

Clean Water Act - Permitting of Discharges from Pesticide Applications

**Regional Tribal Operations Committee Meeting, July 29 2010
Mooretown Rancheria
Oroville, California**

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Presentation adapted from national Pesticides permit webcast, June 24 2010



Goals for today's discussion

- ❑ Provide an overview of the history and **purpose of EPA's draft Pesticides General Permit or "PGP"**.
 - A Clean Water Act General Permit under the NPDES program which will also cover Tribal Lands
- ❑ Answer questions you may have on the PGP
- ❑ Discuss next steps for permit implementation



Background

History of pesticide regulation under CWA

- ❑ In 2000 – 2001, a number of lawsuits and court orders created confusion about whether pesticide spraying could require a permit under the Clean Water Act.
- ❑ In response to this uncertainty in the pesticide user community, EPA proposed a Rule in November 2006 **exempting pesticide application “to, over, or near”** waters from the requirement for a NPDES permit, so long as they followed the requirements under FIFRA, the main federal pesticides law
- ❑ **EPA’s rule was immediately challenged in court, and on January 7, 2009 the 6th circuit vacated (nullified) the rule.** EPA requested time to develop a permit, and reached an agreement with the court under which permits are required as of April 9, 2011



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 and otherwise be subject to the requirements of the CWA.**

Note: In November 2009, industry petitioned the Supreme Court to review the case, and the Court refused



NPDES Pesticide Permitting

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Background: NPDES Permitting

NPDES CWA Statutory Framework

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



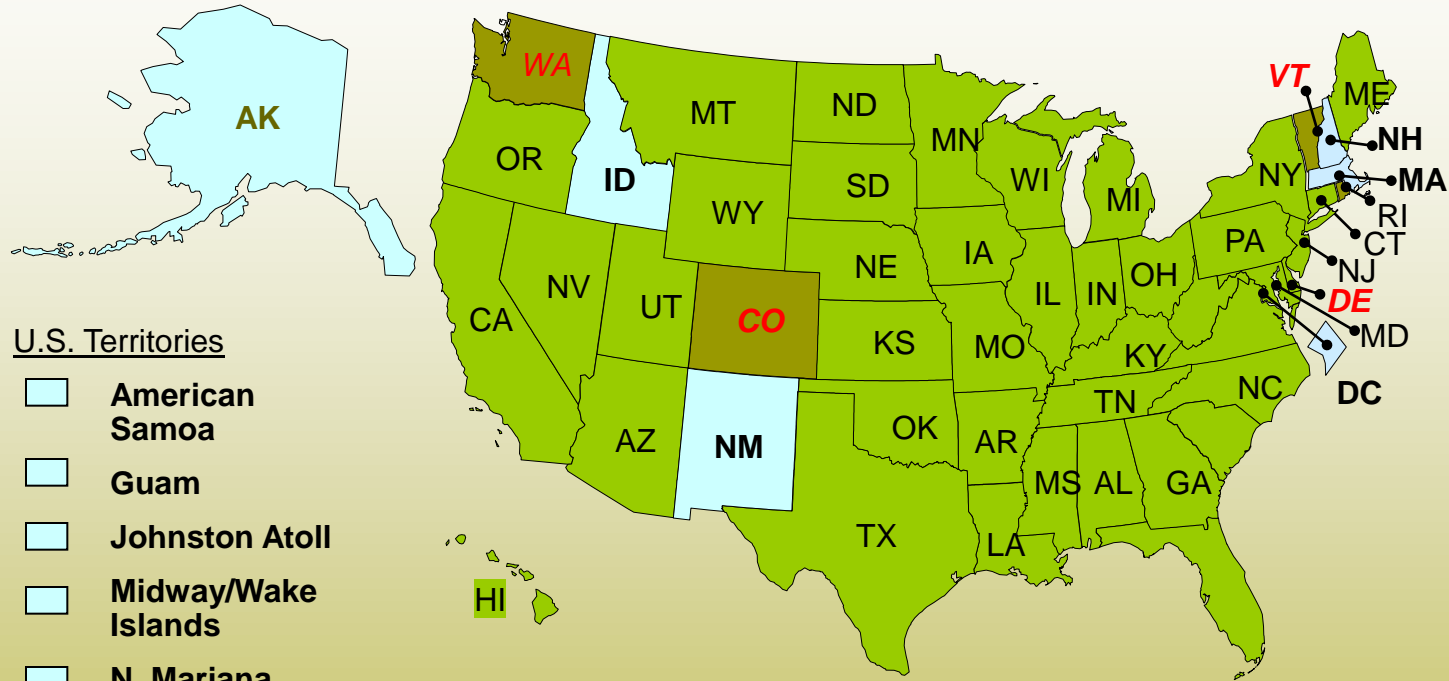
Must obtain NPDES permit coverage from EPA or an NPDES- authorized State, Tribe, or Territory

The 6th Circuit court ruled that some pesticides discharges meet all 3 of these criteria, and thus require a permit



Background: NPDES Permitting

NPDES Program Authorizations (PGP)






U.S. Territories

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

Note: EPA permits activities on all Indian Country Lands nationwide.

