

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

Speakers:

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Permits Division, EPA Headquarters**

Jack Faulk - Project Team Leader

Albuquerque, NM – June 14

Boise, ID – June 16

Boston, MA – June 21

Washington, DC – June 23

Webcast – June 24



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Draft NPDES Pesticide Permit Topics to be Discussed

- Purpose of Public Meeting
- Background:
 - NPDES Permitting
 - 2006 EPA Rule
- Schedule
- Overview of EPA Draft PGP
- Summary and Next Steps
- Questions and Comments



Background

Nov. 27, 2006-Final CWA Pesticides Rule

“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.

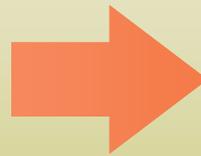
Note: In November 2009, industry petitioned the *Writ of Certiorari* which was denied by the Supreme Court



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: NPDES Permitting

State-Issued NPDES Permits

- ❑ State-issued general permits must meet all CWA requirements that the Federally-issued permit must meet but can be more stringent.
- ❑ Permits are written based on a permit writer's best professional judgment.
 - Judgments may differ, so how each permit satisfies the CWA requirement may differ in some respects.
- ❑ EPA does maintain an oversight role.
 - If EPA determines that a specific state condition fails to satisfy a particular CWA requirement, EPA could object to that permit.
- ❑ Citizens have the right to challenge NPDES permits.
- ❑ NPDES authorized states will need to have permits issued and effective by April 9, 2011.



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

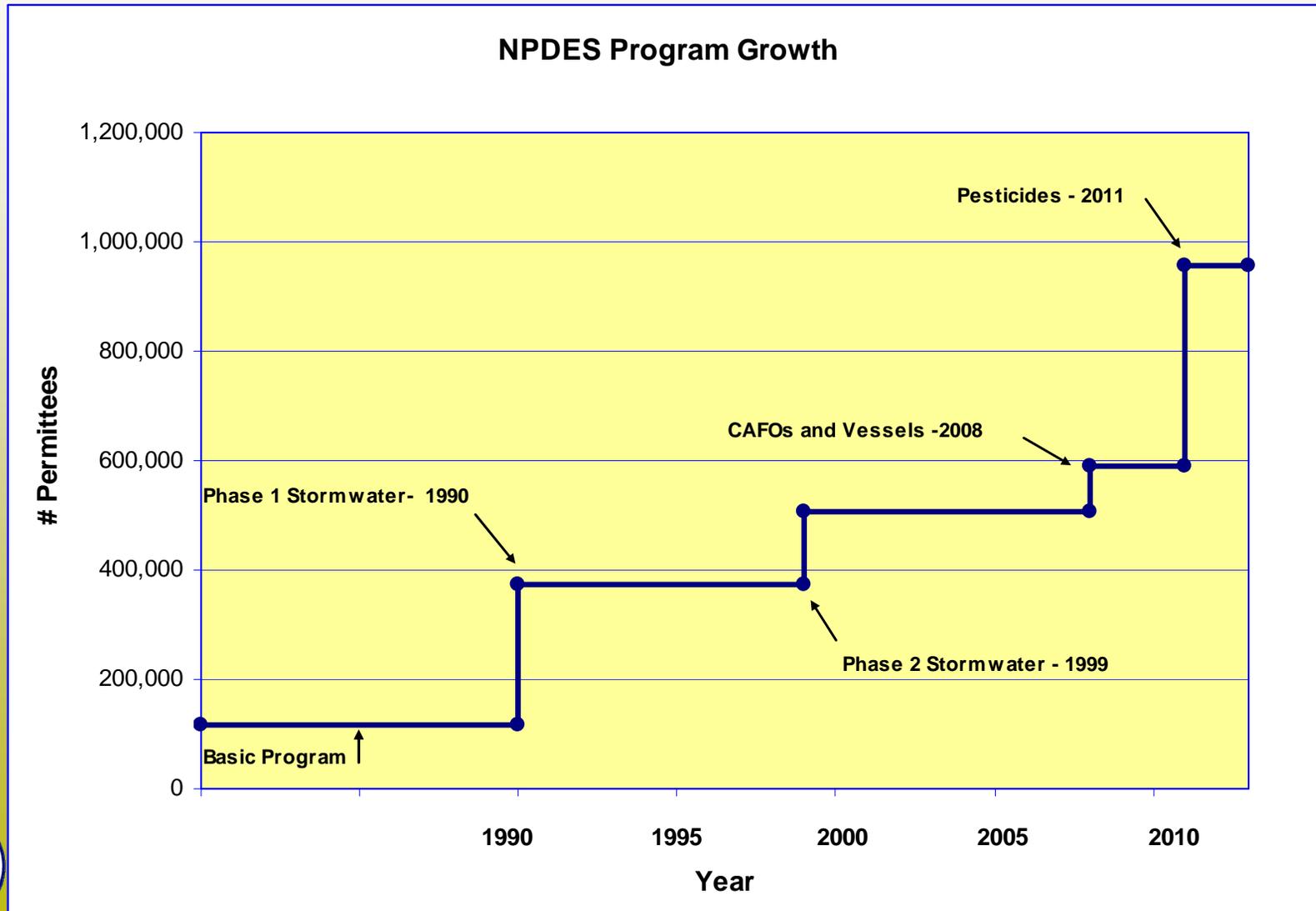
Types of NPDES Permits - General

□ General Permit (40 CFR 122.28)

