

## **FREQUENTLY ASKED QUESTIONS**

### **Regarding the Chemical Treatment of Phragmites**

With the growing concern surrounding the aggressive, nonnative variety of phragmites, *Phragmites australis*, pronounced (frag-MY-teez), the Michigan Department of Environmental Quality's (MDEQ's), Aquatic Nuisance Control (ANC) program has compiled the following Frequently Asked Questions to aid in your preparation for chemical control of phragmites on your property.

1. Do I need a permit to control phragmites on my property?
2. How do I know which permit application form to use?
3. Do I need to apply for a permit that includes only my property or can I coordinate with neighbors to include a larger area?
4. What is the required permit application fee for my proposed treatment?
5. If my permit is denied or modified, will I get a fee refund?
6. How do I know which chemical to request and how much?
7. How do I know which aquatic herbicide brands can be used in Michigan?
8. Once my permit application is received how long will it take for MDEQ to reach a permit decision?
9. Can I check the status of my permit application or determine if there has been a permit application submitted for a specific waterbody?
10. Is there a deadline for submitting a permit application?
11. Once my permit has been issued, how long is it effective?
12. When is the most appropriate time of year to chemically treat phragmites?
13. Where can I purchase aquatic herbicides?
14. Can I apply chemicals myself or do I need to be certified or licensed?
15. If I decide to hire an applicator, where can I find a list of licensed companies?
16. What happens if I violate my permit?
17. What if the phragmites on my property is mixed with native plants, such as cattail, sedges, or rushes?
18. Are the aquatic herbicides safe for public health and the environment?
19. Will one chemical treatment be enough to control phragmites long-term?
20. Is long-term control of phragmites expected when chemicals are used alone?
21. I still have questions concerning aquatic nuisance control. Who do I contact?

## 1. Do I need a permit to control phragmites on my property?

Chemical control of nuisance aquatic species, including phragmites, is regulated and generally requires a permit from the MDEQ's ANC program, particularly when phragmites is chemically controlled in inland lakes, ponds, streams, wetlands, road-side ditches, etc., where there is standing water at the time of treatment. A permit also must be obtained when treating phragmites along the Great Lakes or Lake St. Clair shoreline below the ordinary high-water mark, regardless of whether or not there is standing water. However, the [administrative rules](#) grant authority to a landowner to chemically treat phragmites in an inland pond without a paper permit ("permit-by-rule"), regardless of whether the phragmites is in standing water, if the pond meets **ALL** of the following criteria:

- No outlet
- No record of State or Federal endangered or threatened species, pursuant to part 365 of 1994 PA 451.
- Surface area less than 10 acres
- Bottomlands are owned by either one person, or more than one person and written permission is obtained from each property owner.

Some forms of non-chemical control may require a separate permit from the MDEQ. Mechanically harvesting, cutting or mowing phragmites and other vegetation on Great Lakes bottomlands, including bottomlands that have been exposed by low water levels, requires a permit from the MDEQ Land and Water Management Division (LWMD). However, inconsequential or insignificant (de minimis) hand cutting with no soil disturbance does not require a permit from LWMD. Mowing stands of phragmites in inland wetlands may also require a permit. Disposal of harvested material within inland lakes, on Great Lakes bottomlands, or in wetlands is not allowed without prior written approval from the MDEQ. Please review MDEQ, LWMDs, [Control of Phragmites Along the Great Lakes](#) for further information.

Various biological control options (e.g., insects, pathogens) are currently under research and development. Regulatory requirements may vary depending on the type of organism, however at this time this option is not recommended because effective and selective long-term control of phragmites has yet to be proven.

Please contact your local units of government, including counties and townships, as they may have additional requirements or restrictions covering these activities.

## 2. How do I know which permit application form to use?

The MDEQ has several application forms that can be used to apply for an aquatic nuisance control permit. In most cases, applicants wishing to chemically treat phragmites should use the "long-form" (3 page) permit application, especially if this is the first time you are applying for a permit. For blank forms and application assistance, please call 517-241-7734, email us at [DEQ-LWM-ANC@michigan.gov](mailto:DEQ-LWM-ANC@michigan.gov) or visit the [ANC Program webpage](#) (look under Application and Permit Information).

Using the long-form application, you may apply for either of the following permit types:

- General Permit (GP) – A GP is a special broad permit for a class of aquatic nuisance control activities. The process for obtaining coverage under a GP is usually simpler, quicker, and cheaper than the standard individual permit process. The MDEQ issued a GP for [Aquatic Nuisance Control Activities Along the Great Lakes and Lake St. Clair for Certain Non-Native Invasive Aquatic Plants](#) (including phragmites) for treatment of areas below the ordinary high water mark of the Great Lakes and Lake St. Clair. If your site fits the GP qualifying criteria, you may apply for a Certificate of Coverage (COC) under the GP in place of a standard individual permit. A COC must be obtained each year before chemical treatment can be conducted. The COC permittee is responsible for following the terms of the GP.
- Standard Permit – For all other regulated phragmites treatments, including those along inland waterbodies, you must obtain a standard permit annually. Complete all sections of the application form and submit an application fee based on the treatment area size (see #4 below).

