Aquatic Plant Management Handbook:
Chapter 10 Permitting and the use of Dyes in Public Waterways

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This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:

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Date
GUIDANCE PURPOSE AND DISCLAIMER

The purpose of this chapter is to provide process guidance to Department staff for consistently responding to the requests for the discharge and permitting of dyes in surface waters.

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INTRODUCTION

Chapters NR 107 and NR 109, Wisconsin Administrative Code, require permits to control aquatic plants or other aquatic organisms. Generally, only chemicals registered and labeled for intended use by the USEPA may be issued permits¹. Some dyes may not be registered as a pesticide, but still have pesticidal qualities that have the effect of controlling aquatic plants or other organisms. This chapter of the Aquatic Plant Management Handbook is intended to provide guidance on how to comply with Chs. NR 107 and 109 for the use of dyes in waters of the state. The Department exercises its enforcement discretion to limit the permitting of dyes to waters of the state that are not considered private ponds.

Applicable Administrative Code Language

NR 107.02 Applicability. Any person sponsoring or conducting chemical treatment for the management of aquatic plants or control of other aquatic organisms in waters of the state shall obtain a permit from the Department. Waters of the state include those portions of Lake Michigan and Lake Superior, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other ground or surface water, natural or artificial, public or private, within the state or its jurisdiction as specified in s. 281.01 (18), Stats.

¹ The Department may consider an application for a field evaluation use permit under s. NR 107.10, Wis. Adm. Code, for chemical products that are not labeled for aquatic nuisance control if the applicant has obtained an experimental use permit from USEPA or Wis. DATCP per 40 CFR 172 and s. ATCP 29.71. A Special Local Needs registration by the Wis. DATCP per s. ATCP 29.72 or Section 18 emergency exemption granted by USEPA per 40 CFR 166.
NR 109.02  Applicability. A person sponsoring or conducting manual removal, burning or using mechanical means or aquatic plant inhibitors to control aquatic plants in navigable waters, or introducing non-native aquatic plants to waters of this state shall obtain an aquatic plant management permit from the Department under this chapter.

APPLICATION

Applications for the use of dyes should be routed through Central Intake using the Chemical Aquatic Plant Control Application (Form 3200-004). Questions about the use of dyes should be routed to District Aquatic Plant Management (APM) program staff.

A NR 107 Chemical Aquatic Plant Control permit is required for most discharges of dye into the waters of the state regardless of whether the applicant claims that the intended use is for aesthetics or non-pesticide purposes. Dyes impart color and may act to manage, inhibit or control aquatic plants and organisms and therefore fall under the regulatory purview of Chs. NR 107 and 109, Wis. Adm. Code. Dye in a lake or stream will limit light penetration inhibiting photosynthesis in rooted and free-floating plants and algae. Prolonged use will suppress primary production and negatively affect food web interactions.

In addition to a NR 107 or 109 permit, the applicant must be also covered by WPDES permit. WPDES General Permit for Aquatic Plant, Algae, and Bacteria (WPDES Permit No. WI-0064556) is applicable for all pesticidal dye discharges. When a NR 107 or 109 permit has been issued the APM staff will contact the WPDES Statewide Pesticide GP Coordinator to determine if the permittee has WPDES coverage.

For aesthetic or non-pesticidal discharge of a pollutant a NR 107 or 109 permit is typically not applicable however a WPDES permit is required. It is Department policy to have permittees request coverage under the Aquatic Plant, Algae, and Bacteria (WPDES Permit No. WI-0064556) for all pesticidal dye pollutant discharges to keep these similar discharges under the same general permit. The legal authority for issuance of coverage for these activities is in the General Permit subsection titled ‘Discharge of Other Pesticide Active Ingredients’. Permittees must demonstrate compliance with all requirements of the WPDES general permit. The Statewide Pesticide GP Coordinator will review and issue coverage determinations under the General Permit.

The use of dyes does not require an Aquatic Plant Management permit in the following situations:

1. In private ponds as defined by NR 107.11(3)(a), Wis. Adm. Code.

   A private pond is a body of water located entirely on the land of an applicant, with no surface water discharge or a discharge that can be controlled to prevent chemical loss, and without access by the public.

2. When conducted by the Department, or under the direction of, and consistent with the provisions of Chs. NR 107 or 109, Wis. Adm. Code. Notification to District APM coordinator is required. Note WPDES coverage may be required. Many
Department programs have WPDES coverage for routine dye use, contact the WPDES Statewide Pesticide General Permit Coordinator to determine coverage.

3. When used by, or under the direction of a governmental agency as a “tracer” for investigating public safety and health issues. This could include checking the structural integrity of dams, identification of illegal or unwanted discharges from sanitary sewers or other facilities. Notification of dye use to the District APM coordinator and WPDES Statewide Pesticide General Permit Coordinator is required.

