Clean Water Act (CWA)-Permitting of Discharges from Pesticide Applications

National Tribal Consultation Teleconference
September 29, 2010
2:00pm-4:30pm EDT
Draft NPDES Pesticide Permit
Topics to be Discussed

- Background:
  - NPDES Permitting
  - 2006 EPA Rule
- Schedule
- Overview of EPA Draft PGP
- Questions and Comments
“The application of a pesticide to waters of the United States consistent with all relevant requirements under FIFRA does not constitute the discharge of a pollutant that requires an NPDES permit in the following two circumstances:

1. The application of pesticides *directly to waters of the US* to control pests. Examples of such applications include applications to control mosquito larvae, aquatic weeds, or other pests that are present in waters of the US; and

2. The application of pesticides to control pests that are present *over* waters of the US, *including near* such waters, where a portion of the pesticides will *unavoidably be deposited to waters of the US* to target the pests effectively; for example when insecticides are aerially applied to a forest canopy where waters of the US may be present below the canopy or when pesticides are applied over or near water for control of adult mosquitoes or other pests.”
Background
Challenge to 2006 Rule

- In December, 2006 petitions for review were filed in all 11 Circuit Courts. Petitions were consolidated in the 6th Circuit Court of Appeals.

- On 1/7/09 the 6th Circuit vacated the CWA pesticides rule, stating that the rule was not a reasonable interpretation of the CWA.
  
  - **Biological pesticides** – Court considered “biological materials” a “pollutant” under the CWA stating all biological pesticides are pollutants because they “undeniably alter the physical integrity of the waters.”

  - **Chemicals pesticides** – Court considered “chemical wastes” pollutants also stating that chemical pesticides are pollutants if they leave a residue (or “waste”).

- On 06/08/09, the 6th Circuit granted EPA’s request and ordered a two-year stay of the mandate until 04/09/11.
Background
Result of Court Actions

- **Bottom Line:** EPA’s rule stating that NPDES permits are not required for pesticide applications applied to or over, including near waters of the U.S., remains in effect until April 9, 2011.

- As of April 9, 2011, discharges into a water of the U.S. from pesticide applications will require coverage under an NPDES permit.

Note: In November 2009, industry petitioned the *Writ of Certiorari* which was denied by the Supreme Court.
Schedule:
EPA Pesticide General Permit

- Court Grants 2-yr Stay: June 2009
- EPA Proposes Draft PGP: June 4, 2010
- Close of Public Comment Period on PGP: July 19, 2010
- EPA Finalizes PGP: December 2010
- Mandate Issues: April 9, 2011

Timeline:
- 12 mos.
- 45 days
- 5 mos.
- 4 mos.
NPDES Program Authorizations (PGP)

Legend:
- **American Samoa**
- **Guam**
- **Johnston Atoll**
- **Midway/Wake Islands**
- **N. Mariana Islands**
- **Puerto Rico**
- **Virgin Islands**

**Note:** EPA also permits activities on Indian Country lands.

State NPDES Program Status for Pesticides:
- **Authorized (State permits)**
- **Unauthorized (EPA permits)**
- **Authorized but excludes federal facilities**
NPDES Permittees

NPDES Program Growth

- Basic Program
- Phase 1 Stormwater - 1990
- Phase 2 Stormwater - 1999
- CAFOs and Vessels - 2008
- Pesticides - 2011
Background: NPDES Permitting
Types of NPDES Permits – Individual

- **Individual Permit**
  - 1 application submitted ➡️ permit issued
  - Application includes detailed information describing the specific discharges to be covered under the permit, including the nature and concentration of discharges
Background: NPDES Permitting
Types of NPDES Permits - General

- **General Permit (40 CFR 122.28)**
  - 1 permit issued  → NOI submitted by each permittee
  - Permit must identify:
    - area of coverage
    - sources covered
    - other information
  - NOI typically includes basic information on discharger, the type of discharges, and receiving water.
  - Federal regulations provide that in certain instances, EPA can cover discharges under a general permit without submission of an NOI [40 CFR 122.28(b)(2)(v)].
Draft Pesticide General Permit
Permit Contents

- Scope
- Notice of Intent (NOI)
- Effluent Limits
  - Technology-Based
  - Water Quality Based
- Site Monitoring
- Pesticide Discharge Management Plan
- Corrective Action
- Recordkeeping and Annual Reporting
Scope

- Coverage under the permit generally includes pesticide applications covered by the 2006 Rule

- Pesticide uses covered under permit:
  - Mosquito and Other Flying Insect Control
  - Aquatic Weed and Algae Control
  - Aquatic Nuisance Animal Control
  - Forest Canopy Pest Control
Mosquito and Other Flying Insect Pest Control

Application of larvicides and adulticides to control mosquitoes and other flying insect pests over water.
Aquatic Weed and Algae Control

Application at water's edge

Application directly into waters to control submersent and emergent vegetation and algae
Aquatic Nuisance Animal Control

Agents to control animal pests such as zebra mussel and lamprey
Forest Canopy Pest Control
Outside Scope

- Terrestrial applications to control pests on agricultural crops or forest floors
- Off target spray drift
- Activities exempt from permitting under the Clean Water Act:
  - Irrigation Return Flow
  - Agricultural Stormwater Runoff
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Definition of “Near”

- EPA described “near” in the 2006 rule as: where it is unavoidable that a portion of the pesticide will be deposited to waters of the U.S. in order to target pests effectively.
  - Example: treating weeds along the bank of a stream.

- PGP includes use patterns that EPA identified as meeting the “near” concept described above.
Irrigation Return Flow; Generally Exempt by Statute
Agricultural Stormwater; Generally Exempt by Statute
Questions
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Discharges not Authorized under the PGP

- Discharges of pesticides to waterbodies that are impaired under CWA §303(d) for that pesticide or its degradates

- Discharges to Tier 3 waterbodies

- Discharges from other pesticide uses not specifically eligible for coverage.
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Who is an Operator?