An additional application form, the single-page “Expedited” form, may be appropriate for some standard permit applicants. This form can be used if you have received a standard permit within the last four years and are requesting to conduct the exact same chemical treatment that was previously permitted.

Remember that if you plan on following up the chemical treatment with regulated mechanical activities (see #1 above), a separate permit is required from the MDEQ, LWMD. For LWMD permit application forms, please visit: [www.michigan.gov/deqwetlands](http://www.michigan.gov/deqwetlands) and click on the link for Great Lakes Shoreline Management.

### **3. Do I need to apply for a permit that includes only my property or can I coordinate with neighbors to include a larger area?**

A permit application can include a treatment proposal for one property or multiple adjacent parcels. If you wish to chemically treat plants found on another property, written permission must be obtained from the other property owners. When chemically treating phragmites, organizing as a group of several property owners is beneficial because phragmites can recolonize from neighboring populations.

### **4. What is the required permit application fee for my proposed treatment?**

Application fees are set by statute. For standard permits, the permit application fee structure is based on the size of the proposed treatment area (not on the waterbody size):

- Less than 1/2 acre, \$75.00
- One-half acre or more but less than 5 acres, \$200.00
- Five acres or more but less than 20 acres, \$400.00
- Twenty acres or more but less than 100 acres, \$800.00
- One hundred acres or more, \$1,500.00

For General Permits, the application fee is a fixed \$75.00.

## 5. If my permit is denied or modified, will I get a fee refund?

All application fees are non-refundable, except when the application is submitted with an incorrect fee or the application is voluntarily withdrawn prior to the start of the review process by the ANC staff. Payment of the application fee does not guarantee the issuance of a permit as was originally proposed. Some permits must be modified to protect human health or unique environmental characteristics. However, in most cases the MDEQ is able to work with homeowners to allow some sort of invasive species control. If a permit decision is not made within our statutory deadlines (see #8 below), you will get a partial refund of 15 percent.

## 6. How do I know which chemical to request and how much?

If you have not accurately identified phragmites as the target plant species, documents including [A Landowner's Guide to Phragmites Control](#) are available on-line to help with plant identification. In addition, review the document, "What are the Chemical Control Options?" (available [here](#)), to assist in appropriate chemical selection.

Research indicates that herbicides with the active ingredients glyphosate or imazapyr are most effective in controlling phragmites. While the cost per gallon of imazapyr can be significantly higher than glyphosate, results from recent studies suggest that imazapyr used alone or in combination with glyphosate can control phragmites for a longer period of time. These products also recommend the use of an approved non-ionic surfactant and a water colorant to improve the effectiveness and accuracy of the treatment.

To determine the chemical amount(s) necessary for effective control of phragmites, please use the appropriate method below:

- For small areas (using low volume application methods), application rates are calculated as percent solution. The recommended application rate for controlling phragmites is 1 – 1.5 percent solution. A 1.5 percent solution can be achieved by mixing two ounces of herbicide in one gallon of water.
- For large areas (using high volume application methods), first determine the treatment area size in acres. Then, using the correct application rate, calculate the appropriate amount of chemicals needed by multiplying the treatment area by the application rate. Recommended application rates for phragmites control can be found in [A Guide to the Control and Management of Invasive Phragmites](#).

If approved, your ANC permit will list the maximum amount(s) of each chemical and additive that is appropriate for your treatment area. As part of the permit application review process, ANC staff will ensure that you will be using enough product to be effective, but not too much as to cause environmental harm. Please read and understand your permit!

## 7. How do I know which aquatic herbicide brands can be used in Michigan?

Nation-wide, there are many brands containing the active ingredients glyphosate or imazapyr. A list of brand name aquatic herbicides, adjuvants/surfactants, and water dyes (colorants) that are approved for use in regulated Michigan waterbodies can be found on the ANC homepage in the document, [Herbicides Approved by DEQ](#). Please be aware there are also herbicides that are not approved. Please review [Herbicides NOT Approved by DEQ](#) for more information.

**8. Once my permit application is received how long will it take for MDEQ to reach a permit decision?**

Every treatment proposal is unique, and each proposal will be reviewed individually, so the timeframe inevitably varies based on the scope of the proposal, site conditions, etc. However, state law does require that the MDEQ make a decision within a certain timeframe, or else you will be due a 15% refund. For standard permits, a decision must be made within 30 working days of the Water Bureau's receipt of a complete application, or by May 1, whichever is later. For COCs under a GP, a decision is required within 15 working days of receipt of a complete application, or by May 1, whichever is later.

**9. Can I check the status of my permit application or determine if there has been a permit application submitted for a specific waterbody?**

Yes. The ANC program provides an online service that allows you to follow your permit application through the review process. This service can also be used by the public to determine if a permit has been requested for a specific waterbody. Please visit <http://www.deq.state.mi.us/ancpa/> to check the status of applications.

