# Clean Water Act Permitting of Discharges from Pesticide Applications

U.S. EPA, Office of Water

**Speakers:** 

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# Pesticide Permitting Overview Topics

- Background
- Clean Water Act Permitting
- EPA and State Permitting Responsibilities
- EPA's Final PGP
- Where to Go for Help



## Background

- 2006 EPA Rule clarified EPA's longstanding interpretation that discharges from pesticide applications did not require National Pollution Discharge Elimination System (NPDES) permit coverage.
- EPA was sued on that rule and lost.
- As a result of a 2009 decision by the 6<sup>th</sup> Circuit Court of Appeals in National Cotton Council et al. v. EPA:
  - Point source discharges of "biological pesticides" and "chemical pesticides" that leave a residue are pollutants under the Clean Water Act (CWA).
  - These discharges need to be covered under an NPDES permit as of October 31, 2011.
- 2009-2011: EPA worked with federal agencies, states, industry, and stakeholders; completed public comment period; public noticed a draft permit.
- October 31, 2011: EPA issued its Pesticide General Permit (PGP) that provides a mechanism for certain dischargers to comply with this new requirement.

## Clean Water Act Pesticide Permitting

# NPDES Statutory Framework

- Any point source
- discharge of a pollutant
- to waters of the U.S.

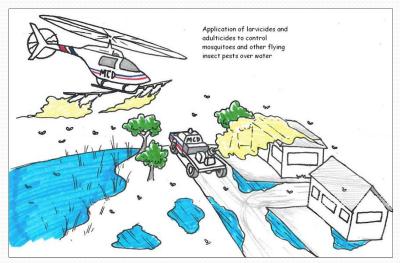


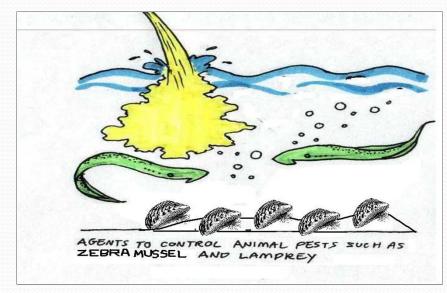
Must obtain NPDES permit coverage

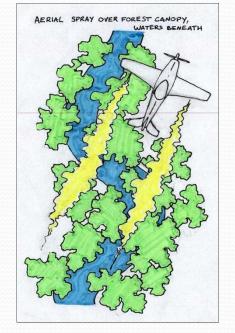
(provides legal authority for discharges of pollutants to waters of the U.S.)

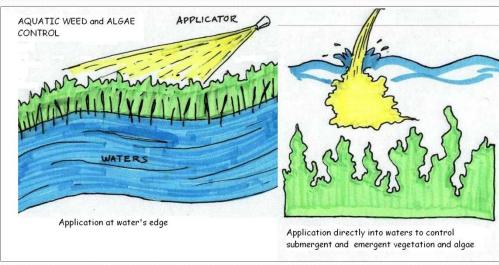


# Pesticide Use Patterns



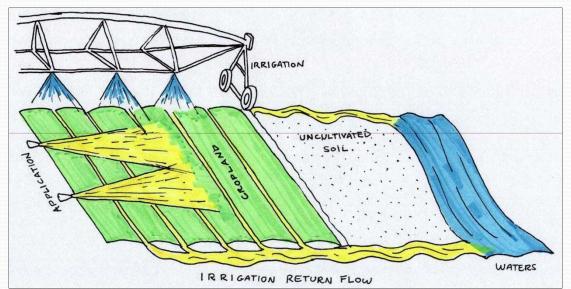








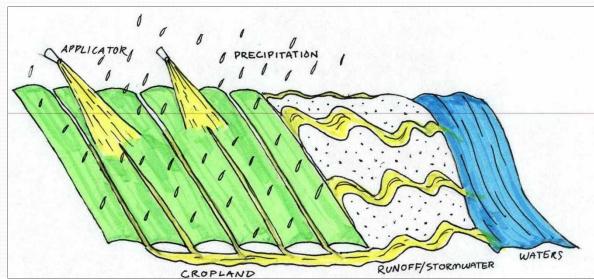
## Clean Water Act Exemptions from NPDES Permitting