- PGP defines operator as any entity involved in the application of a pesticide that results in a discharge to waters of the U.S.

- Operator must meet either or both of the following two criteria:
  1. The entity has control over the financing for or the decision to perform pesticide applications
  2. The entity has day-to-day control of or performs activities that are necessary to ensure compliance with the permit
NOIs will be required for entities that know or reasonably should have known that they will exceed any of the pesticide application thresholds.

The NOI filer, in most cases, would be the entity with control over financing for or the decision to perform pesticide applications, as opposed to the person performing the applications that result in a discharge, if different.

However, any contract applicator would need to file an NOI, if it exceeds the application threshold for any applications not already covered under another NOI.
### Draft Pesticide General Permit

#### Annual Treatment Area Thresholds

<table>
<thead>
<tr>
<th>PGP Part</th>
<th>Pesticide Use</th>
<th>Annual Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 2.2.1</td>
<td>Mosquitoes and Other Flying Insect Pest Control</td>
<td>640 acres of treatment</td>
</tr>
<tr>
<td>Part 2.2.2</td>
<td>Aquatic Weed and Algae Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In Water</td>
<td>20 acres of water treatment area (1)</td>
</tr>
<tr>
<td></td>
<td>At Water’s Edge</td>
<td>20 linear miles at water’s edge (2)</td>
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<tr>
<td>Part 2.2.3</td>
<td>Aquatic Nuisance Animal Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In Water</td>
<td>20 acres of water treatment area (1)</td>
</tr>
<tr>
<td></td>
<td>At Water’s Edge</td>
<td>20 linear miles at water’s edge (2)</td>
</tr>
<tr>
<td>Part 2.2.4</td>
<td>Forest Canopy Pest Control</td>
<td>640 acres of forest canopy</td>
</tr>
</tbody>
</table>

(1) Calculations should include the area of the applications made to: (1) waters of the U.S. and (2) conveyances with a hydrologic surface connection to waters of the U.S. at the time of pesticide application. For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of treatment area.

(2) Calculations should include the area of the application made at water’s edge adjacent to: (1) waters of the U.S. and (2) conveyances with a hydrologic surface connection to waters of the U.S. at the time of pesticide application. For calculating annual treatment totals, count each pesticide application activity as a separate activity. For example, treating both sides of a ten mile ditch is equal to twenty miles of water treatment area.
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Overview of PGP Requirements

PGP Requirements

Exceed NOI Threshold?

Yes
Submit NOI
*Minimize
*Meet Water Quality Limits
Implement IPM
Develop Plan
*Monitor/Report Adverse Incidents
Submit Annual Reports
Maintain Pesticide Application Records

No
Minimize
Meet Water Quality Limits
Monitor/Report Adverse Incidents
FIFRA label not a requirement of permit, but it is clear in the Fact Sheet that a violation of any water-quality related aspect of the label is a CWA violation.

Technology requirements are Best Management Practices (BMPs); not numeric limits

All permittees will minimize discharges
- Use lowest effective amount of pesticide
- Perform regular maintenance
- Calibrate, clean, and repair equipment
Operators submitting NOIs (and therefore over thresholds) also are required to do the following:

- Identify/assess pest problem
- Assess pest management alternatives
- Follow appropriate procedures for pesticide use
The draft PGP includes a narrative water-quality based effluent limitation applicable to all operators covered under the permit.

- “Your discharge must be controlled as necessary to meet applicable numeric and narrative state, territory, or tribal water quality standards.”

EPA expects that compliance with FIFRA plus compliance with permit conditions will generally control discharges as necessary to meet applicable water quality standards.
Permit will also include monitoring for all permittees.

- Visual monitoring for adverse effects during application and during any post application surveillance
- Monitoring of management practices
Operators submitting NOIs would also be required to prepare a Pesticide Discharge Management Plan (PDMP) for their pest management areas.

- Documents how discharges will be minimized and effluent limitations will be met
- Developed prior to first pesticide application covered under the permit
- Kept up-to-date for duration of permit coverage, even if discharges subsequently fall below the applicable NOI threshold.
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Reporting and Recordkeeping

- **Annual Reporting**
  - Permittees submitting NOIs would be required to submit annual reports documenting pesticide application activities.

- **Adverse Incident Reporting**
  - All permittees would be required to report adverse incidents which would help EPA to identify possible permit violations and where permit may need modification to further protect water quality.

- **Records**
  - PDMP: Permittees submitting NOIs would be required to develop a **Pesticide Discharge Management Plan**
  - Permittees submitting NOIs would be required to keep pesticide management records for PDMP, adverse incident reports, corrective action documentation, and annual reports
  - Kept on-site and accessed by public through requests to EPA
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Additional Considerations

- Endangered Species Act Consultation
  - Requires EPA to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service to ensure that issuance of the PGP is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

- CWA 401 Certification
  - Requires all states, territories, and tribes (with a Treatment as a State (TAS) designation) to certify that the permit is consistent with applicable water quality requirements.
Draft Pesticide General Permit Documents

- Federal Register Notice
  - Announces EPA action and summary of action

- Permit Fact Sheet
  - Provides rationale for permit requirements

- NPDES Pesticide General Permit
  - Contains actual permit requirements

- Permit Docket (www.regulations.gov)
  - EPA-HQ-OW-2010-0257
  - Review docket materials
Next Steps:
Key Milestones

- Issuance of Final Permit – Dec 2010
- Outreach – Jan-April 2011
- Permits Required – April 10, 2011
For More Information
NPDES PGP Website

For more information:

www.epa.gov/npdes/pesticides
Questions