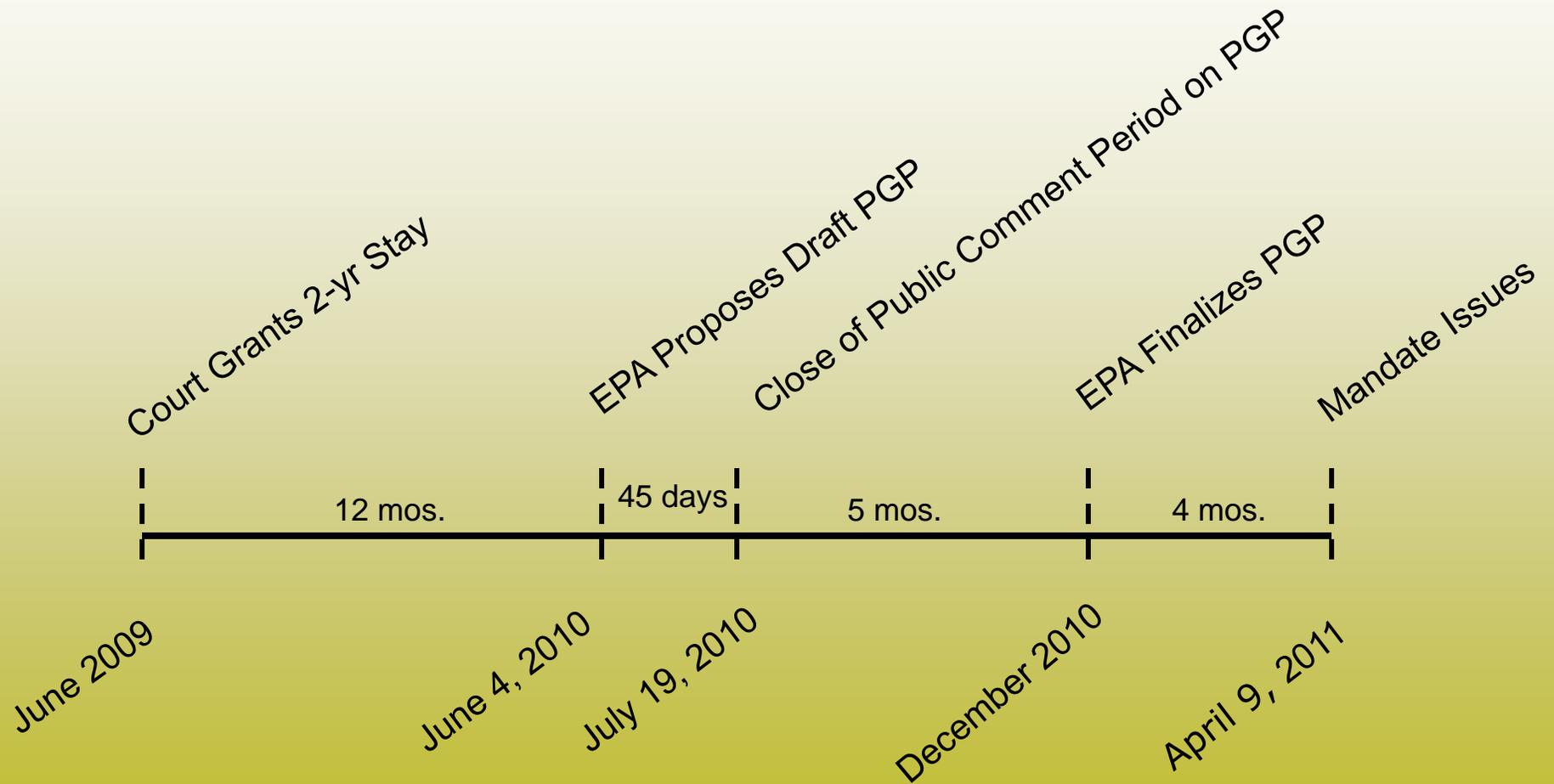
- 1 permit issued → NOI submitted by each permittee
- Permit must identify:
 - area of coverage
 - sources covered
 - other information
- NOI typically includes basic information on discharger, the type of discharges, and receiving water.
- Federal regulations provide that in certain instances, EPA can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



