



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

PESTICIDE APPLICATION
TO SURFACE WATERS OF THE STATE OF MICHIGAN

Permits are required by Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and Part 33, Aquatic Nuisance Control, of the NREPA (Part 33).

AQUATIC NUISANCE CONTROL GENERAL PERMIT
GENERAL PERMIT NUMBER ANCG12-94
AQUATIC NUISANCE CONTROL ACTIVITIES
FOR CERTAIN NON-NATIVE INVASIVE EMERGENT PLANTS

Date Effective: January 26, 2012
Date Expires: December 31, 2012

In compliance with the provisions of Part 33 of the NREPA, pesticides are authorized to be applied to waters of the state (waterbody) for the control of invasive plants in accordance with the requirements and conditions set forth in this Aquatic Nuisance Control General Permit.

The applicability of this General Permit shall be limited to chemical treatment of certain non-native, invasive emergent aquatic plants where the treatment will not negatively impact human health and will have no more than minimal short-term adverse impacts on the natural resources and environment.

In order to have authorization to chemically treat waters of the state under this General Permit, the permittee must be issued a Certificate of Coverage (COC) by the Michigan Department of Environment Quality (DEQ). The following will be identified in the COC:

- COC number
- date effective / issued
- expiration date
- permittee name and address
- waterbody name and location where chemical treatment is authorized
- an approved treatment map specifying where treatment will take place

The terms and conditions of this General Permit shall apply to the permittee for the identified waterbody on the effective date of a COC issued by the DEQ.

The provisions of this General Permit are severable.

All contact with the DEQ as required by this General Permit shall be with the DEQ representative identified in the COC, Aquatic Nuisance Control, Permits Section, Water Resources Division, DEQ, located at 525 West Allegan Street, Lansing, MI, 48909, phone 517-241-1554, and/or e-mail: deq-wrd-anc@michigan.gov

Section A. Qualified Sites

A site qualifies under this General Permit provided both of the following criteria are met:

1. The area of impact at the time of chemical treatment has open water or is located below the ordinary high-water mark of the Great Lakes (Lakes Erie, Huron, Michigan, and Superior)
2. The target for selective chemical control is one or more but not limited to the following non-native plants*:
 - Non-native phragmites (*Phragmites australis*)
 - Purple loosestrife (*Lythrum salicaria*)
 - Reed canary grass (*Phalaris arundinacea*)
 - Non-native cattails (*Typha angustifolia* and *T. glauca*)
 - Lyme grass (*Leymus arenarius*)
 - Glossy buckthorn (*Rhamnus frangula*)
 - Common buckthorn (*Rhamnus cathartica*)
 - Multiflora rose (*Rosa multiflora*)
 - White and yellow sweet clover (*Melilotus albus* and *M. officinalis*)
 - Japanese knotweed (*Fallopia japonica*)
 - Dame's rocket (*Hesperis matronalis*)
 - Autumn olive (*Elaeagnus umbellata*)
 - Flowering rush (*Butomus umbellatus*)
 - Japanese barberry (*Berberis thunbergii*)
 - Giant reed (*Arundo donax*)
 - Garlic mustard (*Alliaria petiolata*)
 - Spotted knapweed (*Centaurea maculosa*)

* If you wish to treat an invasive plant species not listed above please contact the Aquatic Nuisance Control Program. Requests will be considered on a case-by-case basis.

Section B. Authorizations and Coverage Provisions

1. Authorized Areas

Chemical treatment for control of non-native, invasive emergent plants is authorized only to qualified sites as defined by this General Permit, specified by the issued COC, and identified on the approved treatment map(s) submitted with the application and/or on file with the DEQ as part of a previously approved COC.

Areas where chemical treatment for control of non-native, invasive emergent plants is undertaken must be either under the legal control of the permittee or the party(ies) who have granted the permittee permission to do the treatment, or otherwise in accordance with Section 3308 of Part 33.

2. Chemical Application

The permittee shall comply with this permit and all pesticide label instructions to protect self, others, and the environment. The label is provided with the pesticide container. It explains how to use the pesticide safely, effectively, and may suggest ways to avoid unintended impacts to human health and the environment. Read and understand the label before mixing or applying any pesticide. Most labels list a toll-free number for consumers. Pesticide labels are federally-approved legal documents and their requirements are enforced under both federal and state laws.

The application of chemical products to the qualified sites is restricted to the products in the following table. Please consult the product label for the recommended application rates for each target species.

