

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

DATE: MAY 30, 2014

GENERAL PERMIT NUMBER: #MEG180000  
WASTE DISCHARGE LICENSE: #W009045-5Y-B-R

**APPLICATION OF PISCICIDES FOR THE CONTROL OF INVASIVE FISHES  
GENERAL PERMIT  
issued by  
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION**

AREA OF COVERAGE AND RECEIVING WATER CLASSIFICATION:

**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**

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## 1. PROCEDURAL AND REGULATORY SUMMARY

On January 12, 2001, the Maine Department of Environmental Protection (Department) received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. The Department administers the program as the Maine Pollutant Discharge Elimination System (MEPDES) permit program. The General Permit has been assigned MEPDES #MEG180000.

In January 2006, through a collaborative effort among the Maine Departments of Environmental Protection, Maine Department of Inland Fisheries & Wildlife (MDIFW), and (then called) Maine Department of Conservation, the State of Maine developed *Rapid Response Plan For Invasive Aquatic Plants, Fish, and Other Fauna* for responding to new infestations of invasive fish species and for dealing with invasive faunal introductions. “The primary goal of rapid response deployment is to initiate eradication efforts (which may take years to complete) or critical interim measures to achieve effective containment while a longer term eradication or suppression strategy is formulated. This means mobilizing and deploying as quickly as possible to address a newly detected aquatic invasive plant *within the first season of detection, and, preferably, to treat the infestation in less than 30 days.* Inherent in rapid response is the need to use physical techniques or chemical treatments that can knock out an invasive species before it has a chance to proliferate, providing such techniques or treatments are practical and pose little risk to rare or endangered species or human health. We acknowledge that, in the short run, commonly occurring native communities may be compromised, or surface uses may be curtailed, but believe that these are acceptable tradeoffs to avoid spreading such harmful species to other parts of a water body or other waters of 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 6<sup>th</sup> Circuit Court of Appeals (*National Cotton Council, et al. v. EPA*) vacated USEPA's 2007 rule. The USEPA has not promulgated effluent guideline limitations for this category of discharge.

On September 9, 2009, the Department issued a General Permit for the application (discharge) of piscicides for the control of invasive fishes. The September 9, 2009 General Permit authorized the MDIFW and its qualifying agents to discharge 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.

On or about May 29, 2014, the Department provided public notice of its intent to renew the September 9, 2009 General Permit in Bangor Daily, Kennebec Journal, Sun-Journal, and Portland Press Herald newspapers. The notice solicited comments on a draft permit, when available, and provided an opportunity to request a public hearing.

## 2. ADMINISTRATIVE REQUIREMENTS

The General Permit's administrative procedures and requirements are consistent with *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2 (last amended August 25, 2013), *General Permits for Certain Wastewater Discharges*, 06-096 CMR 529(3)(c) (last amended June 27, 2007), 06-096 CMR 514, and applicable Maine laws. Individuals seeking coverage under the General Permit must file a Notice of Intent (NOI) containing sufficient information and facts as to allow the Department to determine if the proposed piscicide treatment plans are anticipated to comply with the General Permit terms and conditions. Pursuant to 06-096 CMR 2, within 30 days prior to filing the NOI with the Department, an applicant for coverage under the General Permit is required to give public notice of its intent to submit a NOI to the Department, and an original or photocopy of the public notice must be submitted to the Department with the NOI.

Once a completed NOI is received, the Department has a maximum of 30 days in which to act on it. If no other action is taken within that 30-day period, the NOI is considered approved on the 31st day following the Department's receipt of the NOI.

The term of the General Permit is five years. Coverage under the General Permit will be continued from year to year through payment of an applicable annual fee pursuant to *Maine Environmental Protection Fund*, 38 M.R.S.A. § 353-B, provided there are no changes in the facility or its operation as described in the NOI. Prior to expiration of the General Permit, the Department must make a determination if it is to be renewed, and, if so, will commence renewal proceedings. Not less than 24 months prior to expiration of the General Permit, the Department must notify all permittees covered under the General Permit of the decision to renew or not renew the General Permit. If the General Permit is to be renewed, it must remain in force until the Department takes final action on the renewal. Upon reissuance of a renewal General Permit, persons wishing to continue coverage must apply for coverage under the renewal General Permit not later than 30 days following the issuance date of the new General Permit.

## 3. DESCRIPTION OF PERMITTED ACTIVITIES

The Maine Department of Inland Fisheries & Wildlife is responsible for coordinating the State's efforts to prevent, limit the spread of, and reduce the harmful effects of invasive fish species and for preventing, controlling, and managing invasive aquatic fish populations. Pursuant to 38 M.R.S.A. § 466(8-A), invasive species are determined by MDIFW and a species may be determined to be invasive for all waters or for specific waters. The Department is responsible for regulating discharges of pollutants to waters of the State pursuant to 38 M.R.S.A. § 413(1).