Irrigation Return Flow: Generally Exempt by Statute

CWA §502(14)

Agricultural Stormwater: Generally Exempt by Statute





CWA §502(14)

## Clean Water Act Pesticide Permitting

## Waters of the United States

- Definition of "waters of the U.S." used in the PGP is consistent with the NPDES regulations (and the same as for all other NPDES permits for all other types of permitted discharges).
- Generally include discharges of pesticides within the ordinary high water mark of waters of the U.S., whether those areas are wet or dry at the time of pesticide application.
- Guidance to identify waters of the U.S. available on EPA's PGP website (under "Additional Resources for Permittees").



## Clean Water Act Pesticide Permitting

## Waters of the United States Guidance

**Source:** Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States (2008)* 

#### **Summary of Key Points**

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively
  permanent where the tributaries typically flow year-round or have continuous
  flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent nonnavigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only
  uplands and that do not carry a relatively permanent flow of water

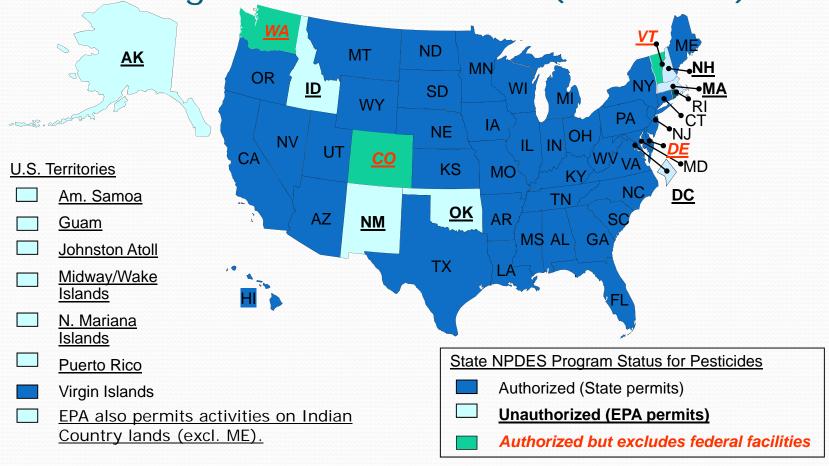
The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors



## **EPA** and State Permitting Responsibilities

## NPDES Program Authorizations (Pesticides)



#### Notes:

- Oil, gas, and geothermal activities in Texas are permitted by EPA.
- In certain instances, EPA authorized a state to administer only a portion of the NPDES program. (For example, OK issues most non-pesticide permits in the state; EPA issues pesticide permits in OK. The state is currently undergoing efforts to assume all NPDES permitting.)



### EPA's Final PGP

# Pesticide General Permit (PGP) Contents

Eligibility (Part 1)

- Scope
- Notice of Intent (NOI)
- Other Requirements
- Effluent Limits

<ul> <li>Technology-Based</li> </ul>	(Part 2)
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- Water Quality-Based (Part 3)
- Monitoring (Part 4)
- Pesticide Discharge Management Plan (Part 5)
- Corrective Action (Part 6)
- Recordkeeping and Reporting (Part 7)
- CWA Section 401 Certifications (Part 9)
- Definitions, Abbreviations, Acronyms (App. A)
- Standard Permit Conditions (App. B)
- Forms (App. D-H)

