

# 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?

Chemical control of aquatic nuisance species, including phragmites, is regulated and always 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 must be obtained when treating phragmites along the Great Lakes 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.

A permit is not required from the MDEQ to control aquatic vegetation in inland lakes by mechanical harvesting or manual removal (e.g., pulling, raking or cutting of vegetation). However, mechanical harvesting may require a permit if the activity is conducted along the shoreline of the Great Lakes and connecting waters. Please review MDEQ, Land and Water Management's, [Control of Phragmites Along the Great Lakes](#) for further information. Also, disposal of harvested material to inland lakes or wetlands is illegal without approval from the MDEQ and/or local unit of government.

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 created three permit application forms that can be used to apply for an aquatic nuisance control permit (long form, expedited, and swimmers itch). If this is the first time you are applying for a permit, you will need to use the long form application. If you have received a permit within the last four years and are requesting to conduct the exact same chemical treatment that was previously permitted, you may use the expedited application form. The swimmer's itch application form may not be used for conducting treatment of phragmites. For further guidance please contact the [MDEQ](#).

### **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 several. If the treatment request includes more than your property, written permission to chemically treat someone else's property must be obtained from that property owner. 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?**

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

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

All application fees are non-refundable, and payment of the application fee does not guarantee the issuance of a permit. However, if a permit decision is not made within our statutory guidelines, a refund of 15% will be issued. In addition, applications that are submitted with incorrect fees or are withdrawn prior to the start of the review process by the ANC staff are eligible for refunds.

### **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 the ANC Control homepage to help with plant identification. In addition, review the document, [Common Aquatic Plant Species and Herbicides Used as Potential Control Agents](#), 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 (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 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.

#### **7. How do I know which aquatic herbicides can be used in Michigan?**

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, by law, a permit 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.

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

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. The application deadline is imposed because chemical treatment is unlikely to be effective by the time a new permit application can be processed, which can take up to 30 working days. The majority of chemical treatments are most effective when plants are actively growing. By the end of August and early September, earlier in some parts of the state, aquatic plants are already starting their natural die back for the year.

#### **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. 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.

**13. 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 any plant species through contact with the leaves and stems, choosing a control 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](#).

**14. When is the most appropriate time to chemically treat phragmites?**

Treatment timing is dependent upon the herbicide or herbicide combination chosen. Recommended treatment timing for phragmites control can be found in [A Guide to the Control and Management of Invasive Phragmites](#).

**15. Is long-term control of phragmites effective 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](#).

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

Check the phone book to find agricultural supply stores in your area. Most stores that carry fertilizers and landscape supplies should carry aquatic herbicides. In addition, there are many sources for purchasing herbicides and locating local or regional herbicide retailers on the internet.

**17. 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 affect any plant species through contact with the leaves and stems. Therefore, these products should be carefully applied using an appropriate application method.

**18. Can I apply chemicals myself or do I need to hire a certified applicator?**

In Michigan, most aquatic herbicides may be applied by individuals with proper authorization (such as permission of the property owner). However, the majority of treatments are carried out by certified applicators. Certain chemical products, such as imazapyr (active ingredient), require pesticide use certification prior to using these herbicides, according to the manufacturer's label. Pesticide use certification is recommended prior to using glyphosate for phragmites control.

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

**19. If I decide to hire an applicator, where can I find a list of licensed pesticide applicators?**

If you are interested in hiring a licensed pesticide applicator, a list and search tool can be found at <http://www.mda.state.mi.us/industry/pest/license/index.html> 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.

**20. 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.

**21. I still have questions concerning aquatic nuisance control. What is the ANC program's contact information?**

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