4. In the event of an emergency where the public or property may be in danger, the Department of Natural Resources or an entity working under the Department’s guidance, does not need prior approval, but needs to contact Spills Hotline immediately and follow up with the APM and WPDES Coordinators.

5. When used for research purposes by a government agency or educational institution. Notification of dye use to the District APM coordinator and WPDES Statewide Pesticide General Permit Coordinator is required to determine whether permit coverage is needed.

**Department Notification for activities not requiring a NR 107 or 109 permit**

When a governmental agency or educational institution applies dyes, the Department shall be notified at least 7 days in advance if the dye has not been approved for use by the Department. If the dye has been approved for use, the Department shall be notified at least 48 hours prior to introduction to waters of the state. The APM Coordinator will send a copy of the notification via e-mail to the DNR Spills Hotline at DNRLHotline@wisconsin.gov. The following information is required for each receiving water body (i.e. change in WBIC):

1. Project scope summary
2. Name of product and associated Safety Data Sheet
3. Location and proposed date(s) of dye application
4. Estimated quantity and duration of dye application
5. Method of dye application
6. Method of release (if retained in a system for testing as is the case of surcharging storm sewers to detect private lateral and sanitary sewer I/I)
7. Outfall location and name of receiving waterbody
8. Name and contact information of applicator
9. Expected color of dye

The District APM Coordinator shall forward the notification to the WPDES Statewide Pesticide General Permit Coordinator for WPDES review. WPDES permit coverage may be required if there is reasonable potential for the dye activity to:
1. Introduce toxic substances, objectionable deposits, floating or submerged material, and materials producing color, odor, taste, or unsightliness that pose a reasonable potential to exceed the surface water quality standards and effluent limitations determined according to chs. NR 102, 104, 105, 106, 207, and 217 Wis. Adm. Code,
2. Will exceed the groundwater standard in ch. NR 140 Wis. Adm. Code
3. Cause harm to endangered or threatened resources as specified in s. 29.604, Wis. Stats., and ch. NR 27, Wis. Adm. Code.

The use of dyes may require additional department approval in the following situation:

1. When applied on ice bound waters such as marking for an event. In this situation, notification of District APM coordinator is required consistent with WPDES requirements. Interested parties should be advised that such a use could be subject to a citation for defacing natural resources under s. 23.095(1m)(a), Wis. Stats., or other local authorities.

WPDES Permit Process

The WPDES Statewide Pesticide General Permit Coordinator will review all requests for aesthetic or non-pesticidal dye use to determine if WPDES coverage is required and permitting options using the following process:

1. If a NR 107 or 109 permit was issued for dye applications, WPDES coverage is required and may be authorized under the aquatic plant pesticide general permit.
2. If a NR 107 or 109 permit is required but was denied, WPDES coverage is required but the project would likely not meet requirements of the general permit.
3. If a NR 107 or 109 permit is not required, WPDES coverage may be required. The Statewide Pesticide General Permit Coordinator will review any aesthetic or non-pesticidal pollutant discharges statewide with the following process steps on a case by case basis. All decisions should be documented in SWAMP Permit Documents.
   a. Review regulatory authority.
   b. Assess if the discharge has reasonable potential to exceed the surface water quality standards and effluent limitations determined according to chs. NR 102, 104, 105, 106, 207, and 217 Wis. Adm. Code, or will exceed the groundwater standard in ch. NR 140 Wis. Adm. Code.
   c. Assess need for additives review for dyes. If the dye is not registered with EPA for aquatic use or an approved aquatic pesticide that is not used in accordance with label requirements further evaluation would be required as per water quality review procedures for additives. Coordination with regional staff, tribal liaison, assessment of local conditions, and final decision in consultation with regional Water Quality Bureau management.
INTERNAL ROUTING OF NOTIFICATION

After the APM Coordinator is notified of a proposed dye application, the APM coordinator will route to all appropriate staff or their appointees and a copy of notification materials to the DNR Spills Hotline e-mail at DNRLEHotline@wisconsin.gov. Consultation with the Statewide Pesticide General Permit Coordinator to determine if a WPDES permit is required.

Education or Research
Streams: Streams biologist, fishery biologist, conservation warden
Lakes: Lakes biologist, fishery biologist, conservation warden

Stormwater applications
Streams: Streams biologist, stormwater specialist or engineer, conservation warden
Lakes: Lakes biologist, stormwater specialist or engineer, conservation warden

Wastewater applications
Streams: Streams biologist, Statewide Pesticide General Permit Coordinator, conservation warden
Lakes: Lakes biologist, Statewide Pesticide General Permit Coordinator, conservation warden

Dam safety or infrastructure integrity
Streams: Streams biologist, dam safety/floodplain engineer, conservation warden
Lakes: Lakes biologist, dam safety/floodplain engineer, conservation warden