The General Permit authorizes the discharge of certain pollutants resulting from the execution of a Department-approved piscicide treatment plan by the Maine Department of Inland Fisheries & Wildlife, or its agent. Piscicides must be registered with both the USEPA and Maine Board of Pesticides Control. Piscicides discharged in accordance with the General Permit must be applied in compliance with federal labeling restrictions and in compliance with applicable statute, Maine Board of Pesticides Control rules and best management practices. Chemicals or compounds proposed to neutralize or deactivate the authorized aquatic piscicide

### 3. DESCRIPTION OF PERMITTED ACTIVITIES (cont'd)

must be identified on the Notice of Intent and may only be discharged to waters of the State with express approval in the Department's final action on a Notice of Intent. A water of the State that serves as a public water supply pursuant to 22 M.R.S.A. § 2601 is not eligible for coverage under the General Permit. Aerial spraying of piscicides from fixed wing or rotary wing aircraft is not authorized under the General Permit.

Field conditions, the invasive species subject of the treatment, the time of year, and the hydrology of the treatment and project areas, among other factors, are variable and require site-specific consideration to maximize the goals of the treatment plan while ensuring compliance with the terms and conditions established in the General Permit.

### 4. AREA OF COVERAGE AND ELIGIBILITY CRITERIA

The General Permit limits coverage to those waters classified as Class GPA, Class AA, Class A, Class B, and Class C, including tributaries to Class GPA waters, and those waters having drainage areas of less than ten (10) square miles at the point of discharge. This area of coverage is identical to the area defined in the General Permit issued on September 9, 2009, and is consistent with provisions in Maine's water quality laws for the purpose of restoring biological communities affected by an invasive species. Estuarine and marine waters are not included in the General Permit since they are not types of waters that the Maine Department of Inland Fisheries & Wildlife treats for invasive species control.

In accordance with *Regulations Concerning the Use of Aquatic Pesticides*, 06-096 CMR 514(2) (effective May 4, 1996), the General Permit is carrying forward requirements for the applicant to demonstrate a significant need to control the target species and that piscicide control offers the only reasonable and effective means to achieve control of the target species and that the piscicide treatment plan provides adequate protection for non-target species. Additionally, in accordance with 38 M.R.S.A. § 464(4)(F)(5), the applicant must make a satisfactory demonstration that any discharge which would result in lowering the existing quality of any water body is necessary to achieve important economic or social benefits to the State following an opportunity for public input.

### 5. CONDITIONS OF PERMIT

*Conditions of licenses*, 38 M.R.S.A. § 414-A states that the Department shall issue a license for the discharge of any pollutants only if it finds that:

- a. 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;
- b. 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 board expects to adopt;

## 5. CONDITIONS OF PERMIT (cont'd)

- c. The discharge either by itself or in combination with other discharges will not lower the existing quality of any body of water, unless, following opportunity for public participation, the department finds that the discharge is necessary to achieve important economic or social benefits to the State and when the discharge is in conformance with 38 M.R.S.A. § 464(4)(F);
- d. The discharge will be subject to effluent limitations that require application of the best practicable treatment, which are the methods of reduction, treatment, control and handling of pollutants, including process methods, and the application of best conventional pollutant control technology or best available technology economically achievable, for a category or class of discharge sources that the Department determines are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Water Pollution Control Act, as amended, and published in 40 Code of Federal Regulations; and
- e. A pesticide discharge is unlikely to exert a significant adverse impact on nontarget species. This standard is only applicable to applications to discharge pesticides.

In addition, *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Surface Waters Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2102) require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

Pursuant to 38 M.R.S.A. § 464(4)(F)(5), the Department may only issue a waste discharge license pursuant to 38 M.R.S.A. § 414-A which would result in lowering the existing quality of any water body after making a finding, following opportunity for public participation, that the action is necessary to achieve important economic or social benefits to the State and when the standards of classification of the water body are met, or if not met, if the project does not cause or contribute to the failure of the water body to meet the standards of classification.

The discharge of piscicides to waters of the State will result in a temporary lowering of existing water quality, including temporary inability to meet the designated uses of drinking water, fishing, recreation in and on the water, and habitat for aquatic life. The project will not cause or contribute to the failure of the water body to meet the standards of classification following completion of the approved piscicide treatment plan. The Department will only issue an order approving a discharge under the General Permit after making a finding that the action is necessary to achieve important economic or social benefits to the State. Each proposed piscicide treatment plan must address this statutory standard as part of the Notice of Intent information submitted for Department review and decision.

## 6. RECEIVING WATER QUALITY STANDARDS

The State's water quality standards establish water quality objectives for all State waters by: 1) designating uses and related characteristics of those uses for each class of water, and 2) prescribing water quality criteria necessary to protect those uses and related characteristics. In addition, the State's antidegradation policy protects and maintains certain existing uses.

The applicability of the General Permit is restricted to discharges to certain fresh waters of the State classified as Class GPA, AA, A, B, and C, including tributaries to Class GPA waters and those waters having drainage areas of less than ten square miles, pursuant to 38 M.R.S.A. §§ 465-A, 467 and 468, and that meet the standards of their ascribed classification, or where not, only if the discharge does not cause or contribute to the failure of the water body to meet the standards of classification. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465 describes the standards for Class GPA, AA, A, B, and C waters.

