Maryland Department of the Environment

16-PE Overview

General Discharge Permit For Discharges from the Application of Pesticides
(16PE / NPDES MDG87)

MARYLAND

11-PE History

11/27/06	01/19/07	01/09/09	06/08/09	04/01/11	10/31/11	06/21/13
EPA issued a final rule clarifying 2 exemptions from a NPDES permit.		The 6th Circuit Court held that the CWA unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant".		EPA proposed a NPDES Pesticide General permit to cover discharges resulting from pesticide applications.		EPA finalized rule removing exemptions
	EPA received petitions for review of the exemptions.		The Sixth Circuit granted EPA the two-year stay of the mandate.		11-PE Issued by MDE (10/31/11 – 10/30/16)	

11-PE Eligible Discharges

This permit covers discharges to State waters from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue, when the pesticide application is for one of the following pesticide use patterns:

Mosquito and Other Flying Insect Pest Control:

- These are applications to control public health/nuisance & other flying insect pests that develop or are present during a portion of their life cycle in/above standing/flowing water.

Weed, Algae, and Pathogen Control:

- These are applications to control invasive or other nuisance weeds, algae, or pathogens in water and at water's edge, including public drainage ditches and/or roadside ditches.

Nuisance Animal Control:

- These are applications to control invasive or other nuisance animals in water and at water's edge.
- Nuisance animals in this use category include, but are not limited to fish and mollusks.

Forest Canopy Pest Control:

- These are aerial applications of a pesticide over or ground-based applications onto a forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water.

11-PE Ineligible Discharges

The following discharges are <u>not</u> covered under this general permit:

- Weed (other than wetland species such as phragmites), algae, or pathogen control applications in tidal waters;
- Applications to Tier III waters by other than federal, State, or local natural resource management agencies or operators contracting for such;
- Weed, algae or pathogen control and nuisance animal control in industrial or publicly owned treatment works (such application shall be regulated by the wastewater discharge permits for such facilities);
- Any discharges from a pesticide application to waters of the State if the water is identified as impaired by that pesticide or its degradates; and
- Weed, algae or pathogen control, insect larva control, and nuisance animal control for which a State toxic material permit has been denied.

11-PE Special Components

- No NOI currently required.
- Reporting currently only required for applications above specific area treatment threshold.
- All involved parties are equally responsible.
- Does not include return flows from irrigated agriculture or agricultural stormwater runoff.

11-PE Main Components

Technology-Based Limits

- Optimum amount of pesticide, optimum frequency of applications.
- Regular maintenance activities to unintended discharges.
- Pest management practices to minimize discharges: problem identification, pest management, and pesticide use.

Pesticide Discharge Management Plan

- If exceeding the annual treatment thresholds

- PDMP Team, Control measures (active ingredients' evaluations, rate and frequency, spill prevention, schedules/procedures, pest surveillance, environmental conditions assessment), spill response procedures, monitoring schedules and procedures, pest management area description, signature.

Water-Quality Based Limits

- Maryland water quality standards.
- Copper: 9 µg/L.

Monitoring

- Ensure PMPs are implemented.
- Visual Monitoring.

Reporting

- 24-Hour Adverse Incident Notification to MDE.
- 30-Day Adverse Incident Written Report to MDE.
- Threatened or Endangered Species or Critical Habitat to NMFS, FWS, DNR, and/or MDE.

TMP Overview

Toxic Material Permit

Code of Maryland Regulations (COMAR)

COMAR 26.08.03.02 requires a permit for persons managing aquatic life in, or near, State waters by use of toxic substances, provided that the toxics application is either specific to the targeted species or limited in scope.

26.08.03.02

.02 Use of Toxic Substances for Aquatic Life Management Purposes.

A. Scope. Any person who adds toxic substances to the waters of this State for aquatic life management purposes shall be governed by this regulation.

B. Restrictions on Use.

(1) Toxic substances may not be applied to, discharged to, or deposited in the waters of this State in any way unless:

(a) The application, discharge, or deposit meets all of the requirements imposed by this regulation; and

(b) Approval is given in accordance with this regulation.

Toxic Materials Control for Beneficial Use

Aquatic Weed & Algae Control

•Most of these cases involve the control algae, cattails, water lilies, submerged aquatic vegetation, or duckweed in farm, stormwater, ornamental, and recreational ponds.

Invasive Species Control

•Mostly involves the control of phragmites, a tall, aggressive reed of little value in native ecosystems, and multiflorarose control in wetlands.