NPDES Permittees



Schedule: EPA Pesticide General Permit



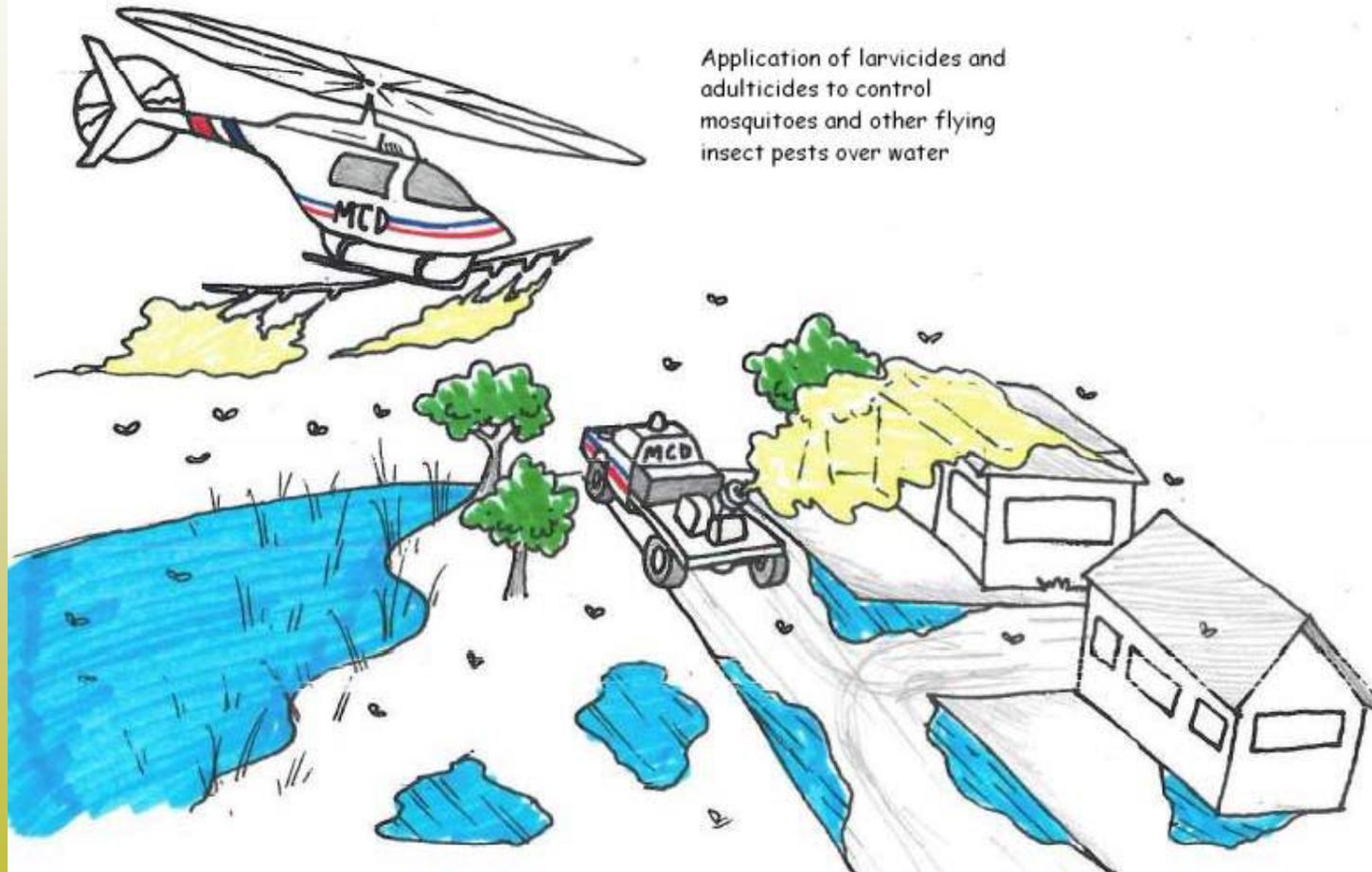
Draft Pesticide General Permit Scope

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

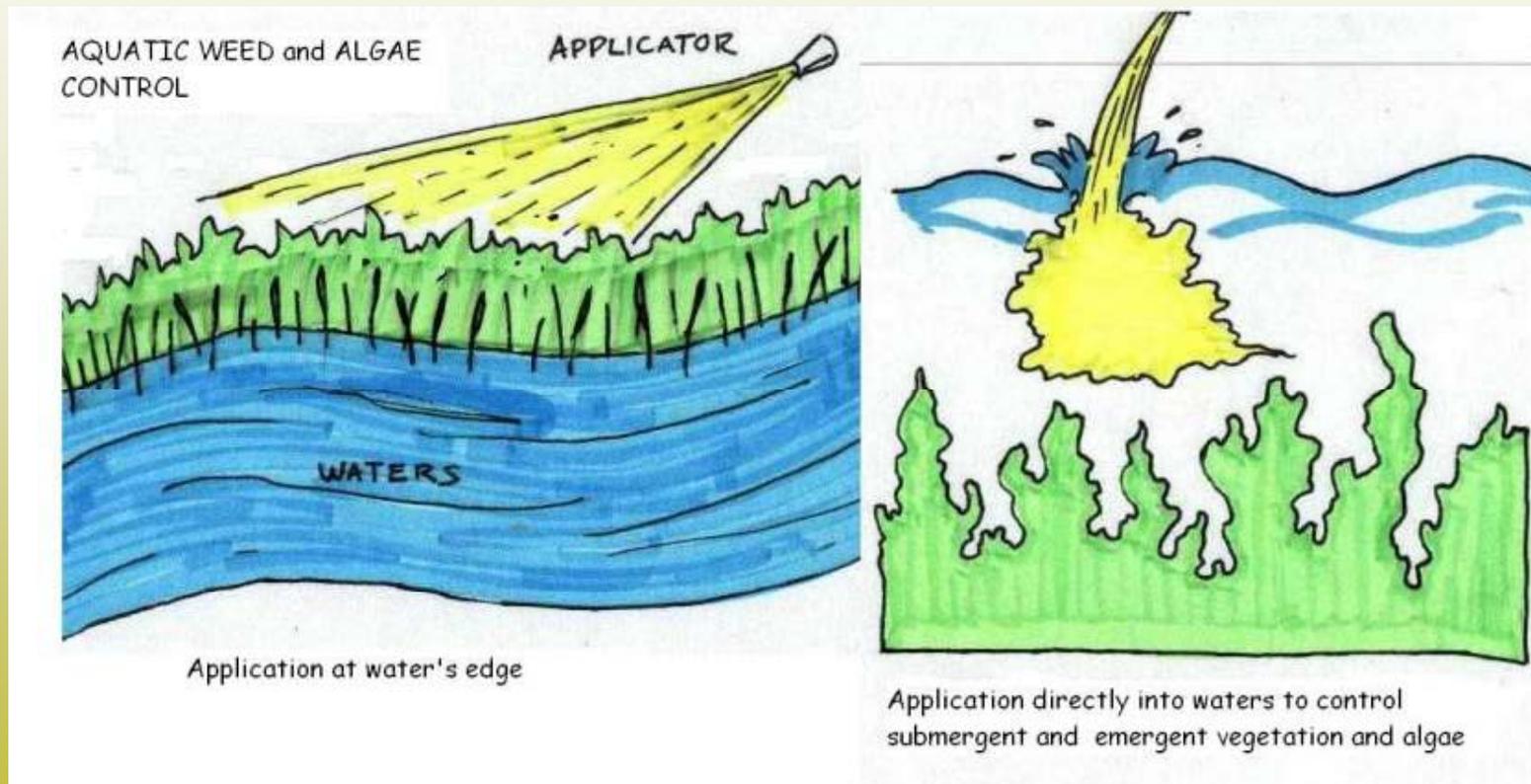
