commersonii* Lacepède, 1802

Maine law includes narrative water quality criteria for each of the water classes covered by this general permit. The criteria describe the water quality values, habitat values, and designated uses that must be maintained for each of these water classes. Invasive aquatic species are fishes that threaten the animal or vegetational composition and diversity, habitat structure and suitability, values and uses of Maine waters. This general permit is intended as a tool to facilitate the MDIFW's mandates on invasive species and protection of Maine waters.

The aggressive tendencies and significant adverse effects of certain fishes on Maine's environment have caused those fishes to be classified as invasive fish species. This general permit may be used to control an established population of invasive fish species so that other non-chemical techniques can be used, or used to depopulate a waterbody so that native fish assemblages can be re-established. In 2006 Commissioners of the MEDEP and MDIFW approved a statewide Rapid Response Plan for responding to new infestations of invasive fish species and for dealing with invasive faunal introductions. This general permit addresses only invasive fish species but it is a critical part of the both MDIFW's abilities to carry out their legislative charge and the directives in the Rapid Response Plan.

In recent years the Department has issued two individual Maine Waste Discharge Licenses to MDIFW for invasive fish control projects. In 2006, Maine WDLs were issued for Big Speck Pond in Norway (#W-008231-5U-A-N/#MEU508231) for eradication of introduced chain pickerel and golden shiners and restocking with brook trout and for Nadeau Lake in Fort Fairfield (#W-008235-5U-A-N/#MEU508235) for eradication of introduced smallmouth bass, fathead minnow, and brown bullhead and restocking with brook trout. In both of these waters, the programs involved eradication of introduced fish species, restocking with native brook trout, and in the case of Nadeau Lake it also involved extensive restoration of a resource damaged by years of human alterations. These projects were successful, but required a significantly longer time to license than is desirable under a Rapid Response action. This General Permit will provide for the same level of environmental protection under a more expedited review period.

E. ADMINISTRATIVE REQUIREMENTS

The administrative procedures and requirements associated with this general permit are based on the following Department rules (CMR 06-096): Chapter 2, Rules Concerning the Processing of Applications and Other Administrative Matters; Chapter 514, Regulations Concerning the Use of Aquatic Piscicides; Chapter 529, General Permits for Certain Wastewater Discharges, and applicable Maine laws. In seeking coverage under this general permit, MDIFW must file a Notice of Intent (NOI) containing sufficient information and facts to describe all proposed aquatic piscicide treatments and waterbodies, so as to allow the Department to determine if the proposed activities are anticipated to comply with the general permit terms and conditions. Prior to submittal of a NOI, MDIFW must hold a public informational meeting to inform the public of the project and its anticipated environmental impacts, and to educate the public about the opportunities for public comment to the Department during the application process. Once a completed NOI is received, the Department has a maximum of 30 calendar days in which to act on it. If no other action is taken within that 30-day period, the NOI is considered approved at the close of business (5:00 p.m. Eastern Time Zone) on the thirtieth day following the Department's receipt of the NOI. A copy of the NOI must be also filed with other agencies and public notice provided as detailed in general permit Part 1.G.3.

Pursuant to Chapter 2, section 24.B.1, "(w)ithin 30 days of the filing of a license decision by the Commissioner with the Board (of Environmental Protection), an aggrieved person may appeal to the Board for review of the Commissioner's decision." The Department notes that a permittee has the legal authority to proceed with an approved project upon approval by the Commissioner and subject to any conditions established. However, the Department advises that if MDIFW proceeds with an approved project prior to the end of the 30-day appeal period, it assumes all risks and responsibilities in the event that the Commissioner's decision is overturned or modified on appeal.

This general permit is valid for a five-year term, and coverage under an approved NOI lasts for a period of 12 months from the date the NOI is approved by the Department, or through the expiration date of this permit, whichever period is shorter. MDIFW may continue coverage under this general permit from one year to the next, contingent upon compliance with the terms and conditions of the general permit, payment of an annual fee pursuant to 38 M.R.S.A. §353-B, demonstration of a continuing significant need to control the target species, and provided there are no significant changes in the discharge as described in the NOI. In the event that any individual aquatic piscicide application project is not in compliance with this general permit or upon determination by the Department that the discharge is having an unreasonable adverse impact on receiving water quality, non-target resources or organisms, the Department may require that MDIFW apply for an individual MEPDES Permit / Maine WDL or cease discharge. Examples of significant changes in activities include, but are not limited to, changes in the extent of the waterbody or areas to be treated, the hydrology in and surrounding the treatment area, methods or materials used, facts or information previously submitted and approved, or changes in anticipated impacts to non-target resources or organisms.

