

STATEMENT OF BASIS

FOR THE ISSUANCE OF AN NPDES PERMIT

U.S. Environmental Protection Agency
Region 5, Water Division
NPDES Programs Branch
77 West Jackson Boulevard (WN-16J)
Chicago, Illinois 60604-3590
www.epa.gov/Region5

Public Notice No.: 13-04-02

Public Notice Issued On: April 19, 2013 Comment Period Ends: May 20, 2013

Permit No.: MN0075017

Name and Address of Applicant:

Minnesota Department of Agriculture (MDA)
625 Robert Street North
St. Paul, MN 55155

Description of the Discharge:

Application of two pesticides (SPLAT-GM-O and/or Disrupt II) used to control gypsy moths within the external boundaries of the Fond du Lac Reservation.

Receiving Waters:

All waters located within the boundaries of the Fond du Lac Reservation except that this permit does not cover discharges from aerial pesticide applications over large bodies of water, including all lakes, reservoirs, and rivers within or partially within the external boundaries of the Fond du Lac Reservation. This includes the St. Louis River, and the following lakes named in the Water Quality Standards of the Fond du Lac Reservation: Bang, Big, Cedar, Dead Fish, East Twin, First, Hardwood, Jaskari, Lac, Lost, Martin (Jo Martin), Miller (Mud), Pat Martin, Perch, Rice Portage, Second, Side, Simian, Sofie, Spring, Spruce, Third, West Twin, and Wild Rice. In addition, Maggie Lake, Upper Deadfish Reservoir, and all open water and/or sensitive wetlands (aquatic Bed/Emergent) wetlands ten (10) or more acres in size are not authorized. Fond du Lac Office of Water Protection staff reserve the right to exclude additional areas as warranted. Exclusion of additional areas will be accomplished with a permit modification pursuant to 40 CFR 122.62.

Description of Applicant's Pest Management Area, Discharge, and Target Pest

The Pest Management Area is located within the external boundaries of the Fond du Lac Reservation. The EPA has retained the authority to issue NPDES permits for activities with

discharges to waters of the United States in Indian Country lands. The EPA is issuing this NPDES permit under the authorities of the Clean Water Act.

The permittee (or applicant), the Minnesota Department of Agriculture (MDA), directs aerial treatments for gypsy moth as part of the Slow-the-Spread (STS) program, in cooperation with the United States Forest Service, state and private forestry, the Fond du Lac Band of Lake Superior Chippewa, and the Minnesota Department of Natural Resources. Although pesticide application for gypsy moth is not sprayed directly over water, the nature of wide-area pest control will result in discharges to waters of the United States. As identified in MDA's permit application, this permit authorizes MDA to discharge from the application of the following two pesticides to control gypsy moths:

Manufacturer	Product Name	EPA Reg.
ISCA Technologies	SPLAT-GM-O	80286-12
Hercon Environmental	Disrupt II	8730-55

The gypsy moth, or *Lymantria dispar L.*, is a non-native invasive insect in North America. Gypsy moth caterpillars feed on the leaves of more than 300 species of trees and shrubs. In the Great Lakes region (including the Fond du Lac Reservation), highly preferred hosts include oak, aspen, paper birch, basswood, and willow and are a widely available food source. High numbers of gypsy moth caterpillars can cause a substantial public nuisance and a reduction in tree growth and overall tree health. Following large outbreaks, some tree mortality can occur, especially when outbreaks persist in any given area for 2-3 successive years or when it occurs in conjunction with drought or other tree health stressors. Widespread caterpillar outbreaks can alter water quality, wildlife habitat, microclimate, and soil fertility. The STS program is nationwide and endeavors to slow the spread of the gypsy moth to 8-10 kilometers (km) per year, down from the historical measured rate of 21 km per year. The main benefits of slowing the spread of gypsy moth are delaying infestations and the cost savings that go along with that delay. Some of the groups benefiting from the delay include forest managers (ranging from small woodlot owners to government agencies that manage vast acreages), tree and plant nurseries, Christmas tree producers, wood products industries (e.g., paper mills and saw mills), municipalities (towns, cities, counties) and the tourism industry (campgrounds, parks, etc.). While STS does not lower the intensity of future outbreaks, it does delay the occurrence of the first one.

For the purpose of this permit, "Applicant or Permit Applicant or MDA or Permittee" is defined to be the Minnesota Department of Agriculture and is liable for any applicator hired to apply pesticide within the external boundaries of the Fond du Lac Reservation and must direct any Applicator applying pesticide within the external boundaries of the Fond du Lac Reservation to do so in accordance with the terms and conditions established in Permit No. MN0075017.

For the purpose of this permit, “Applicator or Applicators” are those entities that are hired by the Minnesota Department of Agriculture or its affiliate partners to apply pesticide within the external boundaries of the Fond du Lac Reservation.