- ❑ Pesticide uses covered under permit:
 - Mosquito and Other Flying Insect Control
 - Aquatic Weed and Algae Control
 - Aquatic Nuisance Animal Control
 - Forest Canopy Pest Control



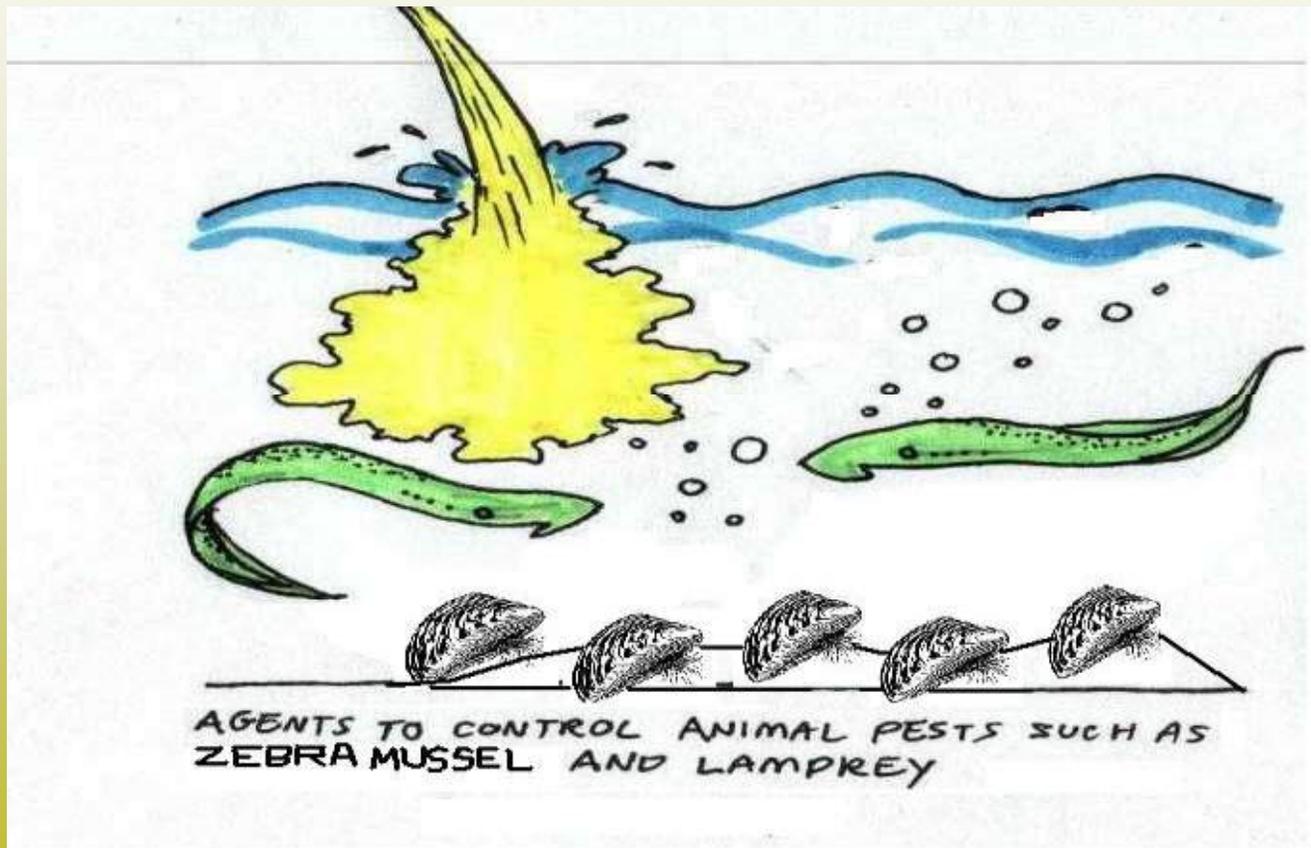
Mosquito and Other Flying Insect Pest Control