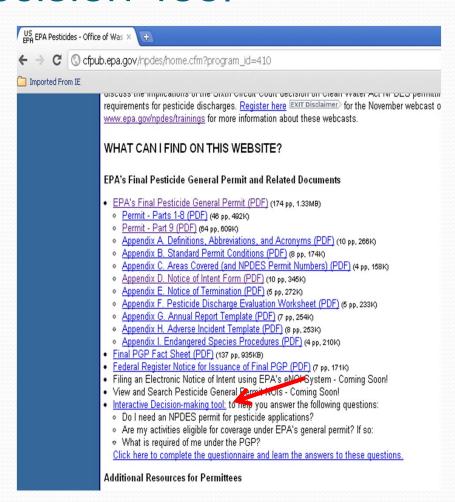


## Where to Go for Help

## Pesticides Permit Decision Tool

EPA has developed an interactive tool to help potential permittees through questions that help them:

- Determine if an NPDES permit will be needed for their pesticide application when the requirement for a permit takes effect;
- •For those who determine they need a permit, determine if they are eligible for coverage under EPA's PGP; and
- If they are eligible for coverage under EPA's PGP, understand what their requirements will be under the PGP.





# Eligibility - Scope

- PGP covers pesticides authorized under FIFRA, generally includes pesticide applications covered by the 2006 Rule.
- PGP covers four use patterns (with discharges to waters of the U.S.):
  - Mosquitoes and Other Flying Insect Pests
  - Weed and Algae
  - Animal Pests
  - Forest Canopy Pest



# Eligibility - Scope

## Discharges to waters impaired for the pesticide being discharged are not eligible for coverage under the PGP

- PGP covers pesticide applications to impaired waters under the following conditions:
  - If a waterbody is listed as impaired for a specific active ingredient, coverage is available only for pesticides with active ingredients other than the active ingredient causing the impairment for that waterbody.
  - If a waterbody is broadly listed as impaired for a family of active ingredients, coverage is available for pesticides with active ingredients in other families.
  - If cannot find an alternative in accordance with the conditions above and wishes
    to use a specific pesticide in a waterbody that is listed as impaired for that specific
    pesticide, then can apply for an individual permit or use other means of pest
    management that would meet eligibility for PGP.
- In Oklahoma, Chlorpyrifos, Diazinon, Dieldrin, Toxaphene, and DDT are causes of impairment for 303(d) Listed Waters.



# Operators of Discharges

- "Operator" PGP defines as any entity associated with an application of a pesticide which results in a discharge to waters of the U.S.
- Types of Operators who can gain coverage under the PGP:
  - Decision-makers have control over the decision to perform pesticide applications
    - Large Decision-makers <u>Public</u>: serves >10,000;
       Private: exceeds Small Business Administration standard
  - Applicators have day-to-day control or perform activities that are necessary to ensure compliance with the permit
    - For-hire applicators subset of Applicators who make contractual pesticide applications for which they or their employer receives compensation (e.g., lawn care firms, pest control companies)



# Eligibility – Notice of Intent (NOI)

- Notice of Intent (NOI) document submitted by an Operator to notify a
  permitting authority of their intent for their eligible discharges to be
  covered under a General Permit.
- NOIs are not "applications" per se, but are similar to permit applications in that they notify the permitting authority of a discharge requiring permit coverage.
- NPDES regulations require NOIs to include basic information on the discharger, type of discharges, and receiving water.
- NOIs cover discharges for the life of the permit (but may be modified or terminated).
- Federal regulations: In certain instances, discharges can be covered under a general permit without submission of NOI.



# Eligibility – Notice of Intent (NOI)

- Who Has to File an NOI under EPA's PGP?
  - Only certain **Decision-makers** who perform <u>more significant</u> pesticide applications:
    - 1. Any Agency for which pest management for land resource stewardship is an integral part of the organization's operations--regardless of size of areas treated
    - 2. Other types of entities with a specific responsibility to control pests (e.g., mosquito and weed control districts, irrigation districts)--regardless of size of areas treated
    - 3. Dischargers to Tier 3 waterbodies (i.e., Outstanding National Resource Waters)-regardless of size of areas treated
    - 4. Dischargers to Waters of the U.S. containing National Marine Fisheries Service (NMFS) Listed Resources of Concern--regardless of size of areas treated (none in OK)
    - 5. Other entities that apply pesticides in excess of annual treatment area thresholds
- Vast majority of Operators (including, generally, for-hire applicators) are covered automatically without submission of an NOI, an application, or any other type of documentation.