F. DESCRIPTION OF AUTHORIZED ACTIVITIES

This general permit authorizes the discharge (application) of authorized aquatic piscicides as defined in general permit Part I.B.1 that are registered with both the USEPA and the Maine Board of Pesticides Control and are applied in accordance with USEPA approved label use to control the existence of invasive fishes. This general permit requires the use of an appropriately certified applicator that has been licensed by the Maine Board of Pesticides Control for applications of the authorized aquatic piscicides to waters of the State. Authorized aquatic piscicides should be applied at the lowest appropriate labeled rates whenever possible (for example, when they can be applied during the most sensitive life stages of the target species or in specific areas so as to minimize non-target damage).

This general permit authorizes applications of certain piscicides to those waterbodies specified in Section A of this Fact Sheet to control invasive fishes. This general permit is not intended to control or eradicate any aquatic fish species other than those specifically listed in this permit as invasive fishes or as determined pursuant to 38 MRSA §466, sub-§8-A. It is noted, however, that certain waterbodies may contain several species of non-target fishes susceptible to the effects of the authorized aquatic piscicides. To the greatest extent possible, applications of piscicides under this general permit will be conducted to minimize impacts to non-target species, especially outside of the defined treatment area. This may be done by a number of means, including the use of the most selective formulation allowed by this permit, using the lowest effective dose or duration of exposure of piscicides to achieve efficacy, differentially dosing areas of waterbodies to areally target species of concern, lowering the water level in the treatment area to provide for additional time for piscicide degradation, altering the timing of piscicide use, and other methods including, but not limited to, those described in Permit Special Condition C, Table 1.

G. CONCENTRATIONS OF AUTHORIZED AQUATIC PISCICIDES

Typical rates of use along with highest rates allowed in this permit are specified below. Typical concentrations were derived from literature on field studies and interviews with fish control experts. Some of this is summarized by species in the Rapid Response Plan (DEP 2006), which was developed after significant review of available information by DEP staff and contractors. In all cases, the permitted rate is at or below the maximum USEPA approved label rate, and in most cases, the treatment concentration will be chosen in consultation with treatment professionals.

Since field conditions, the species involved, time of year, and hydrology, among other factors, will vary between treatments, the maximum permitted rate was chosen to allow some flexibility in specifying individual treatments. In all cases, the minimum effective concentrations and times will be used to minimize damage to non-target populations. However, the actual concentrations chosen need to be adequate to achieve significant control of the target species. Failure to do this may defeat the purpose of the applications and possibly invite environmental damage from more aggressive management that may be needed if the initial infestation is not reduced in a timely manner.

For those species where available information does not allow more defined specification of dosing, the specified maximum permitted rate is used as a default. If new information becomes available from field or lab experience elsewhere, MDIFW will incorporate that information into decisions on reducing rates applied to target species. For those species which are designated in

G. CONCENTRATIONS OF AUTHORIZED AQUATIC PISCICIDES (cont'd)

the future as invasive by the MDIFW, use of the piscicide as permitted herein may be specified, with consideration of the life history, morphology, and similarities to other invasive fishes for which more is known concerning their susceptibility to piscicides.

The following table from the Prenfish product label provides information on the amount of toxicant recommended and active rotenone included for specified types of treatments. Note that the maximum concentration of toxicant approved in this General Permit is 2.0 mg/L.

Table 1 Table 1. Prenfish Label Use Table adapted from Kinney, Edward 1965 Rotenone in Fish Pond Management. USDI Washington, D.C. Leaflet FL-576.