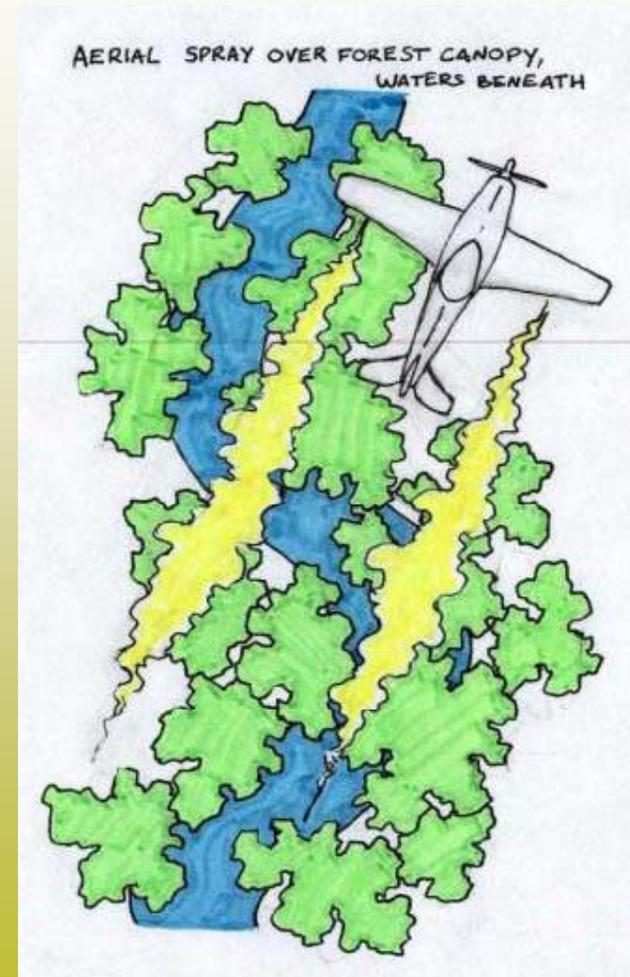
Aquatic Weed and Algae Control



Aquatic Nuisance Animal Control



Forest Canopy Pest Control



Draft Pesticide General Permit Outside Scope

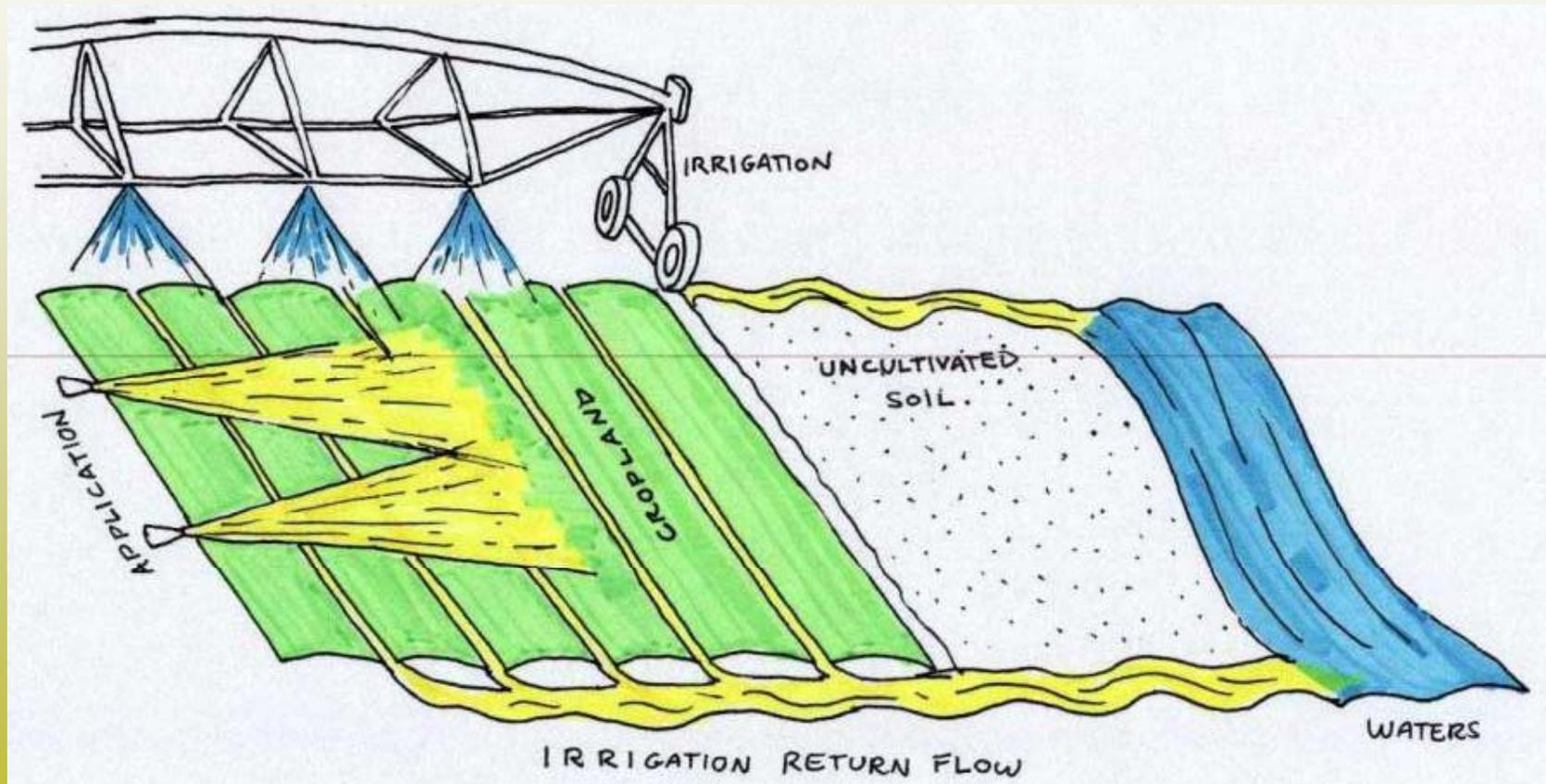
- ❑ Terrestrial applications to control pests on agricultural crops or forest floors