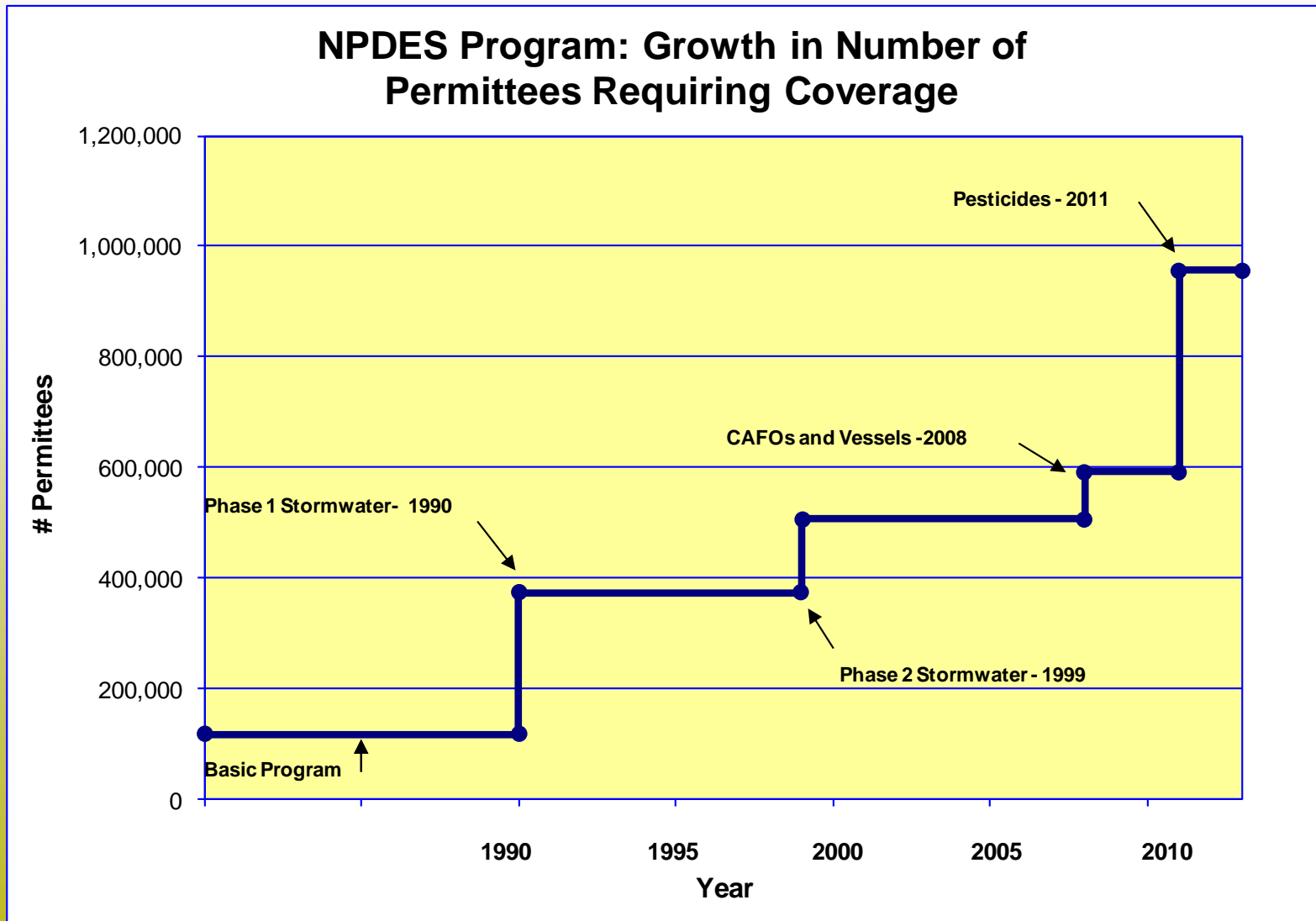
State NPDES Program Status for Pesticides

-  Authorized (State issues permits)
-  Unauthorized (EPA issues permits)
-  **Authorized but excludes federal facilities (EPA issues permits to such facilities)**



Background: NPDES Permitting

Number of Permittees has Increased



Background: NPDES Permitting

Types of NPDES Permits – Individual

□ Individual Permit

- 1 application submitted → 1 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.