Mosquito Control

•Involves the application of pesticides to wetlands to control the larval stage of the mosquito.

Fish Management

•Involves the purging of impoundments of undesirable fish species prior to stocking of preferred species.

TMP Review

DNR

Any impact of a proposa' on fish, plants, or wildlif with particular attentior to endangered or threatened species.

MDE

Any harm to State waters and aquatic life, based on ecotoxicity, water quality standards, etc.

MDE
Registration Letter

1-2 page letters with standard conditions defining the time and number of applications, who should supervise, how to mitigate their impact, prohibitions, any study requirements, any alternative treatments, any monitoring requirements.

TMP Limitation Examples

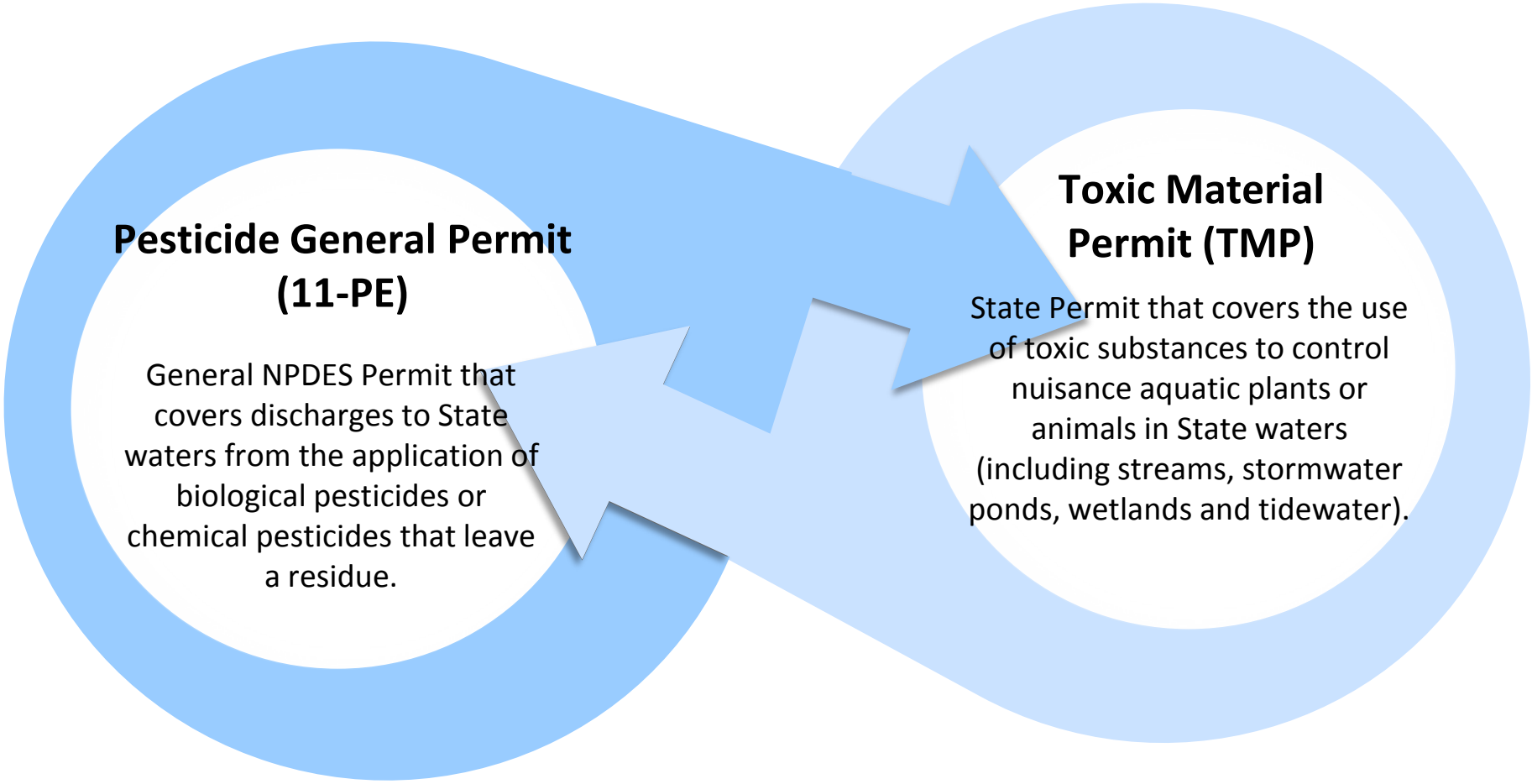
Confinement is often practical because most of the algae and weed control is performed within small impoundments that, while they are connected to greater aquatic systems, they are not vital and generally inhibit the dispersal to downstream waters.