Relevant standards for the receiving waters are as follows:

- Designated Uses. Class GPA, AA, A, B, and C waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection or treatment (depending on classification), fishing; agriculture, recreation in and on the water, industrial process and cooling water supply, hydroelectric power recreation, and as habitat for aquatic life.
- Water Quality Criteria.  
Class AA – The aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs.

Class A – The dissolved oxygen content of Class A waters may be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs.

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

Class C – The dissolved oxygen content of Class C water may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional

## 6. RECEIVING WATER QUALITY STANDARDS (cont'd)

protection for the growth of indigenous fish, the dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less.

Class GPA – Class GPA waters must be described by their trophic state based on measures of the chlorophyll "a" content, Secchi disk transparency, total phosphorus content and other appropriate criteria. Class GPA waters must have a stable or decreasing trophic state, subject only to natural fluctuations and must be free of culturally induced algal blooms that impair their use and enjoyment. The number of *Escherichia coli* bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 29 per 100 milliliters or an instantaneous level of 194 per 100 milliliters.

- Antidegradation Policy. State waters are protected by the State's antidegradation policy which provides that certain existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected. 38 M.R.S.A. § 464(4)(F).

## 7. DISCHARGE LIMITATIONS AND CONTROLS

Neither the USEPA nor the Department has promulgated effluent guideline limitations for the discharge of piscicides for the control of invasive species. The General Permit requires monitoring of biological conditions, piscicide concentrations, water quality, and physical conditions to assess the impact of the treatment on receiving water quality. The General Permit restricts the discharge of piscicides to comply with federal labeling restrictions and with applicable statutes, Board of Pesticides Control rules and best management practices. Based on information provided in the Notice of Intent, the Department will specify the discharge limitations for all piscicides and related treatment compounds that are authorized. The applicant must provide a statement describing significant need to control the target species, that piscicide control offers the only reasonable and effective means to achieve control of the target species, and describe efforts to control non-target species.

The General Permit requires biological monitoring before and after treatment to assess the impact of the treatment on aquatic communities within the project area. Biological monitoring prior to treatment is also conducted to ensure threatened or endangered species that may be adversely affected by the treatment and that are present in the project area are adequately protected. This information will primarily be used by the Maine Department of Inland Fisheries and Wildlife to refine and continually improve subsequent treatment plans. The information will also provide the basis for determining that the designated use of habitat for aquatic life has been satisfactorily restored.

## 8. DISCHARGE LIMITATIONS AND CONTROLS (cont'd)

The General Permit requires water quality monitoring of dissolved oxygen, water temperature profile, pH, alkalinity, conductivity, and Secchi disc transparency for Class GPA waters. This information will be used by the Department to provide the basis for determining that the designated use of habitat for aquatic life has been satisfactorily restored.

The General Permit requires piscicide monitoring within the treatment area and project area either through direct analysis, or if not possible, through sentinel species cage(s) placed at representative locations within the treatment and project areas. This monitoring requirement will provide data to determine compliance with the discharge limitations for specific piscicides and to evaluate the impact of treatments on aquatic life within the project area.

The General Permit requires placarding of the project area in accordance with instructions presented in applicable manuals or piscicide product labels.

## 9. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The discharge of piscicides associated with an approved piscicide treatment plan will have temporary adverse impacts on receiving water quality. Although Department rule and the General Permit require minimization of impacts to non-target species, the nature of the activity and types of piscicides available to achieve the Maine Department of Inland Fisheries and Wildlife's resource management objectives cannot ensure complete protection of non-target species. The designated uses of recreation in and on the water, fishing and drinking water will temporarily not be met within the project area. The MDIFW is required to hold a public meeting in advance of submitting a Notice of Intent for a proposed treatment, in part, to support that the action is necessary to achieve important economic or social benefits to the State.

## 10. PUBLIC COMMENTS

Public notice of this intent to renew the September 9, 2009 General Permit was made in the Bangor Daily, Kennebec Journal, Sun-Journal, and Portland Press Herald newspapers on or about May 29, 2014. 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 *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).



## 11. DEPARTMENT CONTACTS

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

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## 12. RESPONSE TO COMMENTS

In accordance with the National Pollutant Discharge Elimination System Memorandum of Agreement Between the State of Maine and the United States Environmental Protection Agency, finalized on January 12, 2001, and 40 CFR 123.44(a)(2), the USEPA may take up to 90 days from receipt of the proposed General Permit to comment upon, object to or make recommendations with respect to the proposed permit. During the period of May 30, 2014 through the effective date of this final agency action, the Department solicited comments on the draft General Permit – Application of Piscicides for the Control of Invasive Fishes. The Department did not receive substantive comments on the draft General Permit. It is noted that minor typographical and grammatical errors identified in comments were not included in this section, but were corrected, where necessary, in the final permit.