

NPDES PERMIT FACT SHEET
**PESTICIDE GENERAL PERMIT FOR POINT SOURCE DISCHARGES TO
WATERS OF THE STATE FROM THE APPLICATION OF PESTICIDES**

Permit Number ING870001 (2011–2016)

MARCH 3, 2011

GENERAL FACILITY INFORMATION

IDEM proposes to issue a new NPDES general permit that covers discharges to waters of the state of Indiana resulting from the application of pesticides as described below.

Description of activities covered under this permit

Pesticide discharges from the following applications of pesticides are covered under this general permit:

- (1) The application of pesticides directly to water in order to control pests. Examples of such applications include applications to control mosquito larvae, aquatic weeds, or other pests that are present in water.
- (2) The application of pesticides to control pests that are present over water, including near the water, where a portion of the pesticides will unavoidably be deposited to the water in order to target the pests effectively. Examples of such applications include when insecticides are aerially applied to a forest canopy where water may be present below the canopy, or when pesticides are applied over or near water for control of adult mosquitoes or other pests.

Specific pesticide uses that are covered under this general permit include:

- (1) Control of public health or nuisance pests and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health or nuisance pests in this use category include but not limited to mosquitoes and black flies.
- (2) Control of invasive or other nuisance weeds and algae in water and at water's edge, including irrigation ditches and irrigation canals including but not limited to:
 - Treating weeds in a right-of-way or easement where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water; and
 - Control of aquatic vegetation through chemical or biological means in waters of the state under a permit issued by the Department of Natural Resources under IC 14-22-9-10 and 312 IAC 9-10-3.
- (3) Control of invasive or other nuisance animals in water and at the water's edge. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
- (4) Aerial or ground application of a pesticide over a forest canopy to control the population of a pest species, for example, an insect or pathogen, where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water.
- (5) Application of pesticides to outstanding state resource waters designated in 327 IAC 2-1-2, 327 IAC 2-1-11, or 327 IAC 2-1.5-19 to restore or maintain water quality or to protect public health or the environment where those discharges

either do not degrade water quality or only degrade water quality on a short-term or temporary basis.

Description of activities that are not covered under this permit

Pesticide uses that are not covered under this general permit include:

- (1) Agricultural pesticide applications to the land or to terrestrial crops.
- (2) Agricultural stormwater runoff.
- (3) Pesticide applications or discharges that violate IC 15-16-4, IC 15-16-5, the rules of the Office of the Indiana State Chemist (OISC) at 355 IAC 4 or 355 IAC 5, the rules of the Indiana Pesticide Review Board (IPRB) at 357 IAC 1, or the pesticide product label.
- (4) Pesticide applications that result in the discharge of any pesticide to waters that have been designated as impaired for that pesticide or its degradates or as outstanding state resource waters designated in 327 IAC 2-1-2, 327 IAC 2-1-11, or 327 IAC 2-1.5-19 except as otherwise provided, that violates a water quality standard established in 327 IAC 2, or within a pesticide setback established by the OISC or the IPRB or described in the product label.
- (5) Discharges that are currently covered by another NPDES permit.
- (6) Discharges included in a permit that within the last five (5) years has been or is in the process of being denied, terminated, or revoked by the department.

Detailed description of the discharge location

Pesticide discharge locations exist throughout Indiana and include the following:

- (1) Aquatic weed and vegetation control. Indiana has numerous water bodies and waterways that frequently require pesticide use to control nuisance or invasive vegetation to maintain water and habitat quality, navigation, resource use, etc. These areas exist throughout Indiana.
- (2) Aquatic invasive species. Indiana Department of Natural Resources, the U.S. Fish & Wildlife Service and others control a variety of aquatic invasive species. The range and extent of these activities are documented in the "Indiana Aquatic Nuisance Species (ANS) Management Plan."
- (3) Mosquito control activities. Mosquito control is carried out at locations throughout Indiana.
- (4) Gypsy moth and other nuisance insect control in forests. Gypsy moth control activities are currently being conducted in northern Indiana under Indiana's Strategic Plan for Gypsy Moth Management.
- (5) Blue-green algae. Treatment of surface drinking water supplies for blue-green algae blooms by utilities or reservoir managers and the Department of Natural Resources.