An example of limiting the impact would be our requirement that the control of phragmites, by use of a broad-spectrum herbicide called Rodeo, be limited to late summer and autumn when the effects on non-target vegetation would be negligible.

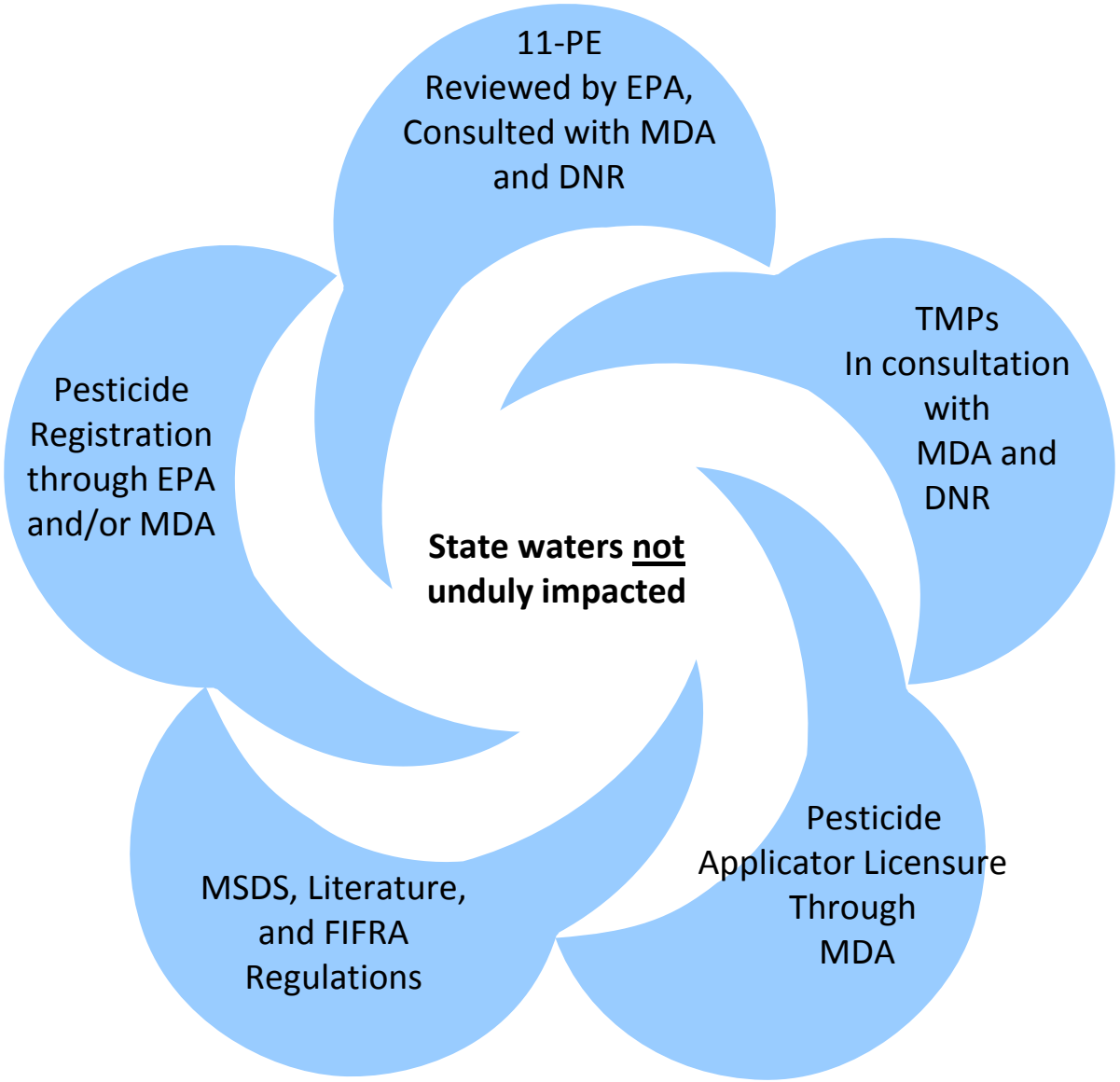
Reducing potential issues by using less toxic or nontoxic alternatives (e.g., barley straw for algae control in eutrophic ponds).