- ❑ Off target spray drift

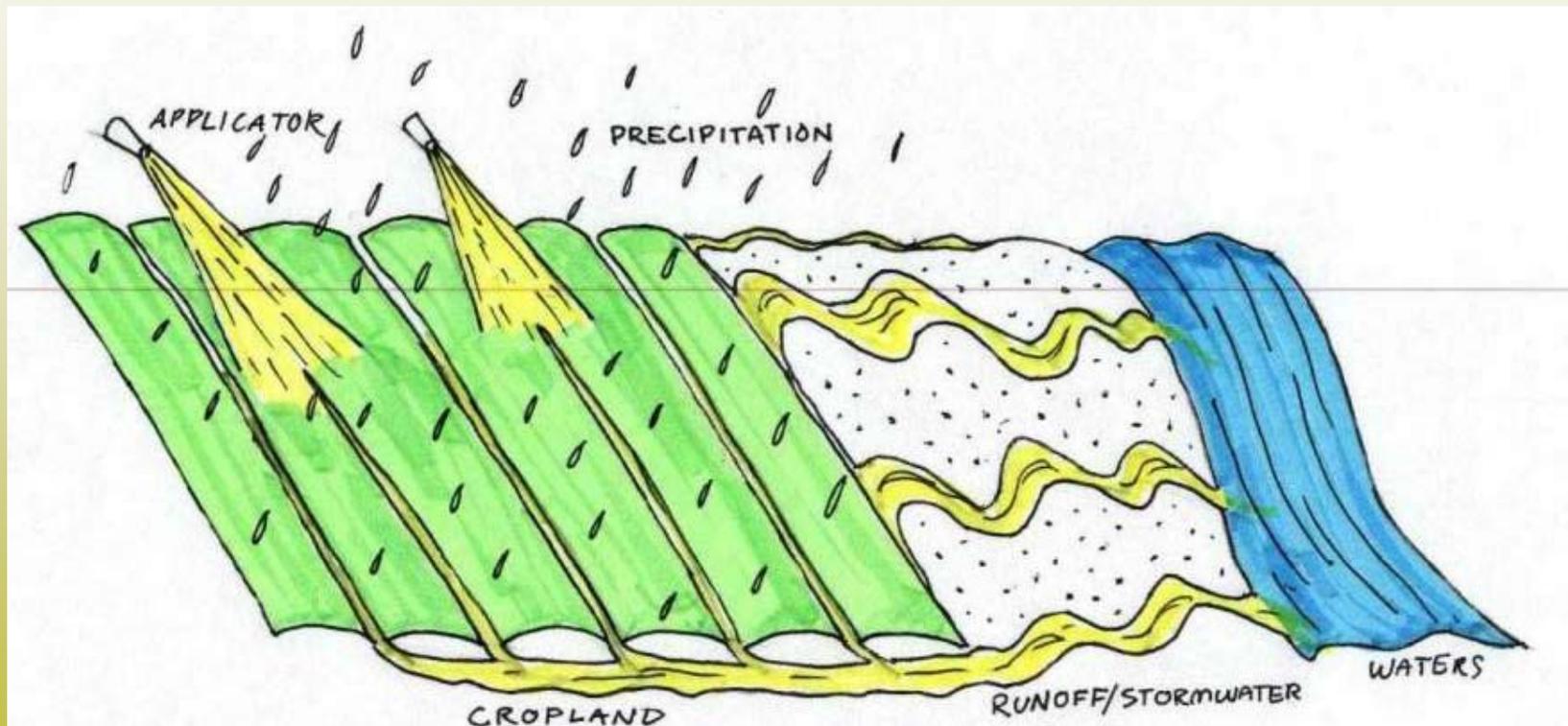
- ❑ Activities exempt from permitting under the Clean Water Act:
 - Irrigation Return Flow
 - Agricultural Stormwater Runoff



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

- ❑ 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.