**10. Is there a deadline for submitting a permit application?**

Yes. The law requires that the MDEQ deny any permit application for the chemical treatment of higher aquatic plants, such as phragmites, that is postmarked after **August 15** in the year in which treatment is proposed. Please submit the forms as soon as possible to allow for review time. Applications are reviewed in the order they are received.

**11. Once my permit has been issued, how long is it effective?**

ANC permits are annual permits that expire on December 31 of the year in which the permit was issued. The ANC program will begin accepting permit applications for the upcoming treatment season after October 1, the start of the fiscal year.

**12. When is the most appropriate time of year to chemically treat phragmites?**

Optimal treatment timing is dependent on several factors, including the herbicide(s) chosen. Treating at the wrong time of year is unlikely to result in control and may harm native plants. Recommended treatment timing for phragmites control can be found in [\*A Guide to the Control and Management of Invasive Phragmites\*](#).

**13. Where can I purchase aquatic herbicides?**

Check the phone book or internet to find local agricultural supply stores or pesticide distributors. Many stores that carry fertilizers and landscape supplies carry aquatic herbicides.

#### **14. Can I apply chemicals myself or do I need to be certified or licensed?**

In Michigan, most aquatic herbicides may be applied by individuals with proper authorization (such as permission of the property owner). However, the majority of phragmites treatments are carried out by certified applicators. The imazapyr herbicides can only be used by certified or licensed applicators, according to the federal label. Certification is recommended prior to using glyphosate for phragmites control.

If you are interested in becoming a certified applicator, information can be found under <http://www.michigan.gov/mdapest> under Pesticide Application Certification.

#### **15. If I decide to hire a pesticide applicator, where can I find a list of licensed companies?**

If you are interested in hiring a licensed pesticide applicator, a list can be found at <http://www.michigan.gov/mdapest> or call the Michigan Department of Agriculture for general information at 1-800-292-3939. You might also seek referrals from other lake associations or riparian owners.

#### **16. What happens if I violate my permit?**

Permit violations are subject to both civil action and criminal enforcement. Penalties can be as high as a \$15,000 fine and up to two years of imprisonment. Permittees should review their permit carefully and comply with all requirements.

#### **17. What if the phragmites on my property is mixed with native plants, such as cattail, sedges, or rushes?**

The goal of controlling phragmites is to reestablish and restore native plant communities that provide critical fish and wildlife habitat. Because the aquatic herbicides used to control phragmites are non-selective and can impact most plant species through contact with the leaves and stems, choosing a treatment method is very important. Herbicide application methods for scattered phragmites plants or isolated phragmites plant stands include: injecting stems, hand swiping or selective backpack spraying. These methods minimize any impacts to native plants. Recommended application methods/techniques for phragmites control can be found in [A Guide to the Control and Management of Invasive Phragmites](#).

#### **18. Are the aquatic herbicides safe for public health and the environment?**

The aquatic herbicides that are permitted by the ANC Program are registered by the United States Environmental Protection Agency and the Michigan Department of Agriculture. They also undergo toxicological review by the MDEQ. If the pesticides are applied according to label instructions and permit requirements, these chemicals should pose no danger to public health and the environment. However, herbicides with the active ingredients glyphosate or imazapyr, which are effective in controlling phragmites, are non-selective and can damage a wide variety of plant species. Therefore, these products should be carefully applied using an appropriate application method.

**19. Will one chemical treatment be enough to control phragmites long-term?**

No. Due to the pervasiveness of this species and its ability to aggressively recolonize areas, long-term management and monitoring are necessary. Annual maintenance is essential to maintain control of phragmites on your property. Once areas of phragmites have been controlled, annual maintenance using spot treatment with herbicide with subsequent mechanical removal should be conducted. It is also important to incorporate monitoring your site. At a minimum, plan to inspect the area annually during the growing season for any phragmites re-growth.

**20. Is long-term control of phragmites expected when chemicals are used alone?**

No. To achieve successful long-term control of phragmites, an integrated management approach must be applied to your property which includes an initial herbicide treatment followed by mechanical removal (e.g., cutting, mowing) and annual maintenance (i.e., spot treating with herbicides and removal of dead stems). For large areas with dense stands of phragmites, prescribed burning used after herbicide treatment can provide additional control and ecological benefits over mechanical removal. Prescribed burning will not be a likely option for an individual landowner. If prescribed burning may be an option for you, please refer to [A Guide to the Control and Management of Invasive Phragmites](#).

**21. I still have questions concerning aquatic nuisance control. Who do I contact?**

AQUATIC NUISANCE CONTROL AND REMEDIAL ACTION UNIT  
WATER BUREAU  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
P.O. BOX 30273  
LANSING, MICHIGAN 48909-7773  
(517) 241-7734  
(517) 335-4381 (FAX)  
DEQ-LWM-ANC@michigan.gov  
<http://www.michigan.gov/deqinlandlakes>