NOIs: Decision-makers Discharging to Tier 3 Waters

- Pesticide applications made to restore or maintain water quality or to protect public health or the environment that either do not degrade water quality or only degrade water quality on a short-term or temporary basis.
- A list of Tier 3 waters is available on EPA's website.
- No Tier 3 waters in the State of Oklahoma.
   (More discussion later)



## NOIs: Thresholds for Decision-makers required to submit NOI

\*not relevant for Decision-makers that are otherwise required to submit NOIs as identified in previous slide

Mosquito and Other Flying Insect Pest Control (adulticiding only) treat > 6,400 acres/calendar year

**Forest Canopy Pest Control** 

treat > 6,400 acres/calendar year

Count each pesticide application to a treatment area as a separate area treated. Example: applying pesticides 3x/year to same 3,000 acres = 9,000 acres total

**Weed and Algae Pest Control** 

treat > 20 linear miles OR 80 acres

**Animal Pest Control** 

treat > 20 linear miles OR 80 acres

Count each treatment area only once, regardless of the number of pesticide application activities performed in a given year.
Example: treating same 10 miles treatment area 3x/year = 10 miles total



## NOI Submission Deadlines and Authorization Dates

# Discharge not in response to a Declared Pest Emergency Situation

Submit NOI at least 10 days prior to discharge.

➤ Discharge authorized no earlier than 10 days after EPA posts online receipt of complete/accurate NOI.

If required to submit NOI for exceeding a treatment threshold, submit at least **10 days before exceeding that threshold**.

➤ Discharges authorized no earlier than 10 days after EPA posts online receipt of complete/accurate NOI.

## Discharge in response to a Declared Pest Emergency Situation

Submit NOIs within **30 days after beginning to discharge**.

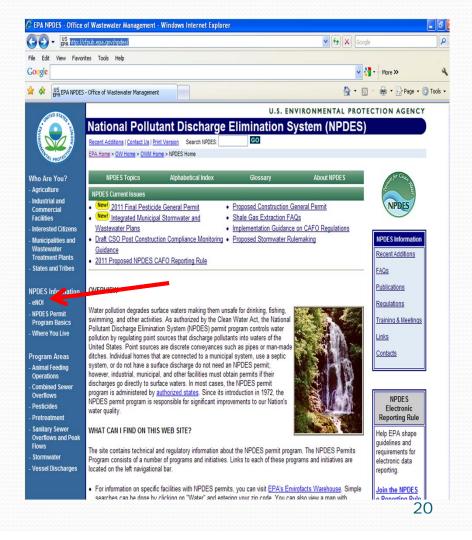
> Discharges authorized immediately.

Note: Deadlines vary in areas with NMFS Listed Resources of Concern (none in OK).



## Electronic NOI Submission (eNOI)

- Decision-makers must file using eNOI unless requesting a waiver because the use of eNOI would incur undue burden or expense (will need to provide reason in paper NOI).
- Website will include guidance on how to use eNOI system.





# EPA's Final PGP: Part 2 of 9 Effluent Limits – Technology-Based Effluent Limits

- All Operators must <u>minimize</u> discharges by using only the amount of pesticide and frequency of application necessary to control the target pest (Part 2.0)
- Applicators must (Part 2.1):
  - Maintain pesticide application equipment in proper operational condition
  - Assess weather conditions
- **Certain Decision-makers** (i.e., Federal and state agencies, other entities with responsibility to control pests, and other entities that apply pesticides in excess of specified annual treatment area thresholds) must implement pest management measures based on IPM principles (Part 2.2.1 2.2.4):
  - Identify/assess pest problem
  - Assess pest management alternatives
  - Follow appropriate procedures for pesticide use



## Pesticide Discharge Management Plan (PDMP)

- Large Decision-makers who are required to submit an NOI are required to develop a PDMP.
- Content of the PDMP includes:
  - Pesticide discharge management team information,
  - Problem identification,
  - Pest management options evaluation,
  - Response Procedures:
    - Spill Response Procedures
    - Adverse Incident Response Procedures
  - Documentation to support that ESA eligibility criteria (from Part 1.1.2.4) were met
- Decision-makers must keep a copy of the current PDMP at the address provided on the NOI (no need to submit).
- PDMP must be kept up-to-date for duration of permit coverage.