NPDES Pesticide Permitting

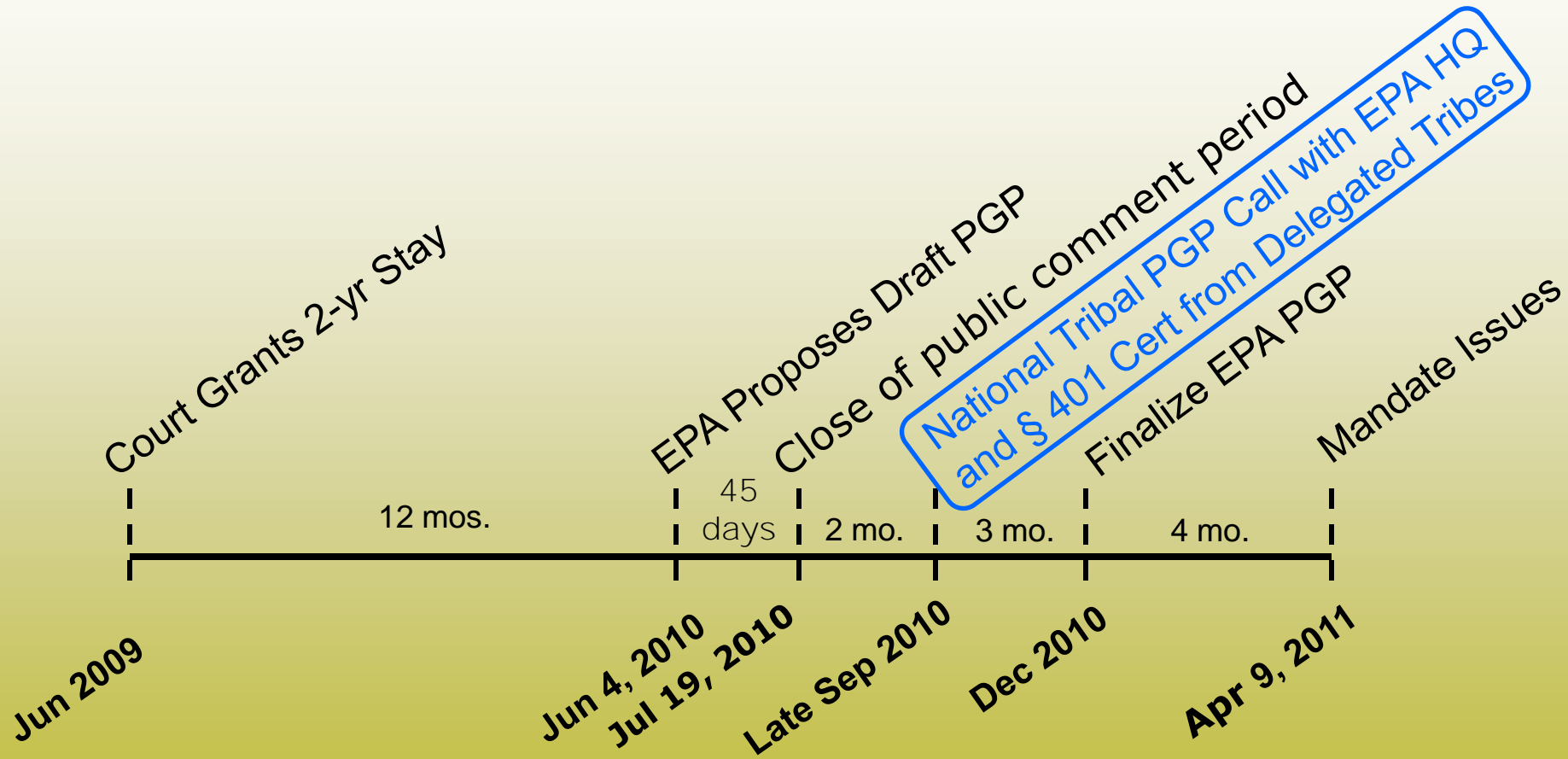
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Background

Schedule for PGP



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Draft Pesticide General Permit

Scope

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

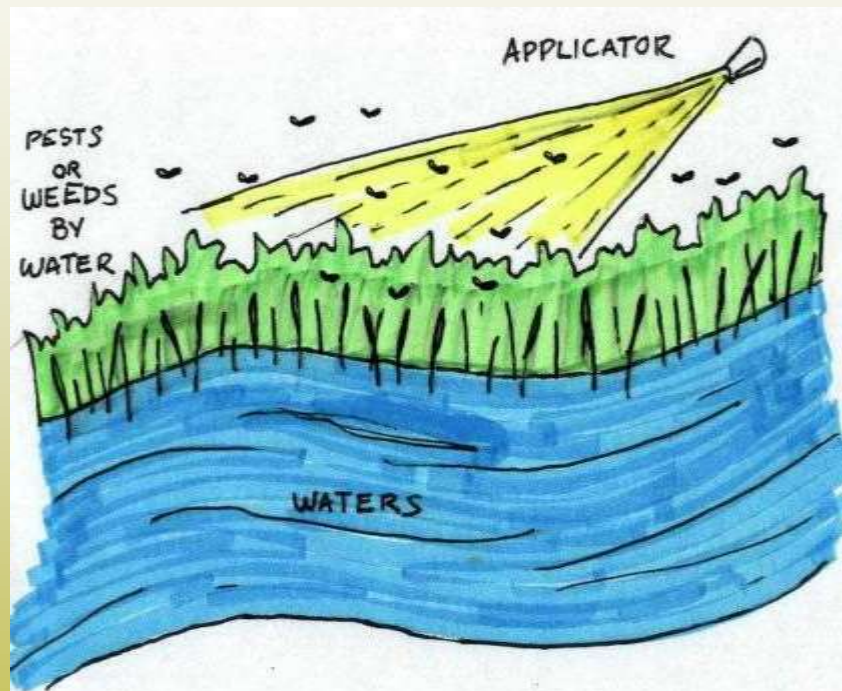
- ❑ Pesticide uses covered under permit:
 - Mosquito and Other Flying Insect Control
 - Aquatic Weed and Algae Control
 - Aquatic Nuisance Animal Control
 - Forest Canopy Pest Control