Type and quantity of wastes or pollutants discharged

Pollutants covered under this permit are pesticides used for control of nuisance pests in or over the water in quantities authorized by the OISC. Pesticides applied include those approved by and registered with the OISC for control of aquatic and terrestrial pests, including:

- Glyphosate-isopropylammonium
- Temephos

- 5-Chloro-2-methyl-3(2H)-isothiazolone
- 2-Methyl-3(2H)-isothiazolone
- Sodium hypochlorite
- Bacillus thuringiensis
- Imazapyr, isopropylamine salt
- Trichloro-s-triazinetrione
- Didecyl dimethyl ammonium chloride
- Polybutene
- Calcium hypochlorite
- Imazamox
- Diquat dibromide
- Sodium chlorate
- Spinosad
- Butoxyethyl 2,4-dichlorophenoxyacetate
- Sodium percarbonate
- Glycine, N-(phosphonomethyl)- potassium salt
- Triethylamine trichlopyr
- Sodium chlorite
- Triclopyr

These pesticides are currently registered with the OISC for aquatic use in Indiana, and during the course of this permit the list of pesticides may change. The quantities of these pesticides used for aquatic application has not been specifically analyzed. In addition, it is not known how much of each pesticide becomes waste after it is applied. Using current monitoring and data measurement techniques, it is not possible to meaningfully quantify the amount discharged as a pollutant at this time.

SUMMARY RATIONALE OF PERMIT CONDITIONS

Division of authority under Indiana law

Under current Indiana law, the Indiana Department of Environmental Management (IDEM) is responsible for implementation of the Clean Water Act, and the OISC is charged with regulation of pesticide use. [IC 13-13-5-1(1), IC 15-16-4] As a result of this divided jurisdiction, the permit contains those conditions that are relevant to the Clean Water Act (CWA), and does not intrude on the statutory jurisdiction of the OISC.

Indiana pesticide rules equivalent to federal standards

The OISC has determined that Indiana law and the rules of the Indiana Pesticide Review Board and the OISC are equivalent to and as protective as the standards of the Environmental Protection Agency's final pesticide general permit (EPA PGP) pertaining to application of pesticides.

Notices of intent

This permit will require the largest operators to submit a notice of intent. These operators would include following if they exceed a use pattern threshold:

- (1) The Indiana Department of Natural Resources (IDNR) which conducts aquatic pesticide applications with its employees, contracts for pesticide application by registered applicators, and permits application of aquatic pesticides to Indiana water bodies and waterways under Indiana law. IDNR also contracts for and supervises aerial pesticide application to control gypsy moth and other invasive species. The IDNR notice of intent will cover all pesticide applications performed, contracted for, or permitted by IDNR.
- (2) The Indiana Department of Transportation that uses its employees and contractors to apply pesticides to ditches and ditch banks to maintain public right-of-ways.
- (3) The U.S. Forest Service when it performs or contracts for pesticide application to control pests in national forests.
- (4) Utilities, railroads and other entities that apply pesticides to right-of-ways to control invasive or nuisance vegetation if they (A) exceed a use pattern threshold and (B) are not a small business as defined in Indiana law (IC 5-28-2-6).

Under 40 CFR 122.28(b)(2)(v), the commissioner has determined that submission of a notice of intent under this permit by operators other than the operators described above is inappropriate. All pesticide applications that would exceed a threshold in the permit are (1) conducted by the state of Indiana or a federal agency using its employees or contractors or by large companies such as utilities and railroads, (2) are permitted by the state, or (3) are carried out by persons registered or certified by the OISC. All of these pesticide applications are a matter of public record. All pesticide application in the State of Indiana is regulated by the OISC. As a result of this determination, submission of a notice of intent by every pesticide applicator will not be required under this general permit.

Pesticide Discharge Management Plans

This permit will require only the largest permittees to develop a Pesticide Discharge Management Plan (PDMP). Permittees required to submit a PDMP include:

- (1) A unit of federal or state government with pest control responsibility that exceeds an annual treatment area threshold.
- (2) An entity with annual receipts that is not a small business that employs or contracts with persons to apply pesticides in a covered use pattern for pesticide applications that exceed an annual treatment area threshold and are not covered under another entity's general permit coverage.
- (3) An entity that applies pesticides to outstanding state resource waters.

The form of the plan will be specified by the OISC since the PDMP consists of standards and procedures applicable to the planning and control of pesticide application and the OISC is the agency tasked by Indiana law with controlling the application of pesticides in Indiana. The OISC estimates that these entities are responsible for the majority of aquatic pesticide discharges in Indiana.

Declared Pest Emergencies

Entities applying pesticides in response to a declared pest emergency situation under 40 CFR 166, will be authorized to discharge immediately for activities conducted in response to that declared pest emergency situation.