Active Ingredient	Approved Brand	U.S. EPA Reg. No.
Glyphosate ¹	Accord Concentrate	62719-324
	Aquamaster Herbicide	524-343
	Aqua Neat Aquatic Herbicide	228-365
	AquaPro Herbicide	62719-324-67690
	Aqua Star	42750-59
	Avocet Aquatic Herbicide	81943-5
	Glyfos Aquatic Herbicide	4787-34
	Refuge Herbicide	100-1362
	Rodeo	62719-324
	Shore-Klear Aquatic Herbicide	228-365-8959
Glyphosate plus surfactant	GlyphoMate 41	2217-847
	ShoreKlear-Plus Aquatic Herbicide	228-367-8959
Imazamox ¹	Clearcast	241-437 and 241-437-67690
Imazapyr ^{1,2}	AquaPier Aquatic Herbicide	74477-6-67690
	Gullwing Aquatic Herbicide	81943-17
	Habitat Herbicide	241-426 and 241-426-67690
	Polaris AC Complete Herbicide	228-570
	Polaris Herbicide	228-534
Triclopyr ¹	Renovate 3	62719-37-67690
	Navitrol	8959-56
n/a (additives ¹)	AGRI-DEX	n/a
	Cygnnet Plus	n/a
	PolyAn	n/a
	TopFilm	n/a
	Tracer dye ³ (colorant)	n/a

¹ Certain herbicide labels require or strongly recommend the use of additives to aid herbicide uptake, improve effectiveness, and minimize non-target impacts.

² Application of AquaPier, Gullwing or Habitat can be made only by federal or state agencies, municipal officials and the U.S. Army Corps of Engineers, or those applicators licensed or certified as aquatic pest control applicators and are authorized by the state or local government.

³ The use of water dyes allowed on this General Permit excludes water dyes that are labeled as herbicides (e.g., Aquashade®, Admiral®, Pond Care Algae Blocker®).

3. Treatment Intervals

Only a single chemical treatment should be necessary each year. Use no more than the maximum application rate approved for the product. Conducting multiple low-dosage treatments is not supported by current research. However, if other factors prohibit the use of the full product amount in a given area, additional treatment(s) may be conducted provided that a minimum length of time is observed between treatments, in accordance with the federal product labels. Visible signs of treatment effectiveness may not be apparent for weeks. Multiple treatments may not be necessary if the initial treatment is conducted properly.

Active Ingredient	Minimum Treatment Interval
glyphosate	24 hours minimum between treatments
imazamox	No label requirement
imazapyr ¹	10 days minimum between treatments
triclopyr ¹	10 days minimum between treatments

¹ Per the federal product labels, do not apply more than 6 pints of imazapyr per acre per year or 8 quarts of triclopyr per acre per year.

4. Special Conditions

This General Permit is intended to allow for the selective chemical control of the non-native, invasive emergent plant species identified above in Section A. The intentional chemical treatment of native species with herbicides is a violation of the permit.

Glyphosate and imazapyr products are broad-spectrum herbicides and can damage all types of vegetation. Triclopyr is generally selective against only broad-leaf species such as purple loosestrife; however, it may also affect other species. All herbicides are to be applied in a manner which best targets the invasive species. Refer to the product label requirements and suggestions to optimize selectivity. The applicator is expected to take all practical measures to avoid impacting non-target vegetation and make each treatment as selective as possible, such as through the careful selection of equipment, method of application, and timing of treatment.

Upon receipt of written notification from the DEQ, the permittee may be required to do any of the following:

- Conduct the chemical treatment only when a DEQ representative is present.
- Notify the DEQ a minimum of three working days prior to application of chemical(s).
- Satisfy additional reporting requirements (instead of, or in addition to, the requirements listed below in Section C).
- Hire a certified pesticide applicator where treatment may affect significant or unique natural resources and/or human health interests.
- Implement other measures to avoid impacting sensitive natural resources, environmental attributes and human health, such as federally or state-listed endangered or threatened species, unique habitats or ecosystems, designated critical dunes, designated environmental areas, critical fish spawning areas, and community drinking water intakes.
- In addition to the normally required notification, also notify other person(s) specified by the DEQ.
- Any other measures determined by the DEQ as necessary to protect the natural resources or the public health, to prevent economic loss or impairment of recreational uses, to protect non-target organisms, or to help ensure control of the aquatic nuisance.

Target Species Recommendations

Species specific treatment recommendations can be found on the Aquatic Nuisance Control Program webpage, <http://www.michigan.gov/deqinlandlakes>.

Mechanical Activities / Physical Alterations

Certain mechanical or physical management activities, such as mowing or vegetation removal below the ordinary high water mark of the Great Lakes, may require a separate permit or other authorization from:

- DEQ, Water Resources Division, Permit Consolidation Unit, P.O. Box 30458, Lansing, MI 48909-7958, phone 517-373-9244, website www.michigan.gov/wetlands.
- U.S. Army Corps of Engineers, Detroit District, phone 1-888-694-8313.
- Local units of government.