Mosquito and Other Flying Insect Pest Control

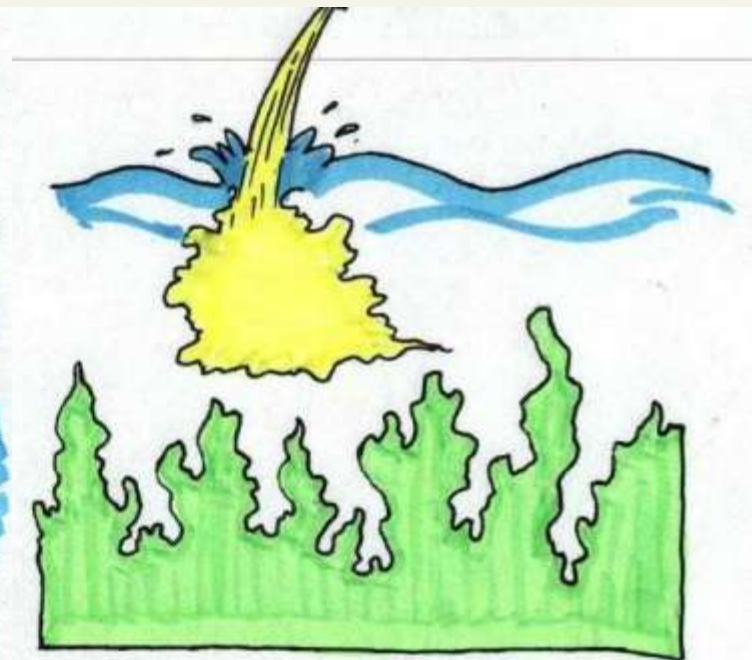


Aquatic Weed and Algae Control



ANIMAL PESTS SUCH AS MOSQUITO LARVAE AND LAMPREY

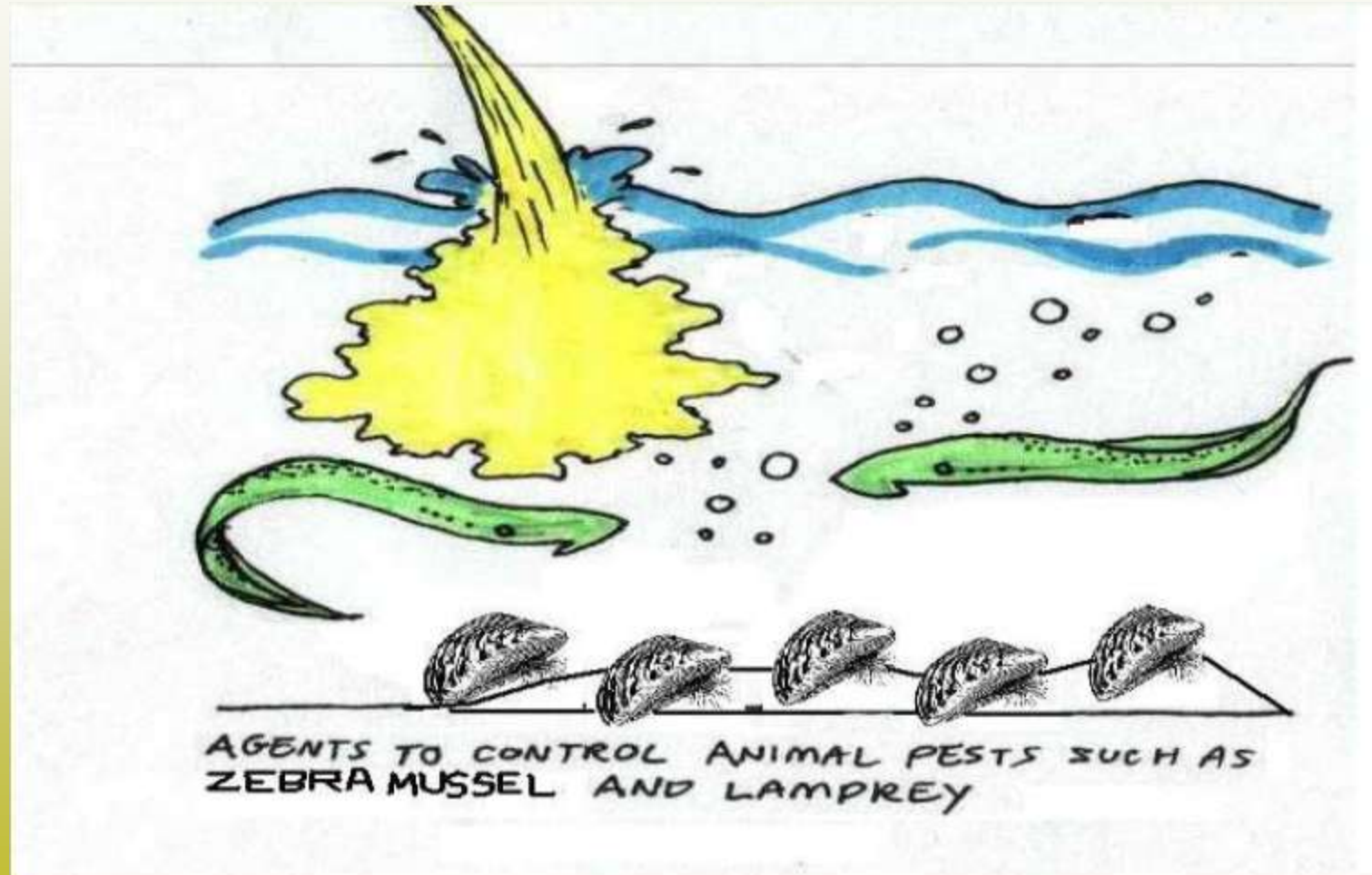
Application at water's edge to control e.g. ditch-bank weeds, where pesticide will unavoidably run off into waters