DETAILED RATIONALE OF PERMIT CONDITIONS

Permit conditions

Permittees will be required to comply with the following to maintain coverage under this permit. The permit contains all provisions of the EPA PGP relating to CWA implementation, including notification of spills, leaks and other unpermitted discharges and adverse incident notification, termination, revocation, requirement to obtain an individual NPDES permit, and provisions for changes to the terms and conditions of the general permit.

Technology-based effluent limitations

Permit conditions to comply with technology-based effluent limitations:

- (1) IC 15-16-4 covers pesticide approvals, registration of pesticides, handling, storage and disposal of pesticides.
- (2) IC 15-16-5 covers pesticide use and application, licensing, certification and registration of pesticide applicators, enforcement and violations.
- (3) 355 IAC 4 covers pesticide applicator certification and registration, supervision of applicators, site awareness and on-site supervision, liability coverage, record-keeping.
- (4) 355 IAC 5 covers storage and secondary containment of pesticides.
- (5) 357 IAC 1 covers violations and enforcement, use of pesticides in wellhead protection areas and near community public water supply system wells, community-wide mosquito abatement, pesticide drift, open burning of pesticide containers, use of pesticide service containers, use of pesticides at golf courses.
- (6) The pesticide product label required by Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. §136a).

Water quality based effluent limitations

Permit conditions to comply with applicable numeric and narrative state water quality standards and water quality based effluent limitations:

- (1) IC 14-22-9-10 and 312 IAC 9-10-3 cover aquatic pesticide applications under a permit issued by the Indiana Department of Natural Resources for control of aquatic vegetation.
- (2) 327 IAC 15-4 covers general standards and requirements for NPDES general permits.
- (3) 327 IAC 2 covers numeric and narrative water quality standards in Indiana.

Monitoring and reporting requirements

This permit requires permittees to report spills under existing Indiana rules at 327 IAC 2-6.1. This permit also requires permittees to reports spills in accordance with section 311 of the Clean Water Act (33 U.S.C. 1321). Since those spill reporting provisions are matters of longstanding law and rule, they are not further restated in this permit. This

permit also requires permittees to monitor for, identify and report adverse incidents. The language for this requirement was drawn from the proposed EPA PGP. Permit conditions to comply with state and federal reporting requirements are:

- (1) 327 IAC 2-6.1 for reporting of spills.
- (2) 40 CFR 110.6 and 40 CFR 117.21 for reporting of spills to the National Response Center.
- (3) IC 13-14-2-2 and 327 IAC 15-4-1(l) for inspection and entry.
- (4) Section 311(b)(5) of the Federal Water Pollution Control Act (33 U.S.C. 1321(b)(5)).

Record-keeping

Record-keeping requirements are found at IC 15-16-5-59 and 355 IAC 4-4.

Special requirements

This permit requires compliance with the Endangered Species Act and Indiana law concerning non-game endangered and threatened species at:

- (1) The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).
- (2) IC 14-22-34 for non-game endangered and threatened species.

This permit also makes special provisions for use of pesticides in declared pest emergency conditions under 40 CF 166.

Requirements for document signatures are found in 327 IAC 15-4-3(g).

ADMINISTRATIVE REQUIREMENTS

Procedures for reaching a final decision on the draft permit

This permit is based on the proposed EPA PGP that was available at the time the permit was drafted. The final EPA PGP was not available. As a delegated state, Indiana is required to develop a permit that is not less stringent than permits issued under the federal NPDES program. Conversely, IDEM is strongly discouraged from developing permit conditions that are substantively more stringent than the federal program. We have attempted to strike this delicate balance in this permit even though the final EPA PGP was not available for comparison when this draft general permit was public noticed.

As provided in 40 CFR 124.10, this general permit was noticed for public comment on March 8, 2011. At the end of the 30 day comment period, the permit will be issued as a final administrative general permit, with any modifications requested by EPA Region 5 or resulting from public comments received during the public comment period.

Public comment period beginning and ending dates

As provided in 40 CFR 124.10, this general permit was noticed for public comment on March 8, 2011. Public comment was accepted until close of business on April 9, 2011.

Procedures for requesting a hearing

In addition to the requirements of 40 CFR 124.12, procedures for requesting a hearing are found in 327 IAC 5-3.

Other procedures for public participation

IDEM complies with the public participation requirements of 40 CFR 122 and 40 CFR 124. Other procedures for public participation are found in 327 IAC 5-3.

CONTACT FOR MORE INFORMATION

Please direct comments and questions about this fact sheet or the general permit to Catherine Hess at 317-232-8704 or chess@idem.in.gov.