# EPA's Final PGP: Part 3 of 9 Effluent Limits – Water Quality-Based Effluent Limits (WQBEL)

## **All Operators:**

• The permit includes a narrative WQBEL:

"Your discharge must be controlled as necessary to meet applicable numeric and narrative state, territorial, or tribal water quality standards (WQS)."

- EPA expects that compliance with FIFRA in addition to compliance with the conditions in the permit will control discharges as necessary to meet applicable water quality standards.
- Section 401 of CWA: EPA permits required to obtain certification from states. Some states added requirements to PGP to ensure consistency with State WQS (Part 9 of the permit).
- During the life of the permit, EPA may determine, after reviewing new information, that additional control measures are warranted.



# Monitoring

- Applicators (Part 4.1):
  - Must conduct "visual monitoring" to detect observable adverse incidents that may be related to the pesticide discharge.
- All Operators (Part 4.2)
  - If any post-application surveillance occurs, must conduct "visual monitoring" to detect observable adverse incidents that may be related to the pesticide discharge.



## Corrective Action

## Corrective Action for Adverse Incidents

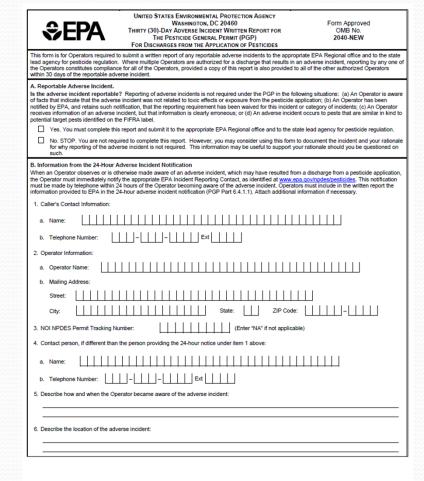
- All Operators: If become aware of an adverse incident which may have resulted from your discharge:
  - Within 24 hours of discovery or as soon as possible: Notify EPA Region by phone
  - 2. Within 30 days of discovery: Written report
  - 3. As necessary, corrective action



## EPA's Final PGP: Appendix H

# Forms – Adverse Incident Template

- 30-day Adverse Incident Report
- Report includes:
  - Operator name/telephone number/mailing address
  - Date/location of adverse incident
  - Description of incident identified, including EPA registration number of product used and description of steps taken or will be taken to contain any adverse effects.





EPA FORM 6100-24

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# Recordkeeping and Reporting

### **All Operators:**

- Copy of any Adverse Incident Reporting
- Copy of any corrective action documentation
- Copy of any spill and leak or other unpermitted discharge documentation

### For-Hire Applicators:

- Documentation of equipment calibration
- Information on each treatment area
  - Description of each area, including location and size and identification of any waters to which pesticides are discharged
  - 2. Pesticide use patterns
  - 3. Target pests
  - 4. Name and EPA Registration # of each pesticide product used
  - 5. Quantity of each pesticide product applied to each treatment area
  - 6. Pesticide application dates
  - 7. Whether or not visual monitoring was conducted during and/or after pesticide application; if not, why not; and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides



# Recordkeeping and Reporting

## Decision-makers who are required to submit an NOI and are:

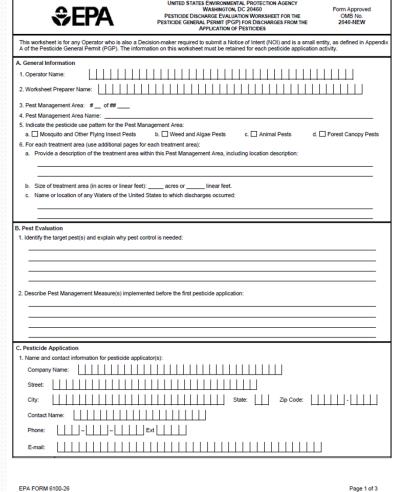
Small Entity	Large Entity
<ul> <li>Submit and retain a copy of the NOI</li> </ul>	<ul> <li>Submit and retain copy of the NOI</li> </ul>
<ul> <li>Keep Pesticide Discharge Evaluation Worksheet</li> </ul>	Copy of PDMP
(instead of Annual Report)	<ul> <li>Submit and retain copies of Annual Reports</li> </ul>
Documentation of equipment calibration if also	Documentation of     aguinment collaboration if also
an Applicator	equipment calibration if also an Applicator



## EPA's Final PGP: Appendix F

## Forms – Pesticide Discharge Evaluation Worksheet

- Required for Small Decision-makers who submit NOIs (instead of Annual Report).
- Must retain at the address provided on the NOI (do not need to submit).
- Worksheet includes:
  - Decision-maker and Applicator information
  - Locations and pesticide product use information
  - Identification of target pests and alternate pest management practices considered
  - Whether visual monitoring was conducted during/post application (if not, why not)
  - Adverse effects identified during visual monitoring

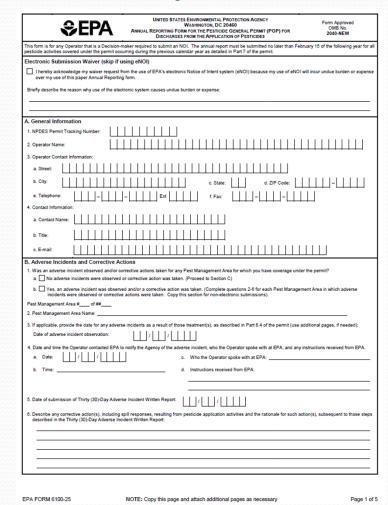




## EPA's Final PGP: Appendix G

# Forms - Annual Report Template

- Required for Large Decisionmakers who submit NOIs
- Report includes:
  - Decision-maker and applicator information
  - Adverse incident and corrective action information
  - Summary of locations, use patterns, and pesticides, pesticide application methods
- Submit no later than February 15
   after previous calendar year. Must
   be submitted even if coverage was
   terminated after a partial year.





## CWA §401 Certifications: Oklahoma

- ODAFF has denied PGP certification for:
  - New discharges to Scenic Rivers or Outstanding Resource Waters (ORWs) and all waters of the state within their watersheds.
    - Discharges existing as of 6/11/89 are allowed provided there is no increased load of any pollutant. New discharges to any High Quality Waters (HQWs) or Sensitive Public and Private Water Supplies (SWS).
    - New discharges are allowed if demonstrate discharge will maintain/improve water quality.
    - New discharges or increased pollutant loading from existing discharges as of 6/11/1989 listed in Table 1 of App. B in OK's Water Quality Standards (WQS) are only allowed if it is to ensure that recreational and ecological significance of waters will be maintained.
    - Documentation of criteria for any of the above must be submitted to ODAFF to determine eligibility. Copies of ODAFF determinations for the above must be submitted with any NOIs to EPA.
- No additional requirements for Indian Country lands within the State of Oklahoma.



## Where to Go for Help Additional Information

For more information on NPDES Pesticide permitting:

www.epa.gov/npdes/pesticides

PGP NOI homepage:

www.epa.gov/npdes/pesticides/enoi

Send any questions to:

hill.jenelle@epa.gov (EPA Region 6) pgp@epa.gov (EPA HQ)





# **End Presentation**

Time for Questions