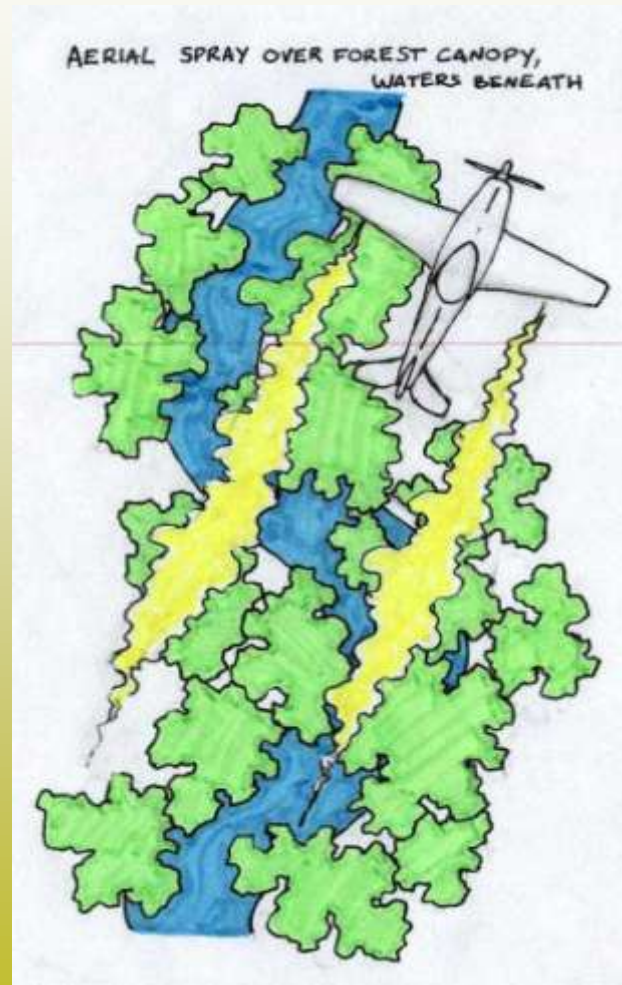
HERBICIDES TO CONTROL AQUATIC WEEDS AND ALGAE

Application directly into waters to control submerged and emergent vegetation and algae

Aquatic Nuisance Animal Control



Forest Canopy Pest Control



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Applications Outside Scope of the Permit

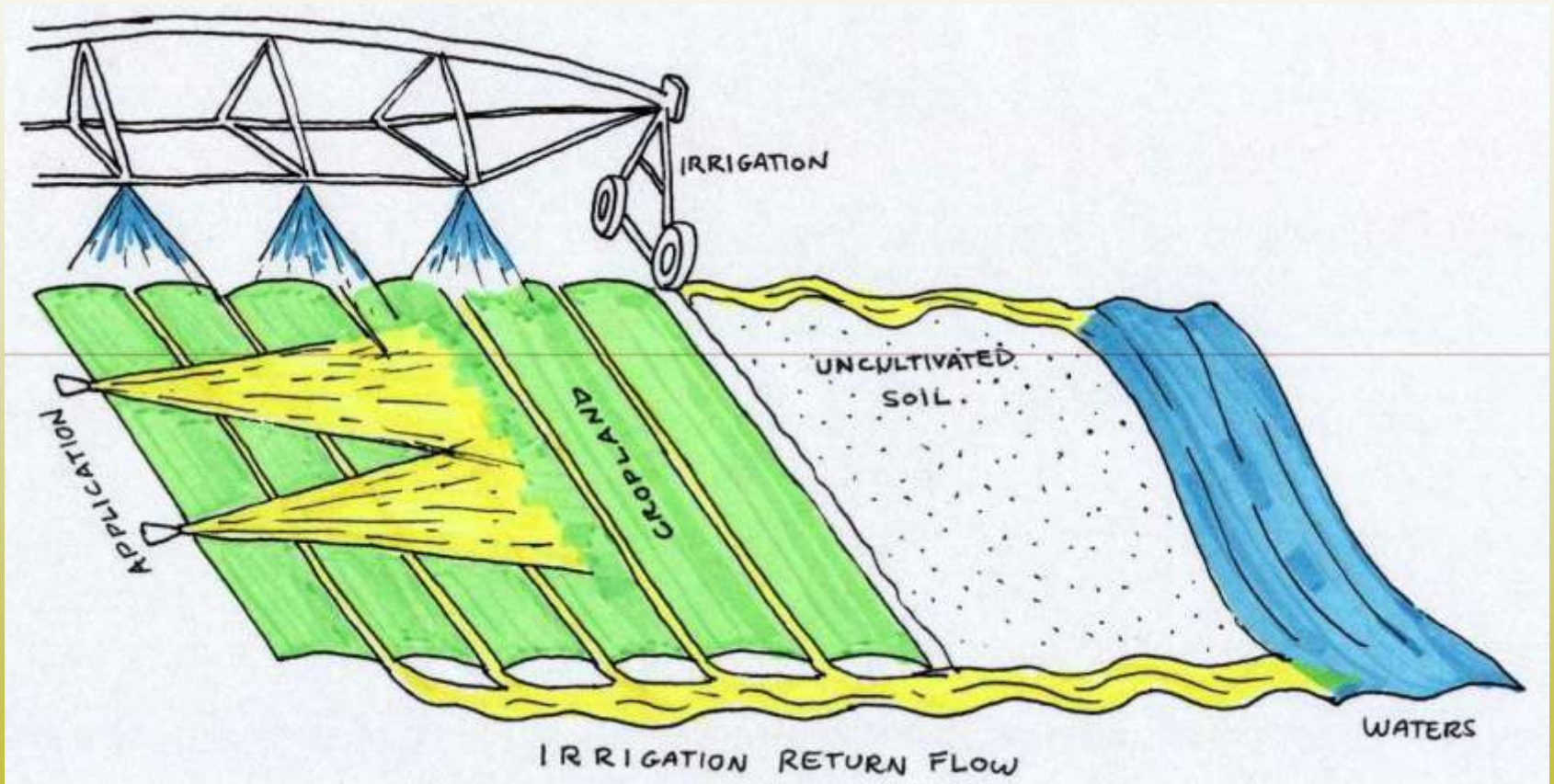
- ❑ Land-based applications to control pests on agricultural crops or forest floors