Types of Use	Parts per Million		Number of Acre-Feet/Gallon
	Concentration of Prenfish Toxicant	Concentration of Active Rotenone	
Selective Treatment	0.1 to 0.13	0.005 to 0.007	30 to 24
Normal Pond Use	0.5 to 1.0	0.025 to 0.050	6.0 to 3.0
Remove bullheads or carp	1.0 to 2.0	0.50 to 0.100	3.0 to 1.5
Remove bullheads or carp in rich organic ponds	2.0 to 4.0	0.100 to 0.200	1.5 to 0.75
Preimpoundment treatment above a dam.	3.0 to 5.0	0.200 to 0.250	1.0 to 0.60

Please note that a 2007 USEPA Re-registration Eligibility Decision (RED) recommends revision of the above cited label based on the maximum solubility of rotenone. This general permit limits the use of rotenone to a maximum of 2.0 mg/L (General Permit Part I, Section D) and further requires that it be applied in accordance with the USEPA approved label (General Permit Part I, Section B.1, etc.) In the event that the approved label is changed during the term of this General Permit, the more restrictive of 2.0 mg/L or the newly approved label rate shall apply until this General Permit is revised by the Department.

H. DESCRIPTION OF AUTHORIZED AQUATIC PISCICIDES

This general permit authorizes the application (discharge) of granular, solid, powder, liquid, or other formulations of piscicides as described in the following sections. Specifically, the formulations that may be used under this permit are those below, or successor formulations with substantially the same constituents. From time to time, formulations may be re-registered or minor modifications, including product names, may be made subject to EPA and Maine BPC registration. If new registered formulations replace these listed below, the NOI will include those formulations proposed for use, their specifications, and information sufficient allow the Department to conclude that conditions and safeguards in this permit will be met.

H. DESCRIPTION OF AUTHORIZED AQUATIC PISCICIDES (cont'd)

PRENTOX Prenfish Toxicant Liquid E.C. (EPA Reg No. 655-422) (5% rotenone).

PRENTOX Rotenone Fish Toxicant Powder (EPA Reg No. 655-691) (7.4% rotenone).

PRENTOX CFT Legumine™ Fish Toxicant (EPA Reg No. 75338-2) (5% rotenone) (upon registration with Maine BPC)

Descriptions of the properties and potential effects of each of these approved aquatic piscicides are included as Attachment A

I. MONITORING AND REPORTING REQUIREMENTS

This general permit requires monitoring of biological conditions, piscicide concentrations, water quality, physical conditions, and computer modeling, as described below. The monitoring requirements included herein constitute minimum monitoring requirements. Additional monitoring will be based on waterbody specific and treatment specific conditions and properties and will be specified in the NOI as needed. MDIFW's monitoring plans shall also consider information received from consultation with the MDIFW Non-Game Program, MDIFW Regional Wildlife Biologist, MDOC Natural Areas Program, MDMR Bureau of Sea-Run Fisheries and Habitats, US Fish and Wildlife Service, and US NOAA Fisheries.

1. Biological Monitoring (see General Permit Cond. E.1, Biological Monitoring): Biological monitoring is conducted to establish the extent and variety of the aquatic communities within the defined treatment area, secondary effects zone, and in downstream areas prior to and following piscicide treatment.

Aquatic community monitoring is conducted for two basic reasons: to assess the success of control on the target population(s) and to assess effects of treatment of the fish community as a whole within and beyond the defined treatment area. There are many ways to monitor fish populations, ranging from simple physical examination and field identification of fishes to very labor-intensive quantitative sampling. MDIFW will conduct before and after fish community monitoring according to MDIFW protocols.

As described in the General Permit, downstream biological monitoring must be conducted for treatment programs in which outflow occurs during the period when the piscicide is active within the treatment area. For projects consisting only of spot treatments in a waterbody, the need to conduct biological monitoring in the outlet stream will be based on determinations of the dilution and potential effects. At a minimum, MDIFW will conduct visual observations within the secondary effects zone and further downstream in the outlet stream for dead fishes to ensure that there is no evidence of effect on downstream fishes.

Non-target Fauna Observations: MDIFW will consult with HMAP and the MDIFW Reptile, Amphibian, and Invertebrate Group Leader before filing a rotenone NOI to determine the presence, composition, and relative abundance of any known non-target fauna in the treatment area and outlet areas. MDIFW will also conduct visual observations in the treatment area, secondary effects zone, and further downstream throughout the treatment program for treatment-related effects on macroinvertebrates, fish, and other aquatic organisms. MDIFW shall report the occurrence and significance of any adverse findings within 24-hours. Effects on non-target

I. MONITORING AND REPORTING REQUIREMENTS (cont'd)

fauna will be reported on Maine Amphibian and Reptile Atlas Project Site Cards (MARAP). MDIFW and the Department shall evaluate the occurrence and determine an appropriate course of action. MARAP cards will be forwarded to the MDIFW Reptile, Amphibian and Invertebrate Group Leader. MDIFW shall also report observations on recovery of non-target faunal communities after treatment.

