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

Pesticides General Permit (PGP)

Sam Sampath, Ph.D.
Pesticide Permitting Coordinator, EPA, Region 4
Draft NPDES Pesticide Permit
Topics to be Discussed

- Purpose
- Background:
  - 2006 EPA Rule
  - NPDES Permitting
- Schedule and Activities Conducted to Date
- Draft Pesticide General Permit Contents:
  - Scope
  - Notices of Intent (NOIs)
  - Technology-Based Effluent Limits
  - Water Quality-Based Effluent Limits
  - Monitoring
  - Reporting and Recordkeeping
- Next Steps
- For More Information
- Conclusion
Purpose: Presentation

To provide background on the contents and structure of the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) published draft pesticide general permit (PGP) in preparation for publication of the final permit in February, 2011.
Purpose: Draft PGP

- EPA’s draft Pesticide General Permit (PGP), which was published by EPA on June 4, 2010, is based on:
  - Concepts evolved from information gathered from stakeholders.
  - Opportunities to hear from States and EPA Regions on practical aspects of permit.

- The draft pesticide general permit is not:
  - A final permit.
  - Representative of final EPA decision-making.
Background: EPA 2006 Rule
2006 Final CWA Pesticides Rule

Rule published on November 27, 2006

“The application of a pesticide to waters of the United States consistent with all relevant requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (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 United States; and

2. The application of pesticides to control pests that are present over waters of the United States, 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 United States may be present below the canopy or when pesticides are applied over or near water for control of adult mosquitoes or other pests.”
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

- 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.
Background: NPDES Permitting

NPDES CWA Statutory Framework

- All “point” sources
- “Discharging pollutants”
- Into “waters of the U.S.”

- Must obtain NPDES permit coverage from EPA or an NPDES-authorized State
Background: EPA 2006 Rule
Course of Action

- EPA developed a Pesticide General Permit (PGP) to cover areas where EPA remains the NPDES permitting authority.

- EPA worked with the NPDES-authorized States to concurrently develop their permits.

- EPA and States will provide outreach and education to the regulated and environmental communities.
Note: EPA also permits activities on Indian Country lands.
Background: NPDES Permitting
NPDES General Permits

- Consistent with how EPA has regulated discharges from other large universes of discharges, EPA is issuing a pesticides general permit and an accompanying fact sheet.

- NPDES permits are issued by authorized NPDES permitting authorities (typically DEQ/DEP type agency).

- NPDES permits do not override any existing state or federal requirements: permits should work in tandem with those requirements.
State-issued NPDES general permits must meet all CWA requirements that the Federally-issued permit must meet but can be more stringent.

- EPA does maintain an oversight role.

- Citizens have the right to challenge NPDES permits.
Background: NPDES Permitting

NPDES Permit Components

Industry-Specific Components
- Effluent Guidelines
- Best Professional Judgment (BPJ)
- Best Management Practices (BMPs)

Cover Page
- Effluent Limitations
  - Technology-Based
  - Water Quality-Based
- Monitoring & Reporting Requirements
- Special Conditions
  - Compliance Schedules
  - Special Studies, Evaluations, and Other Requirements
- Standard Conditions
Schedule
EPA Pesticides General Permit (PGP)

- Court Grants 2-yr Stay: 4-5 mo.
- Discuss w/ States and stakeholders: 9 mo.
- Propose Draft Permits (all use patterns): 9 mo.
- Finalize Permits: 1-2 mo.
- Mandate Issues: Apr 2011
Activities Conducted to Date
EPA Outreach and Coordination

- Published draft PGP on June 4, 2010, with 45 day public comment period, in which EPA received over 750 sets of public comments.
- Joint effort between EPA Offices (Water, Pesticide Programs, Enforcement and Compliance Assurance, Policy, General Counsel, Research and Development, and the Regions)
- Periodic conference calls and face-to-face meetings with state and regional regulatory representatives for both water and pesticide programs
- Regular meetings with USDA and various groups (industry and environmental) to discuss permit concepts.
- Webcasts and public meetings for stakeholders.
Draft Pesticide General Permit Contents

Scope

Pesticide Use Categories

- The PGP will cover pesticides authorized for use under FIFRA, including:
  - Pesticides registered under FIFRA §§ 3 or 24(c)
  - Pesticides authorized for use under FIFRA §§ 5 or 18
  - Pesticides exempt from FIFRA requirements pursuant to FIFRA sec. 25(b)

- The PGP will cover the following pesticide applications:
  - Mosquito and Other Flying Insect Pest Control
  - Weed and Algae Pest Control
  - Animal Pest 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 submergent and emergent vegetation and algae
Aquatic Nuisance Animal Control

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

Estimated Universe of Covered Activities

- Approximately 5.6 million such applications annually are performed by 365,000 applicators for these types of pesticide uses.

- More than 200 different pesticide active ingredients registered for these uses.
Draft Pesticide General Permit Contents

Scope

Outside Scope

- Activities exempt from permitting under the Clean Water Act
  - Irrigation Return Flow
  - Agricultural Stormwater Runoff
- Discharges to Tier 3 waters (i.e., Outstanding National Resource Waters)
- Discharges to waters impaired for the pesticide active ingredient (or degradate of that active ingredient) that is being applied
- Terrestrial applications on agricultural crops or forest floors that are not in Waters of the United States
- Off-target Spray Drift
Notices of Intent (NOIs)

Who Has to File?

- NOIs will be required for entities that exceed a pesticide application threshold.

- The NOI filer, in most cases, would be the entity responsible for deciding to conduct the pesticide applications, as opposed to the person performing the applications, if different.

- However, any applicator would need to file an NOI, if it exceeds the application threshold for applications not already covered under another NOI.
**Draft Pesticide General Permit Contents**  
**Notices of Intent (NOIs):**  
**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>
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<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>
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</tr>
<tr>
<td></td>
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<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.
FIFRA label not a requirement of permit, 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 must minimize discharges:
- Use lowest amount possible
- Prevent leaks and spills
- Calibrate, clean and repair equipment

A subset of permittees must implement IPM Practices:
- Identify/assess pest problem
- Assess pest management alternatives
- Follow appropriate procedures for pesticide use
Draft Pesticide General Permit Contents
Water Quality-Based Effluent Limits

- The permit will include a narrative Water-Quality Based Effluent Limit, “Your discharge must be controlled as necessary to meet applicable water quality standards (WQS).”

- EPA expects that compliance with FIFRA plus compliance with permit conditions will generally control discharges as necessary to meet applicable water quality standards.
Draft Pesticide General Permit Contents

Monitoring

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

Adverse Incident Reporting
- If a permittee becomes aware of an adverse incident, notification and reporting, and as necessary, corrective action are triggered. Reporting will help EPA to identify possible permit violations and permit may need modification to further protect water quality.

Records
- PDMP: Permittees submitting NOIs required to develop a Pesticide Discharge Management Plan.
- Permittees submitting NOIs required to keep pesticide management records for PDMP, adverse incident reports, corrective action documentation, and annual reports.
- Records must be kept on-site; to be publicly accessible through requests to EPA.
Next Steps

- EPA will publish its final PGP in February, 2011.

- EPA will continue to work with States in finalizing their permits and perform outreach to stakeholders to promote awareness of permit conditions.

- Court’s mandate will take effect April 9, 2011.
For More Information
NPDES PGP Website

For more information:

www.epa.gov/npdes/pesticides
Conclusion

- Questions
- Wrap Up