- ❑ Off target spray drift

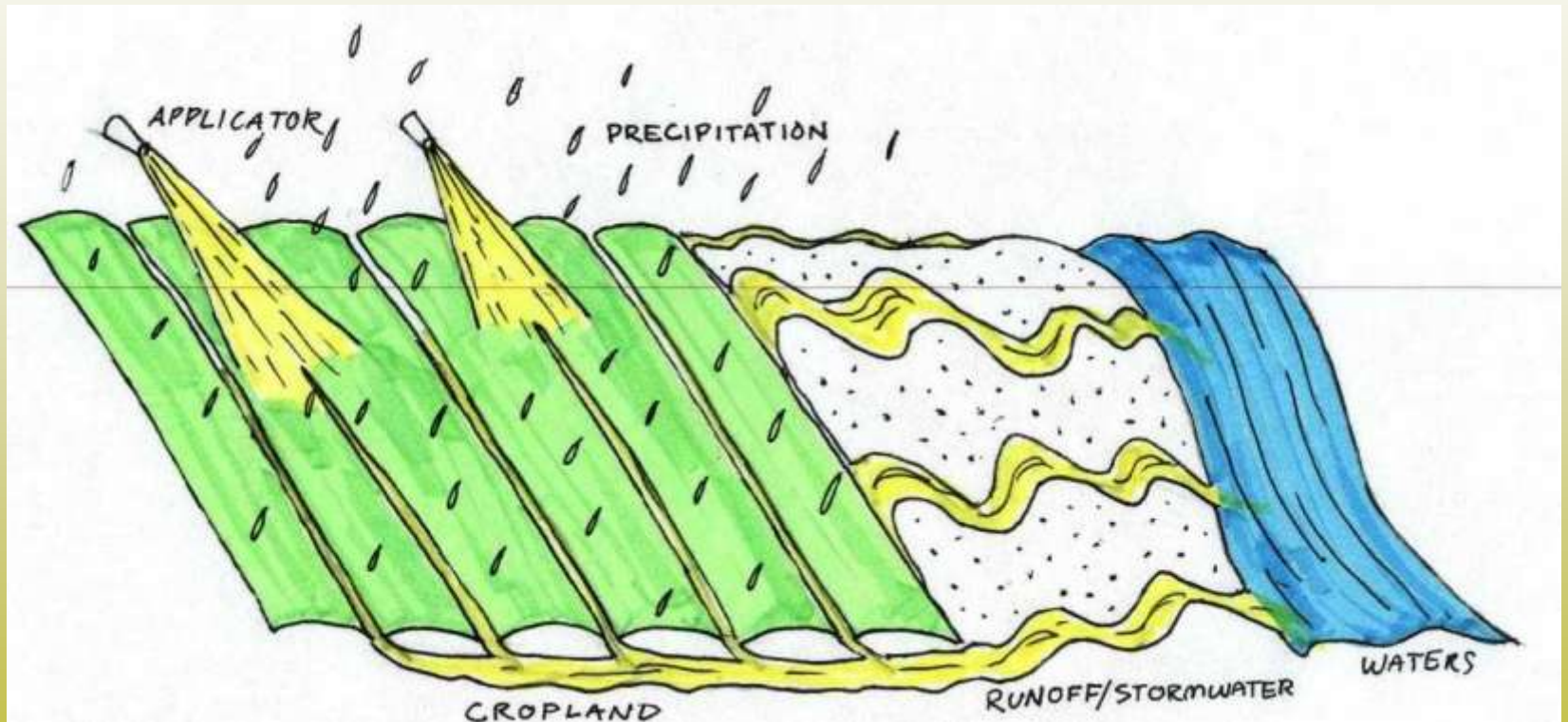
- ❑ Activities exempt from permitting under the Clean Water Act:
 - Irrigation Return Flow
 - Agricultural Stormwater Runoff