2. Piscicide Monitoring (see General Permit Cond. E.2, Piscicide Monitoring): Piscicide monitoring is typically done to ensure that permit limits are not exceeded, to assure that target concentrations are met (or maintained in the event that booster treatments are required to maintain residuals over time), to determine when to re-apply (booster treatments), or to assess when concentrations drop below levels that will have an effect on invasive fish populations. Bioassay is the only allowed and currently available method of determining rotenone concentration.

Secondary effects zone and downstream monitoring is required when a whole lake treatment is performed and there is anticipated to be outflow during the time of effective piscicide concentrations within the treatment area. Secondary effects zone and downstream monitoring is conducted to determine and prevent adverse impacts on non-target resources and organisms. Sampling locations will be designated on a map submitted with the NOI based on downstream conditions and pursuant to guidance discussed in General Permit Cond. E.2, Downstream Monitoring.

3. Water Quality Monitoring (see General Permit Cond. E.3, Water Quality Monitoring): Water quality monitoring is conducted in order to evaluate treatment related effects on water quality in the treatment area and downstream resources, including to detect whether there are increases in total phosphorus associated with releases from dying fishes. Also, abnormally low Secchi disk transparencies (algae response to increased nutrients) or low dissolved oxygen beyond conditions typically expected in the waterbody, which may be due to fish decay, may be detected. Data taken as part of the treatment project will be compared to pre-treatment data, if available, to determine evidence for water quality impacts due to the treatment.

Water quality monitoring will be conducted at least twice per field season, separated by approximately 60-days (i.e. spring/summer and fall) timed to entail pre and post-treatment, during years when a lake is treated. Monitoring will include dissolved oxygen profiles, water temperature profiles, Secchi disk transparency, pH, alkalinity, total phosphorous, and conductivity conducted in conformance with the Department's Standard Field Methods for Lake Water Quality Monitoring.

4. Physical Monitoring (see General Permit Cond. E.4, Physical Monitoring): Physical monitoring is conducted in order to provide information necessary in managing the treatment program and minimizing adverse effects on non-target resources and organisms for treatment programs involving a drawdown and for those with intermittent outlet conditions. Monitoring will include the water level in the treatment area, the outlet flow status, and other parameters as necessary. MDIFW will propose a frequency for, and conduct, physical monitoring based on site specific hydrologic factors, with a minimum frequency consisting of once per month during the active period for the piscicide.

I. MONITORING AND REPORTING REQUIREMENTS (cont'd)

5. Computer Modeling (see General Permit Cond. E.5, Computer Modeling): Computer modeling will be conducted to predict rotenone degradation and dispersal in treatment areas, secondary effects zones, and downstream areas. MDIFW's computer models for the treatment program shall be provided with the NOI.

6. Reporting: Results of all monitoring and modeling shall be reported to the Department as described in general permit Part I.F.

J. PUBLIC HEALTH CONCERNS AND RISK REDUCTION

Aquatic piscicides covered under this permit have been reviewed by the USEPA during the registration process. USEPA considered studies on human exposure as well as laboratory and field studies of both acute and chronic effects on animals. The labels set limits that are unlikely to pose risk to humans given normal behavior and using very conservative assumptions as to exposure and duration of piscicides in the environment. Aquatic pesticides covered under this permit have been reviewed by other private and public organizations including:

Maine Department of Inland Fisheries and Wildlife, Programmatic Environmental Assessment: for reclamation of various lakes and ponds in the State of Maine under the Brook Trout and Native Fish Restoration and Enhancement Program. Appendix A (below)

Washington Department of Fish and Wildlife, Lake and Stream Rehabilitation: Rotenone Use and Health Risks, Final Supplemental Environmental Impact Statement.

American Fisheries Society, Rotenone Stewardship Program, Rotenone Use in Fisheries Management Manual.

New Zealand, Department of Conservation, Rotenone-a review of its toxicity and use for fisheries management.