Section 401 Water Quality Certification

Section 401(a) of the Clean Water Act specifies that all federally-issued NPDES permits be certified by the state, territory, or Indian Country in which the discharge occurs. That certification is to ensure that the permit will comply with state, territory, and tribal water quality standards and other requirements. The Fond du Lac Band of Lake Superior Chippewa provided its certification with conditions to ensure that the permit meets applicable water quality standards. That certification did include a condition, which is carried over to this permit, that the use of *Bacillus thuringiensis* subsp. *kurstaki* (Btk) is NOT authorized within the external boundaries of the Fond du Lac Reservation. Only the two gypsy moth mating disruption pesticides identified above are authorized under this permit. Additional conditions specified by the tribe are included in the permit.

Basis for Permit Requirements

The effluent limitations, monitoring requirements, and other conditions of this permit are described in the permit. The limitations were developed to ensure compliance with 40 CFR Part 122, protection of tribe’s water quality standards and Minnesota’s water quality standards where they are applicable.

A. Effluent Limitations and Monitoring

The technology-based effluent limitations for this permit are based on Best Professional Judgment because no national Effluent Limitation Guideline has been developed for this type of activity. EPA has determined that the combination of pollution reduction practices described in the permit is the most environmentally sound way to control discharges from these activities. These non-numeric effluent limitations are expected to minimize environmental impacts by reducing the point source discharges of pesticides to waters of the United States, thereby protecting the receiving waters, including to the extent necessary to meet applicable water quality standards. Consistent with the control level requirements of the CWA, the term “minimize” means to reduce and/or eliminate pesticide discharges to waters of the United States through the use of Pest Management Measures to the extent technologically available and economically achievable and practicable for the category or class of discharges covered under this permit taking into account any unique factors relating to the specific activities to be covered under the permit. For further discussion of the technology-based effluent limitations, see the fact sheet for the EPA’s 2011 Pesticide General Permit available on the Internet at www.epa.gov/npdes/pesticides.

In addition to the technology-based effluent limitations, this permit contains water-quality-based effluent limitations. The Operator must control its discharge as necessary to meet applicable water quality standards. Any discharge that results in an excursion of any applicable numeric or narrative EPA-approved state, tribal or EPA-promulgated water quality standard is prohibited. In general, based on the data included in the record for the

EPA 2011 Pesticide General Permit, existing Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements, and the additional requirements in this permit, EPA expects that compliance with the technology-based effluent limitations and other terms and conditions in this permit should ensure water quality is protected. However, if at any time, the Operator or EPA determines that the discharge causes or contributes to an excursion of applicable water quality standards, the Operator must take corrective action and document and report the excursion(s) to EPA. For further discussion of the water quality-based effluent limitations, see the fact sheet for the EPA's 2011 Pesticide General Permit.

Pursuant to CWA sections 308 and 402(a)(2), 40 CFR 122.43(a), and other applicable implementing regulations, NPDES permits require monitoring to assess compliance. The monitoring requirements of this permit are narrative and demonstrate compliance with permit conditions by using currently established pesticide use routines for monitoring pest control. Specifically, the permit requires routine visual assessments to be conducted as part of the pest control activity, when considerations for safety and feasibility allow, and any post-application pest surveillance, and calls for records of the pesticide discharge quantities to be kept. The monitoring requirements of the permit are reasonable measures of good pest management practices that the conscientious Applicator should employ to ensure environmental health and safety and optimal control of pest organisms. For further discussion of the monitoring requirements, see the fact sheet for the EPA's 2011 Pesticide General Permit.

B. Corrective Action

The purpose of including corrective action requirements in this permit is to assist the Applicant so that they are effectively meeting technology-based and water-quality-based effluent limitations and implementing Pest Management Measures in this permit. Corrective actions in this permit are follow-up actions the Applicant must take to assess and correct problems. They require review and revision of Pest Management Measures and pesticide application activities, as necessary, to ensure that these problems are eliminated and will not be repeated in the future. For further discussion of the Corrective Action requirements, see the fact sheet for the EPA's 2011 Pesticide General Permit.

C. Recordkeeping and Annual Reporting

This permit requires the Applicant to keep records to help them assess performance of Pest Management Measures and to document compliance with permit conditions. These requirements are consistent with Federal regulations at 40 CFR 122.41(j), but have been tailored to more closely reflect the requirements in this permit which to a large extent are consistent with recordkeeping and reporting requirements in EPA's Pesticide General Permit issued on October 31, 2011. For further discussion of the recordkeeping and annual reporting requirements, see the fact sheet for the EPA's 2011 Pesticide General Permit.

D. Address

This permit requires the Applicant to send written correspondence concerning discharges covered under this permit to the addresses listed in Part VI of the permit. Generally, information is to be shared with the NPDES permitting authority, EPA Region 5, although as identified in the permit, in certain instances, information is to be submitted to the applicable tribal representative on the Fond du Lac Reservation.