Questions...



Draft Pesticide General Permit Permit Contents

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



Draft Pesticide General Permit

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



Draft Pesticide General Permit

Who Has to File an NOI?

- ❑ 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

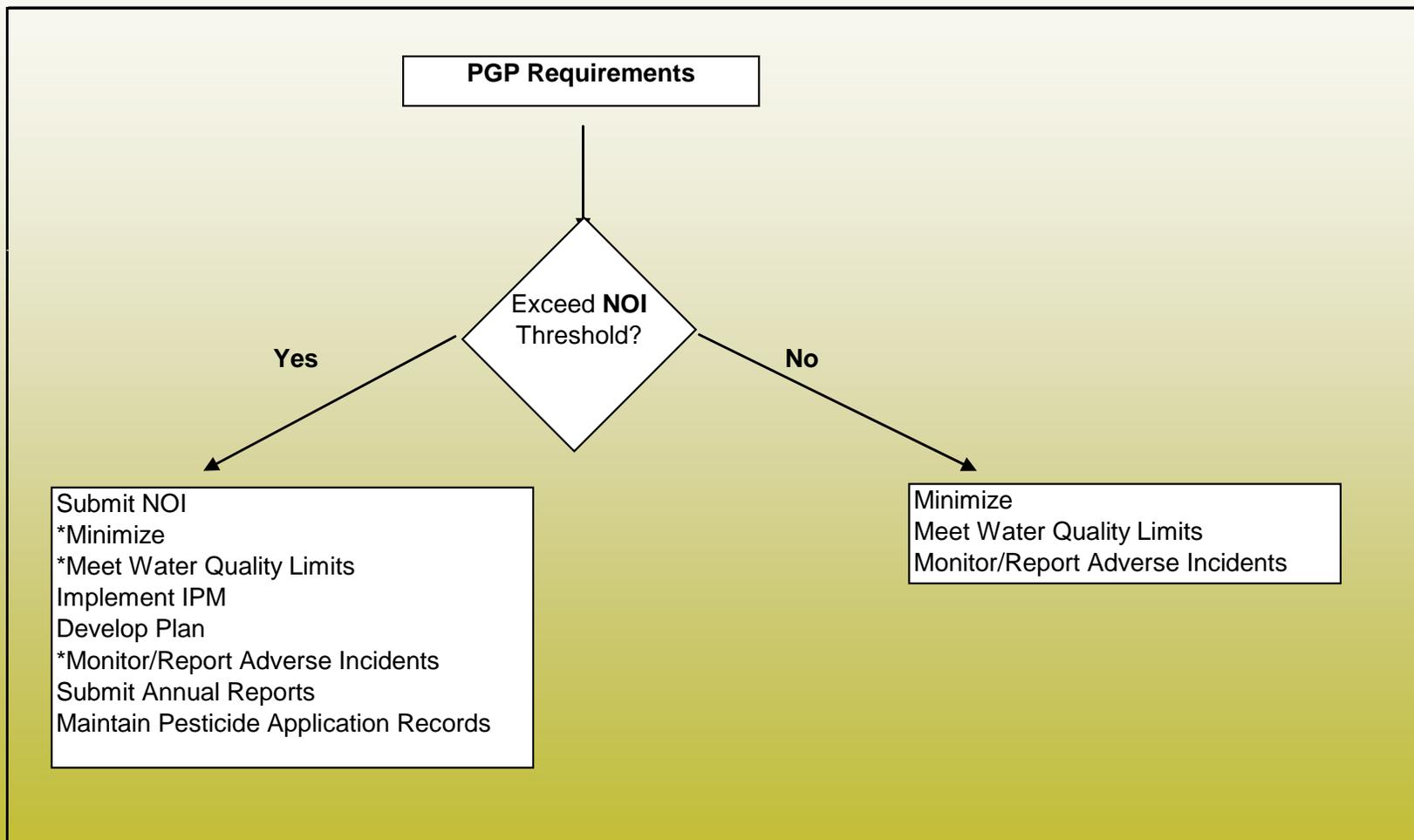
PGP Part	Pesticide Use	Annual Threshold
Part 2.2.1	Mosquitoes and Other Flying Insect Pest Control	640 acres of treatment
Part 2.2.2	Aquatic Weed and Algae Control	
	In Water	20 acres of water treatment area (1)
	At Water's Edge	20 linear miles at water's edge (2)
Part 2.2.3	Aquatic Nuisance Animal Control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



Draft Pesticide General Permit

Overview of PGP Requirements



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 permittees will minimize discharges
 - Use lowest effective amount of pesticide
 - Perform regular maintenance
 - Calibrate, clean, and repair equipment



Draft Pesticide General Permit Technology Based Effluent Limits

- ❑ 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



Draft Pesticide General Permit

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.



Draft Pesticide General Permit 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



Draft Pesticide General Permit

Pesticide Discharge Management Plan

- ❑ 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.