The actual limits set in this permit are at or below the maximum allowable under USEPA approved label rates. This is done both to limit human contact and to reduce non-target effects to the maximum extent practicable.

As noted above, a public informational meeting will be held prior to submittal of a NOI to inform the public of the project and its anticipated environmental impacts, and to educate the public about the opportunities for public comment to the Department during the application process. Abutting landowners to all affected resources will then be notified when MDIFW submits a NOI for General Permit coverage. In addition, the treatment area(s) will be posted at likely access points with information about the treatment including advisories against swimming, drinking, and eating dead fish. And, all known public access points to areas affected by the treatment will be closed during the period in which the authorized piscicide is active.

K. CONDITIONS OF LICENSES / PERMITS

Discharges of authorized aquatic piscicides under this general permit are subject to 38 M.R.S.A. §414-A, 1(E), provisions and conditions of Maine's Water Classification Program at 38 M.R.S.A. §§ 464(4), 465, and 465-A and Department rules Chapters 514 (Regulations Concerning the Use of Aquatic Pesticides), 523(2) (Waste Discharge License Conditions Applicable to All Permits), and 529 (General Permits for Certain Wastewater Discharges).

L. REGULATIONS CONCERNING THE USE OF AQUATIC PESTICIDES

Department Rules, Chapter 514, REGULATIONS CONCERNING THE USE OF AQUATIC PESTICIDES. Section 1, Definition. states, “an aquatic pesticide is any substance applied in, on or over the waters of the State or in such a way as to enter those waters for the purpose of inhibiting the growth or controlling the existence of any fish or animal in those waters”. In accordance with Chapter 514, Section 2, Criteria for Approving a License to Use Aquatic Pesticides,

Subsection A, “Except as provided in 38 M.R.S.A. Section 362-A, no permit for aquatic pesticide use will be issued for a pesticide which is not registered for the intended use by the United States Environmental Protection Agency and the Maine Department of Agriculture”.

Subsection B, “No permit for aquatic pesticide use will be issued unless the applicant or agent for the applicant is certified and licensed in aquatic pest control by the Maine Board of Pesticides Control”.

Subsection C, “A permit for aquatic pesticide use will be issued only if the applicant provides adequate protection for non-target species”.

Subsection D, “A permit for aquatic pesticide use will be issued only if the applicant can demonstrate a significant need to control the target species and that pesticide control offers the only reasonable and effective means to achieve control of the target species. Demonstration of significant need may include, but not be limited to, health risk, economic hardship, or loss of use.”

Subsection E, “In addition to paragraphs (A) through (D), any discharge of aquatic pesticides, alone or in combination with all other discharges, shall meet all other applicable requirements of Maine’s waste discharge laws including, but not limited to, the provisions of 38 M.R.S.A. Sections 464 and 465”.

In response to the citations above: PRENTOX Prenfish Toxicant Liquid E.C. (EPA Reg No. 655-422), and PRENTOX Rotenone Fish Toxicant Powder (EPA Reg No. 655-691), are registered for the use proposed in this licensing action by the USEPA and the Maine Department of Agriculture. PRENTOX CFT Legumine™ Fish Toxicant (EPA Reg No. 75338-2) is authorized for use pursuant to this General Permit only upon its registration with Maine BPC. The permittee shall utilize a pesticide applicator who is certified and licensed in aquatic pesticide control by the Maine Bureau of Pesticide Control and shall provide proof of certification / licensing to the Department with the NOI. The permittee has disclosed that effects on non-target species are anticipated due to the scope of treatment projects, but that such effects shall be minimized to the extent possible. In submitting a NOI for coverage under this General Permit, the permittee has demonstrated a significant need to control the target species, has explored potential treatment methods, and has designed an effective treatment program that incorporates appropriate methods. The Department anticipates that proposed treatment programs will result in short-term adverse impacts to non-target organisms especially within the defined treatment area, but that such impacts are necessary in order to eliminate invasive fishes, prevent long-term adverse impacts to non-target organisms and resources, and ensure long-term maintenance of receiving water quality and uses in both treated and connected waters. The Department finds that the aquatic pesticide treatment program described herein complies with Chapter 514. Additional details on the aquatic pesticide treatment program water quality and fish community monitoring program and reporting requirements are detailed in this Fact Sheet.