E. Special Conditions

This permit requires the development and implementation of a Pesticide Discharge Management Plan (PDMP). The PDMP must be developed prior to the first pesticide application that results in a discharge. The permit requires that the following be documented in the PDMP: (1) pesticide discharge management team information; (2) problem identification; (3) pest management options evaluation; (4) response procedures pertaining to spills and adverse incidents; (5) documentation to support eligibility considerations under other federal laws, and (6) signature requirements. The PDMP must be kept up-to-date and modified whenever necessary to document any corrective actions as necessary to meet the effluent limitations in this permit. The requirement to develop a PDMP is a permit “term or condition” authorized under sections 402(a)(2) and 308 of the Act. For further discussion of the PDMP requirements, see the fact sheet for the EPA’s 2011 Pesticide General Permit.

F. Standard Permit Conditions

These conditions apply to all NPDES permits as required by 40 CFR Part 122.41; although they have been adjusted where appropriate to reflect the nature of discharges covered under this permit.

G. Endangered Species Act (ESA) Requirements

Section 7(a) of the Endangered Species Act (ESA) requires all Federal Agencies to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (together, the “Services”), that any Federal action carried out by the Agency is not likely to jeopardize the continued existence of any endangered species or threatened species (together, “listed” species), or result in the adverse modification or destruction of habitat of such species that is designated by the Services as (“critical habitat”). See 16 U.S.C 1536(a)(2), 50 CFR 402. Issuance of an NPDES individual permit by the Agency is a Federal action.

The pesticide activities on the Fond du Lac Reservation to be covered under this individual permit were considered and analyzed as part of formal consultation with the Services on the EPA’s draft Pesticide General Permit (PGP), issued as final in 2011¹. During this consultation on the draft PGP, the EPA and the Services had agreed on a number of important issues regarding the effects of certain types of pesticide discharges on listed species and critical habitat. Many of these decisions are documented in the EPA’s

¹ Fond du Lac Reservation denied water quality certification (i.e., CWA §401) of EPA’s draft PGP.

Biological Evaluation for the United States Environmental Protection Agency's (EPA) Pesticides General Permit (PGP) dated July 30, 2010, (i.e., the Biological Evaluation). For one, the EPA and the Services agreed that the act of permitting these discharges under the NPDES program will not affect terrestrial environments removed from waters, although pesticide discharges could impact terrestrial organisms that use aquatic environments for breeding, foraging, migration and other life cycle purposes. Thus, consistent with that consultation, the EPA only considers this individual permit to have the potential to affect aquatic and aquatic-dependent species. A summary of EPA's analysis of both NMFS and FWS species and critical habitat follows.

NMFS

The EPA completed formal consultation with NMFS on the 2011 PGP which resulted in *NMFS' 2011 ESA Section 7 Consultation Biological Opinion* (i.e., BiOp). The BiOp identified certain listed species and their critical habitat where activities under the draft PGP would either jeopardize the continued existences of such species or destroy or adversely modify such critical habitat (identified as NMFS Listed Resources of Concern in the PGP and available at <http://cfpub.epa.gov/npdes/pesticides/esa.cfm#nmfs>). Those NMFS Listed Resources of Concern do not overlap the Fond du Lac Reservation and as such, the EPA does not believe this permit is likely to jeopardize the continued existence of any NMFS listed species or result in the adverse modification or destruction of these species' critical habitat.

FWS

The FWS website at <http://www.fws.gov/endangered> lists only one species, the Canada Lynx (*Lynx canadensis*), as Federally-threatened in the Fond du Lac Reservation. This area contains no Federally-endangered species or critical habitat. As part of informal consultation with FWS on the 2011 PGP, the EPA developed a Biological Evaluation that considered the effects of these pesticide discharges on FWS managed species and habitat. That Biological Evaluation noted that lynx is a terrestrial species that does not eat aquatic animals and is therefore not "aquatic-dependent." As such, the EPA noted that the PGP would have no effect on this species. Because these are the same discharges and species considered for this individual permit, the EPA draws the same "no effect" conclusion for the Canada Lynx.

EPA believes it has satisfied its requirements under the Endangered Species Act and that the issuance of this permit will have no effect on endangered or threatened species or their critical habitat.

H. National Historic Preservation Act (NHPS) Requirements

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertaking on historic properties. In accordance with the Advisory Council on Historic Preservation's website, if the Agency Official determines that there is no undertaking as defined in 36 C.F.R. § 800.16(y), or there is an undertaking but it is not a type of activity that has the potential to cause adverse effects on historic properties, there is no further obligations under Section 106 or the Council's regulations. Though a federal permit is being issued, EPA

does not believe the activity that this permit will authorize has the potential to cause adverse effects on historic properties. EPA believes it has further satisfied its requirements under NHPA as this discharge is similar to EPA's Pesticide General Permit, which went through NHPA evaluation. EPA believes that the issuance of the permit will have no impact to historical, archeological, or cultural resources.

The permit is based on an application dated April 30, 2012, supplemental application information received June 28, 2012 and additional supporting documents found in the administrative record.

The permit will be effective for five years from the date of issuance as allowed by 40 CFR § 122.46.

Written By: Mark Ackerman, March, 2013
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