Irrigation Return Flow; Generally Exempt by Statute



Agricultural Stormwater; Generally Exempt by Statute



Draft Pesticide General Permit

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.



Draft Pesticide General Permit

Discharges not Authorized under the PGP

Each of these types of discharges would require preparation of individual permits, meaning a more detailed analysis:

- ❑ Discharges of pesticides to waterbodies that are impaired under CWA 303(d) for that pesticide or its degradates
- ❑ Discharges to Tier 3 (ONRW) waterbodies
- ❑ Discharges from other pesticide uses not specifically eligible for coverage.



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Annual Treatment Area Thresholds for NOI

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

- (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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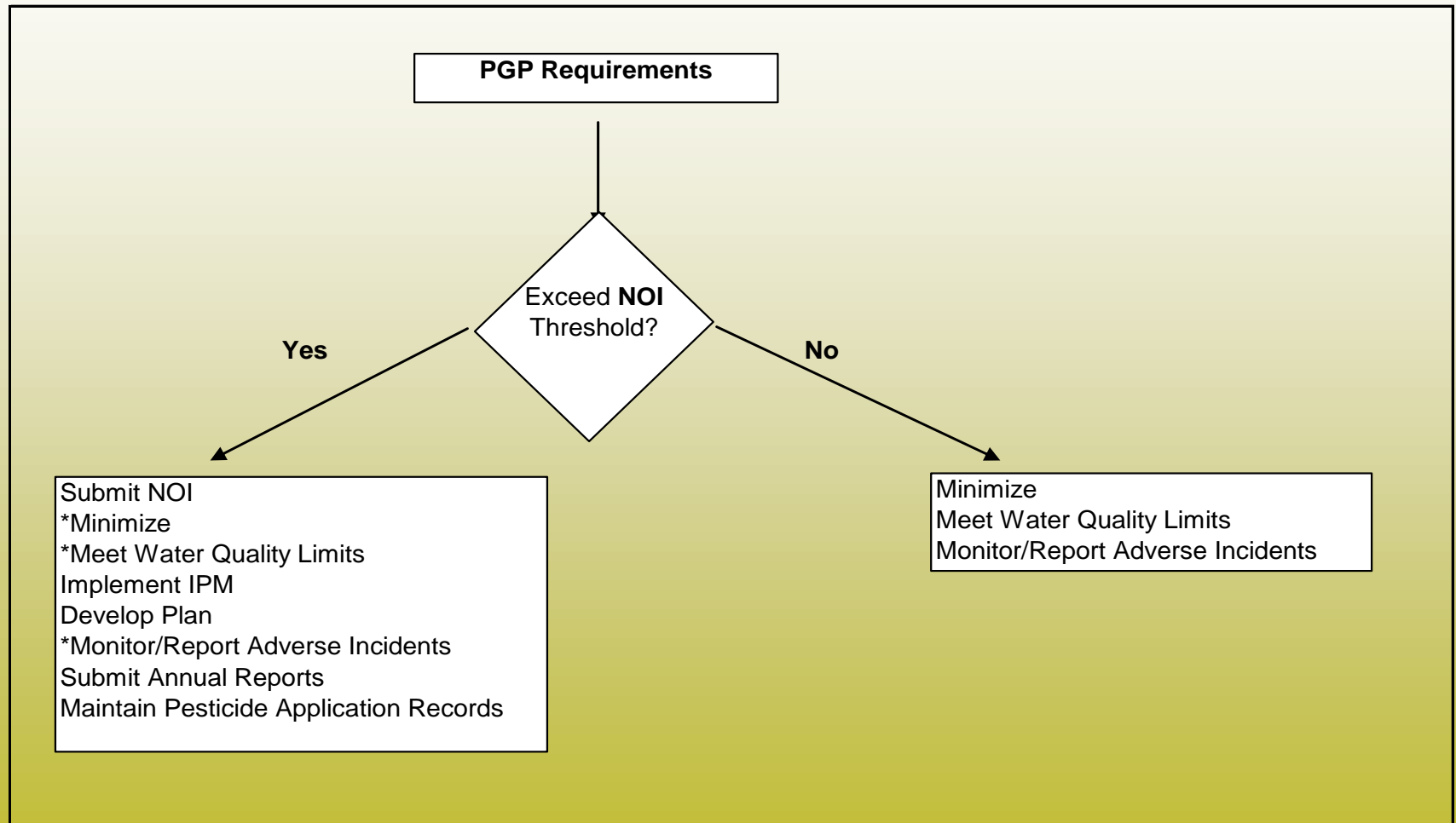
Who Has to File the NOI?