Comparison Between the TMP and 11PE

Current Permits within MDE



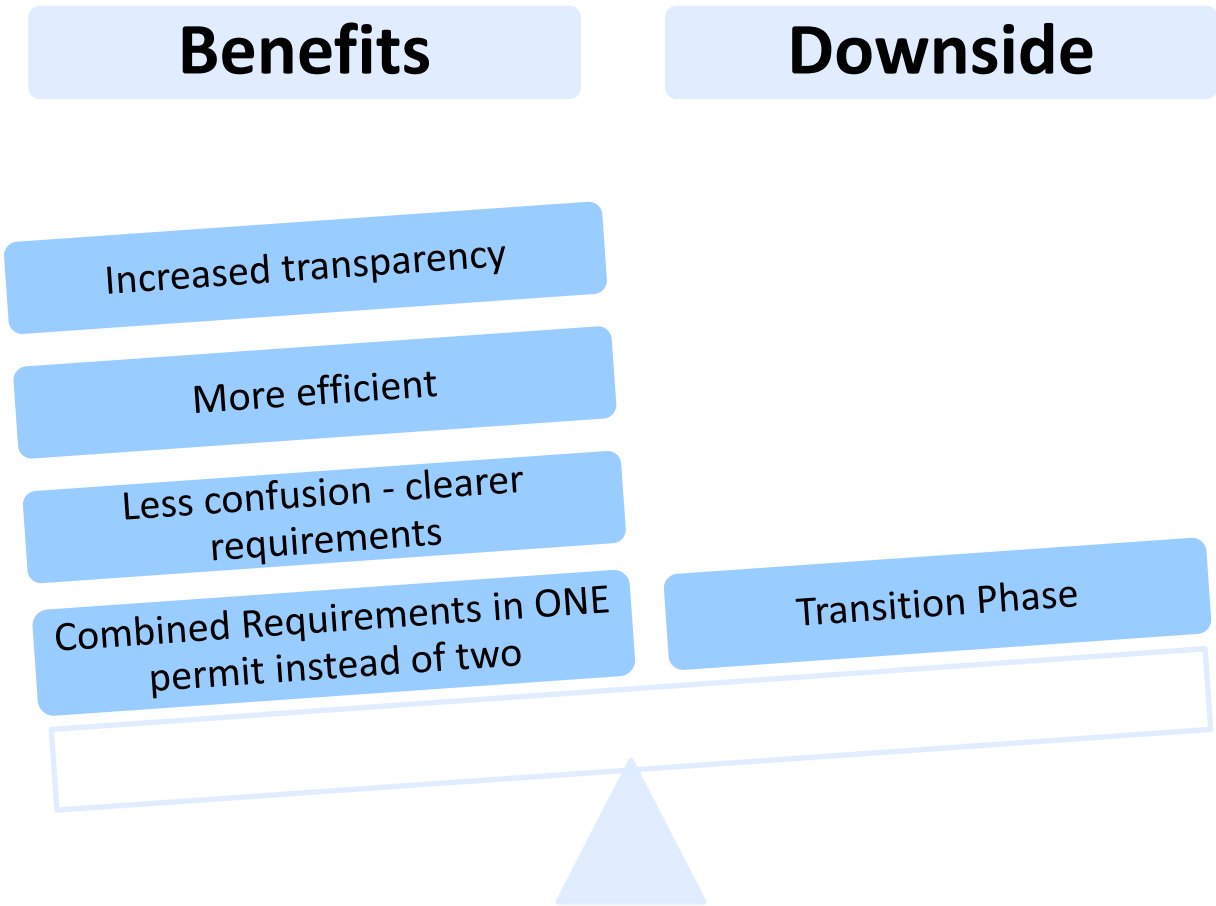
TMP and 11PE Purpose



11-PE vs. TMP

11-PE	vs	TMP
No application needed		Requires application for specific project
General NPDES Permit		Individual State Permit
Only applicable for pesticides		Applicable to ANY toxic substance
Application of pesticides anywhere		Application only in or near State waters
EPA/NPDES - 2009 6th Circuit Court -		COMAR 26.08.03.02
Public Participation at Renewal		No Public Participation
Application of a pesticide in State waters		

Potential Combination



Questions

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Best number to refer applications to:
410-537-3323