Permitting of Discharges from Pesticide Applications

Virginia Pollution Discharge Elimination System (VPDES) General Permit

DEQ
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
Background

- Nov 2006 Final CWA Pesticide Rule stated that the application of a pesticide to waters of the United States consistent with FIFRA does not constitute the discharge of a pollutant that requires an NPDES permit.

- 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.

- 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.

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

- Delegated NPDES states (VPDES) subject to results of court actions.
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 Animal Pest Control
- Forest Canopy Pest Control
Activities Covered by General Permit
Mosquito and Other Flying Insect Pest Control
Activities Covered by General Permit
Water Application for Aquatic Pests (animals, weeds, algae)

Insecticides and other agents to control animal pests such as mosquito larvae and lamprey

Herbicides to control aquatic weeds and algae
Activities Covered by General Permit
Aerial Pest Application Over Forest
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 Storm Water Runoff
Types of NPDES (VPDES) Permits

Individual and General

Individual Permit
1 application submitted ➔ 1 permit issued

General Permit
1 permit issued ➔ NOI or Registration submitted by each operator

➢ Virginia’s proposed general permit does not require the submittal of a Registration to obtain permit coverage - automatic coverage for operators making pesticide applications in any of the 4 pesticide use patterns.
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 waterbodies from other pesticide uses not specifically eligible for coverage.
An operator applying pesticides is defined as:

- The entity with control over the financing for, or the decision to perform pesticide applications; and
- The entity with day-to-day control or performs activities that are necessary to ensure compliance with the permit.
The General Permit provides that more than one Operator (entity) may be responsible for the same discharge resulting from pesticide application.

Any operator authorized to discharge under this general permit is responsible for compliance with the terms of this permit for discharges resulting from the application of pesticides.
Virginia DEQ Draft Pesticide General Permit

Permit Contents

**Effluent Limits**
- Technology-Based
- Water Quality Based

**Monitoring**

**Pesticide Discharge Management Plan**

**Special Conditions**
- Corrective Action
- Adverse Incident Documentation and Reporting
- Reportable Spills and Leaks
- Recordkeeping
- Annual Reporting
Draft Pesticide General Permit

Technology Based Effluent Limits

- 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 operators must minimize discharges
  - Use lowest effective amount of pesticide
  - Keep equipment in sound mechanical condition
  - Equipment cut off valves
Operators also are required to use Integrated Pest Management (IPM) practices:

- Identify/assess pest problem
- Assess pest management alternatives
- Follow appropriate procedures for pesticide use
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Water-Quality Based Effluent Limits

- The draft PGP includes a narrative water-quality based effluent limitation applicable to all operators covered under the permit.

- “The operator’s discharge of pollutants must be controlled as necessary to meet applicable numeric and narrative water quality standards.”

- DEQ 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
Monitoring

- All operators must conduct visual monitoring for adverse effects during application and during any post application surveillance.
- Applicators monitor the amount applied to ensure the lowest effective amount is used.
- Applicators monitor to ensure regular maintenance is performed to reduce leaks and spills.
- Applicators monitor to ensure application equipment is in proper operating condition (calibrating, cleaning and repairing).
Operators exceeding annual thresholds are also 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 application areas subsequently fall below the applicable annual threshold.
Draft Pesticide General Permit
Annual Treatment Area Thresholds

<table>
<thead>
<tr>
<th>Pesticide Use</th>
<th>Annual Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosquitoes and Other Flying Insect Pest Control</td>
<td>640 acres of treatment</td>
</tr>
<tr>
<td>Aquatic Weed and Algae Control</td>
<td></td>
</tr>
<tr>
<td>In Water</td>
<td>20 acres of water treatment area</td>
</tr>
<tr>
<td>At Water’s Edge</td>
<td>20 linear miles at water’s edge</td>
</tr>
<tr>
<td>Aquatic Nuisance Animal Control</td>
<td></td>
</tr>
<tr>
<td>In Water</td>
<td>20 acres of water treatment area</td>
</tr>
<tr>
<td>At Water’s Edge</td>
<td>20 linear miles at water’s edge</td>
</tr>
<tr>
<td>Forest Canopy Pest Control</td>
<td>640 acres of forest canopy</td>
</tr>
</tbody>
</table>
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Pesticide Discharge Management Plan

Requirements

• Pesticide Discharge Management Team

• Pest Management Area Description

• Control Measure Description

• Schedules and Procedures

• Signatures
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Special Conditions

- Corrective Action
- Adverse Incident Documentation and Reporting
- Reportable Spills and Leaks
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Special Conditions

Recordkeeping and Annual Reporting

- Adverse Incident Reports
- Corrective Action Documentation
- Threshold operators record each pesticide applied per VDACS reporting requirements
- Threshold operators maintain a pesticide discharge management plan
- Annual Report of Adverse Incidents to DEQ
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Conditions Applicable to All Permits

• Monitoring (instream)
• Duty to provide information
• Duty to comply
• Duty to reapply (if not qualified for automatic coverage)
• Other Laws
• Allow entry and inspection
• Transfers
• Etc...
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Overview of PGP Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Minimize Discharge of Pesticide</td>
</tr>
<tr>
<td>Meet Water Quality Limits</td>
</tr>
<tr>
<td>Implement IPM</td>
</tr>
<tr>
<td>Monitor/Report Spills &amp; Adverse Incidents</td>
</tr>
<tr>
<td>Submit Annual Report - only if adverse incident occurred</td>
</tr>
<tr>
<td>Develop Pesticide Management Plan*</td>
</tr>
<tr>
<td>Maintain Pesticide Application Records*</td>
</tr>
</tbody>
</table>

* Required by General Permit if Annual Application Threshold is exceeded
Pesticide General Permit
Timeline

- Sept 27th - SWCB Authorized Notice of Public Comment and Hearing (NOPC) for Draft Permit Regulation
- October 25 – December 27- NOPC with Public Hearing(s)
- By February 8, 2011 - SWCB Approval of Final Permit Regulation
- February 2011 - General Permit Filed and published in VA Register
- No Later than April 10th 2011 - General Permit Effective
- Permit Expires June 30, 2013 (must be reissued before then)
Questions

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Office of Water Permits and Compliance Assistance

To See Permit and Fact Sheet
http://www.deq.state.va.us/vpdes/publicnotices.html

OR

http://www.townhall.state.va.us/L/ViewChapter.cfm?chapterid=2418