Draft Pesticide General Permit 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



Draft Pesticide General Permit 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 Environmental Benefits

- ❑ Mandatory equipment calibration and maintenance programs.
- ❑ Annual pesticide reporting – quantities and locations available to the public.
- ❑ Will be enforceable under the CWA as a permit violation.
- ❑ Additional limitations on pesticide use in impaired waterbodies (303d) and outstanding natural resources (Tier 3)
- ❑ Required use of Integrated Pest Management practices.
- ❑ immediate notification of adverse effects and expanded scope for who must report adverse effects on aquatic ecosystems.



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

- Permit Fact Sheet
 - Provides rationale for permit requirements
 - Referenced in FR notice



Draft Pesticide General Permit

Key Websites

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

- Federal Government Website (www.regulations.gov)
 - Submit comments
 - Review docket materials



Questions...



Specific Comments Requested

Number of Activities Covered

- The type, size, and number of entities that are applying pesticides to U.S. waters
 - How many entities expect to obtain permit coverage?
 - Who are the most frequent applicators? Government agencies? Public utilities? For-hire applicators?
 - What are the trends in application area size for specific uses?



Specific Comments Requested

Activities Covered

- Other pesticide use patterns that should be covered under this permit
 - Are there uses outside the framework of the four use patterns in which pesticides are necessarily and unavoidably discharged to waters of the U.S.? Should any such uses be eligible for coverage under this PGP?



Specific Comments Requested Limitations on Coverage

- Discharges to Tier 3 waters
 - Should applications to outstanding resource waters be eligible for coverage under this PGP? What if the purpose of the application is to maintain the integrity of such waters?
- Discharges of pesticides to waters impaired for those pesticides or degradates of those pesticides
 - What about applications of pesticides other than those causing the impairment?



Specific Comments Requested

Sharing of Responsibilities

- The best way to cover entities with shared responsibilities for meeting permit requirements
 - How should responsibility and liability under the PGP be effectively divided among the following types of parties involved in an application?
 - Decision-makers
 - Land owners
 - Applicators
 - Where there are multiple decision-makers for one application



Specific Comments Requested Notices of Intent

- The appropriateness of entities not submitting an NOI
 - What is the appropriate subset of permittees to require or not require an NOI from?
- The appropriateness of the annual treatment area thresholds
 - Do the proposed annual thresholds adequately separate “large scale” from “small scale” applications for the respective use patterns?



Specific Comments Requested Technology-Based Effluent Limits

- ❑ The types, sizes, and numbers of entities responsible for controlling pests and implementing IPM
- ❑ The range of IPM practices currently implemented by existing entities
- ❑ Burden associated with implementing IPM



Specific Comments Requested Water-Quality Based Effluent Limits

- How else might the WQBELs of this PGP be structured in order to meet applicable water quality standards? Is there another viable approach?



Specific Comments Requested Monitoring

- The appropriateness of ambient water quality sampling and who should be required to do this
 - Should ambient water quality monitoring be a requirement in this PGP and who should have to do it? How would the results of such sampling be best interpreted? Is there a way to obtain ambient data without burdening individual applicators?



Specific Comments Requested Annual Reports

- The appropriateness of the scope of operators required to submit annual reports and the type, level of detail, and practical utility of the information being requested
 - Who should have to submit an annual report and what should they tell us?



Next Steps: Key Milestones

- Public Notice of Draft Permit
 - June 4, 2010

- 45 day Public Comment Period
 - June 4 – July 19, 2010

- Issuance of Final Permit – Dec 2010

- Outreach – Jan-April 2011

- Permits Required – April 10, 2011



Outreach Schedule

Public Meeting - Albuquerque	June 14, 2010 12:00 pm – 3:00 pm	CNM Workforce Training Center Room 101 5600 Eagle Rock Av., NE Albuquerque, New Mexico
Public Meeting - Boise	June 16, 2010 9:00 am – 12:00 pm	U.S. Bureau of Reclamation Rooms 206 & 219 11650 North Curtis Road Boise, Idaho
Webcast	June 24, 2010 1:00 pm – 3:00 pm (EST)	** Rescheduled date www.epa.gov/npdes/training
Public Meeting - Boston	June 21, 2010 1:00 pm – 4:00 pm	U.S. EPA Region 1 Conference Room 1529 5 Post Office Square Boston, Massachusetts
Public Hearing – Washington, D.C.	June 23, 2010 10:00 am – 1:00 pm	U.S. EPA Headquarters Room 1153 1201 Constitution Ave., NW Washington, D.C.



For More Information NPDES PGP Website

For more information:

www.epa.gov/npdes/pesticides



Questions...



Background

Definition of "Point Source"

- 40 CR 122.2 defines "point source" as:
 - Any discernible, confined, and discrete conveyance, including but not limited to:
 - Any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.



Background

Definition of “Discharge of a Pollutant”

- 40 CFR 122.2 defines “discharge of a pollutant” as:
 - Any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any “point source,” or
 - Any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
- This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any “indirect discharger.”



Background

Definition of “Waters of the United States”

□ 40 CFR 122.2 defines “Waters of the United States” as:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate “wetlands;”
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

□ More information about “Waters of the U.S.” can be found in EPA Guidance (and available in the PGP Docket)

- “Clean Water Act Jurisdiction following the U.S. Supreme Court's Decision in *Rapanos v. United States* & *Carabell v. United States*”