M. RECEIVING WATER QUALITY STANDARDS

This general permit authorizes discharges to Class GPA, AA, A, B and C waters of the State, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles. Maine law, 38 M.R.S.A. §465 describes the standards for Class AA, A, B, and C waters, 38 M.R.S.A. §465-A describes the standards for Class GPA waters, and 38 M.R.S.A. §464(4) describes the standards for tributaries to Class GPA waters and those waters having drainage areas of less than ten square miles. This General Permit does not authorize the discharge of piscicides to any Public Water Supply.

N. RECEIVING WATER QUALITY AND HABITAT CONDITIONS

The active ingredients in the aquatic piscicides authorized for use under this general permit are EPA registered and formulated for aquatic use. Further discussion on the basic identification and information about formulations covered under this permit are included in Fact Sheet Attachment A. This general permit does not authorize the use of other compounds; thus concerns with chemical toxicity are limited to the specific authorized aquatic piscicides, for which such information is provided herein.

Lakes and ponds and streams dominated by invasive fishes do not exhibit natural habitat characteristics, suffering reduced habitat suitability for fish and other aquatic life and those species managed for by MDIFW. Invasive fish species disrupt natural systems by crowding out native and managed fishes and altering the physical and biological structure of the aquatic habitat. Eradication of invasive fishes is often feasible, and significant protection for native and managed fish communities can be achieved even by reducing densities of aggressive invasive fishes. This reduces their ability to spread to new habitat within the infested water or to other waterbodies.

Piscicide applications under this permit are designed to eradicate invasive species in an attempt to restore and preserve the natural habitat characteristics of the specific water of the State. As stated in Fact Sheet Section L, the Department anticipates some short-term adverse impacts, but considers such impacts as necessary in order to control invasive species, prevent long-term adverse impacts to non-target organisms and resources, and ensure long-term maintenance of receiving water quality and uses in subject waterbodies and connected waters.

No waterbody that serves as a public water supply is eligible for coverage under this general permit. The Department has not identified other significant geographical areas of concern that should be excluded from coverage under this general permit. Additional diligence is required in applications in any waters known to contain rare, endangered, or threatened aquatic species. The Department anticipates that treatment programs approved under this general permit will result in long-term improvement in receiving water quality, habitat, and designated uses.

O. ANTI-DEGRADATION

The State's antidegradation policy is set forth in Maine law at 38 M.R.S.A. §464(4)(F). The Department has determined that the discharge of the authorized aquatic piscicides in accordance with the terms and conditions of this general permit will not violate the provisions of the anti-degradation policy.

P. PUBLIC COMMENTS

Public notice of this general permit was made in the Bangor Daily, Morning Sentinel, Kennebec Journal, Sun-Journal, Portland Press Herald and The Times Record newspapers on or about June 29, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits 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.

Q. DEPARTMENT CONTACTS

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

Robert D. Stratton, Division of Water Quality Management

Bureau of Land and Water Quality

Department of Environmental Protection

17 State House Station, Augusta, Maine 04333-0017

Telephone: (207) 287-6114; Fax: (207) 287-3435; email: Robert.D.Stratton@maine.gov

R. RESPONSE TO COMMENTS

During the period of July 21, 2009 through August 20, 2009, the Department solicited comments on the proposed draft General Permit for the use of Piscicides for the Control of Invasive Fishes. The Department communicated with the Maine Department of Inland Fisheries and Wildlife, the potential General Permit permittee, on several issues and modified the draft General Permit as appropriate. The Department did not receive any other comments that resulted in significant revisions to the permit, but made some minor internal revisions. Therefore, no response to comments has been prepared.

GENERAL PERMIT, ATTACHMENT A: ENVIRONMENTAL ASSESSMENT

MEPDES GENERAL PERMIT # ME180000; Maine Waste Discharge Lic:#W-009045-5Y-A-N

ATTACHMENT A: ENVIRONMENTAL ASSESSEMENT

(Insert MDIFW Environmental Assessment here.)

GENERAL PERMIT, ATTACHMENT B: NOTICE OF INTENT

MEPDES GENERAL PERMIT # ME180000; Maine Waste Discharge Lic:#W-009045-5Y-A-N

ATTACHMENT B: NOTICE OF INTENT

(Insert Notice of Intent form here.)

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

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MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

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

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

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

(c) Notice.

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

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

6. Upsets.

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

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C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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.