Surface Water Intakes (Drinking Water)

The federal labels for glyphosate, imazamox, imazapyr, and triclopyr require setback distances from active surface water intakes used for potable drinking water. Such intakes exist in inland lakes and along the Great Lakes and connecting waters and serve as drinking water sources for some communities. Refer to the specific product label for setback requirements or guidelines prior to application of these products. Contact your local water authority if you are unsure about the local drinking water source. Potable water intakes which are no longer in use, such as those replaced by connections to wells or a municipal water system, are not considered to be active potable water intakes. This federal label restriction does not apply to intermittent, inadvertent overspray of water in terrestrial use sites or when the target plants are not in standing water and there is no hydrological surface connection to the intake.

5. Notification and Posting Requirements

The permittee is required to notify, in writing, an owner of any waterfront property within 100 feet of the area of impact, not less than seven days, and not more than 45 days, before the initial chemical treatment. Requirements for written notification are provided in Section 324.3310(h) of Part 33. If the owner is not the occupant of the waterfront property or the dwelling located on the property, then the owner is responsible for notifying the occupant. Alternative pre-treatment notification may be approved on a case-by-case basis by DEQ upon written request from the applicant.

Notice of the chemical application must be posted prior to each chemical application, in accordance with Section 324.3310(d) of Part 33. Alternate posting may be reviewed on a case-by-case basis by DEQ upon written request from the applicant. Water use restrictions listed on the label for the specific product(s) used shall be included on the posting sign. In addition, a 24-hour water use restriction for entry into treated areas is required for each chemical application.

Section C. Reporting and Record Keeping

1. Environmental Impacts

The applicant is required to immediately contact the DEQ, Water Resources Division, at 517-241-1554 if any fish or wildlife damage or significant non-target plant impacts occur in association with any chemical application.

2. Treatment Report

A treatment report, on the approved DEQ form must be returned postmarked no later than November 30 of the year the COC is in effect, even if treatment is not undertaken. Blank forms can be downloaded from the website <http://www.michigan.gov/deqinlandlakes> or are available upon request. Submit completed and signed report to:

AQUATIC NUISANCE CONTROL
WATER RESOURCES DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY
PO BOX 30458
LANSING MI 48909-7958
E-MAIL: DEQ-WRD-ANC@MICHIGAN.GOV

3. Record Retention

The applicant shall obtain and maintain written permission from each bottomland owner in the area of impact for 1 year from the expiration date of the COC, unless exempt under Section 324.3308 of Part 33. The records shall be made available to the DEQ upon request.

Section D. Liability

1. Noncompliance

Initiation of any work on the permitted project confirms the applicant's acceptance and agreement to comply with all terms and conditions of this General Permit. Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this General Permit, shall be cause for the modification, suspension, or revocation of the COC, in whole or in part. Further, the DEQ may initiate criminal and/or civil proceedings to correct project deficiencies, protect public health and natural resource values, and secure compliance with statutes.

The issuance of this General Permit does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other DEQ permits, or approvals from other units of government as may be required by law.

2. Property Rights

This General Permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights.

3. Indemnification

The applicant shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents and representatives for any and all claims or causes of action arising from acts or omissions of the applicant, or employees, agents, or representatives of the applicant, undertaken in connection with this General Permit. This General Permit shall not be construed as an indemnity by the State of Michigan for the benefit of the applicant or any other person.

4. Right of Entry

The permittee shall allow the Department upon the presentation of credentials:

- To enter upon the permittee's premises where application equipment is located or in which any records are required to be kept under the terms and conditions of this permit; and
- At reasonable times to have access to waterbodies regulated under this permit, copy any records required to be kept under the terms and conditions of this permit; to inspect equipment regulated or required under this permit; and to sample chemicals, discharges, chemical products, and waterbodies.

5. Laboratory and Analytical

When required by this permit or per the pesticide product label, laboratory analytical methods, practices and product or water sampling techniques shall be performed in accordance with standard laboratory guidelines. The permittee shall periodically calibrate and maintain all monitoring instrumentation at necessary intervals to ensure accuracy of measurements. When outside contractors are utilized to perform sampling and analysis, the permittee shall insure that said contractors are sufficiently qualified to perform the required sampling and analysis, and that the quality control measures listed above are properly executed.

Dan Wyant, Director
Department of Environmental Quality

By: 

Date: February 15, 2012

Tiffany Myers, Unit Chief
Lakes Michigan and Superior Permits Unit
Water Resources Division