- ❑ NOIs will be required for entities that “know or reasonably should have known” that the total of their applications will exceed any of the pesticide application thresholds during a given year.
- ❑ The NOI filer, in most cases, would be the entity with control over financing for, or the decision to perform, pesticide applications, not the pesticide applicator (unless they are the same entity).
- ❑ However, any contract applicator would need to file an NOI if the applications it performs which are not already covered under another NOI total more than the annual threshold.



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Overview of PGP Requirements



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Technology Based Effluent Limits

- ❑ FIFRA label not a requirement of permit, but the Fact Sheet clarifies that a violation of any water-quality related aspect of the label is a CWA violation.
- ❑ The Technology-Based requirements are Best Management Practices (BMPs); not numeric limits
- ❑ All permittees are required to minimize discharges
 - Use lowest effective amount of pesticide
 - Perform regular maintenance
 - Calibrate, clean, and repair equipment



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Technology Based Effluent Limits

- ❑ Operators submitting NOIs (i.e. those applying more than the thresholds) also are required to do the following:
 - 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.
 - **“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.



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Monitoring

- Permit includes basic monitoring requirements for all permittees.
 - Visual monitoring for adverse effects during application and during any post application surveillance
 - Monitoring of management practices



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Pesticide Discharge Management Plan

- ❑ Operators submitting NOIs would also be required to prepare a Pesticide Discharge Management Plan (PDMP) for their pest management areas.
 - Must document how discharges will be minimized and effluent limitations will be met
 - To be developed prior to first pesticide application covered under the permit
 - Must be 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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Draft Pesticide General Permit

Public Comment Documents

- Federal Register Notice
 - Published in FR on June 4
 - Brief description of Permit
 - Specific Questions for which is EPA soliciting comment

- NPDES Pesticide General Permit
 - Contains actual permit requirements
 - Referenced in FR notice
 - Available on EPA website and regulations.gov



Draft Pesticide General Permit

Public Comment Documents (cont.)

- Permit Fact Sheet
 - Provides rationale for permit requirements
 - Referenced in FR notice
 - Available on EPA website and regulations.gov

- Website (www.epa.gov/npdes/pesticides)
 - All documents identified above
 - Frequently asked questions
 - Additional background information



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Questions in Federal Register Notice

- ❑ The type, size, and number of entities that are applying pesticides to U.S. waters
- ❑ Other pesticide use patterns that should be covered under this permit
- ❑ The appropriateness of the annual treatment area thresholds
- ❑ The appropriateness of entities not submitting an NOI
- ❑ The best way to cover entities with shared responsibilities for meeting permit requirements



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Questions in Federal Register Notice

- ❑ The type, size and number of entities that are already practicing IPM
- ❑ The appropriateness of ambient water quality sampling and who should be required to do this
- ❑ The appropriateness of a scope of operators required to submit annual reports and the type, level of detail, and practical utility of the information being requested



Next Steps:

Key Milestones

- ❑ Public Notice of Draft Permit
 - June 4, 2010
 - 45 day Public Comment Period June 4 – July 19, 2010
- ❑ (NEW) HQ national call with Tribes – late Sept 2010
 - Goal is to identify any outstanding Tribal concerns with what EPA is doing or has done in the PGP process
 - At end of the process EPA will prepare a document that describes how each tribal issue was addressed or, if not, why not
- ❑ 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



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Questions and Comments?

If you aren't able to ask your questions today, feel free to contact me:

Pascal Mues

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Background

Nov. 27, 2006-Final CWA Pesticides Rule

In 2000 – 2001, a number of lawsuits and court orders created confusion about whether pesticide spraying could require a permit under the Clean Water Act.

- Most well-known: 9th Circuit Court decision in *Headwaters, Inc. v. Talent Irrigation District*, March 2001

In response to this uncertainty in the pesticide user community, EPA proposed a Rule in November 2006 stating:

“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.”**

* FIFRA is the Federal Insecticide, Fungicide, and Rodenticide Act, the main federal pesticides regulation



Background

Challenge to 2006 Rule

- ❑ EPA's proposed pesticides rule was challenged in court almost immediately, in December 2006.
 - Petitions for review of EPA's proposed pesticides rule were filed in all 11 Circuit Courts. Petitions were consolidated in the 6th Circuit Court of Appeals.
- ❑ On January 7, 2009, the 6th Circuit vacated the Clean Water Act pesticides rule, stating that the rule was not a reasonable interpretation of the CWA, and that EPA must regulate the following under the Act:
 - **Biological pesticides** – always
Court considered these to fall under the CWA definition of "biological materials" as a "pollutant," ruling that all biological pesticides are pollutants because they "undeniably alter the physical integrity of the waters."
 - **Chemicals pesticides** – "once they've done their job"
Court considered these to count as "chemical wastes" pollutants once they have "completed their intended purpose," stating that any chemical pesticides (or their residues or degradates) which remain after the application has had its intended effect are "waste" and thus pollutants under the CWA.
- ❑ On June 8, 2009, the 6th Circuit granted EPA's request for time to develop a permit and ordered a two-year stay of the mandate until **April 9, 2011**.

