

**PERMIT FOR 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).

Permission is hereby granted, based on information supplied on the permit application and on the applicant's assurance of adherence to State requirements and this permit, to apply chemicals to the waters described herein for the control of aquatic plants and/or algae or swimmer's itch.

PERMIT NUMBER: 10-98-0300-0

DATE EFFECTIVE: 04/12/2010

This permit is valid only through December 31, 2010.

Permittee Name and Address

Washtenaw County Department of Public Works  
705 N. Zeeb Rd.  
Ann Arbor, Michigan 48107

Name of Waterbody Affected

North Lake

County(ies) in which Waters are Located

Washtenaw

**Authority granted by this permit is subject to the following conditions and limitations:**

**Section A. Authorizations and Coverage Provisions**

**1. Chemical Application**

The application of chemicals is restricted to the following CHEMICAL(S) (product name and/or active ingredient), APPLICATION RATE(S), and MAXIMUM AMOUNT(S) PER TREATMENT.

<u>CHEMICAL(S) AND APPLICATION RATE(S)</u>	<u>MAXIMUM AMOUNT(S) TO BE APPLIED PER TREATMENT</u>
Aquathol K - endothall 1.3 - 1.9 gallon(s)/acre foot	199.5 gallon(s)
Chelated Copper Algaecides (algae) 0.6 gallon(s)/acre foot	33.7 gallon(s)
Copper Sulfate (algae) 2.6 pound(s)/acre foot	438.7 pound(s)
Copper Sulfate (macroalgae) 4.4 pound(s)/acre foot	462.0 pound(s)
Cygnat Plus - adjuvant (submergent) 1.5 - 2.5 pint(s)/acre foot	262.5 pint(s)
Diquat Dibromide 0.5 - 2.0 gallon(s)/acre	70.0 gallon(s)
Hydrothol 191 - endothall (submergent) 1 gallon(s)/acre	35.0 gallon(s)
Navigate - 2,4-D (milfoil) 100 pound(s)/acre	9500.0 pound(s)
Renovate 3 - triclopyr (submergent) 0.7 - 2.3 gallon(s)/acre foot	399.0 gallon(s)
Triclopyr - dry (submergent) 14 - 67 pound(s)/acre foot	12060 pound(s)
Water Dye (tracer - submergent) 0.01 gallon(s)/acre foot	1.0 gallon(s)

The applicant may apply only those specific chemical products that are approved by the Department of Natural Resources & Environment (DNRE). If only an active ingredient is approved in the table above, consult the list of DNRE -approved aquatic pesticides and related products to determine if the brand name product you plan to use is approved. This list is available from the DNRE upon request.

**2. Treatment Intervals**

Each chemical approved for use in Section A(1) of this permit has a minimum length of time required between each treatment in same area(s) of impact, in accordance with the federal product label. The table below indicates these restrictions for all currently approved active ingredients. Please note that this permit may not approve the use of all chemicals listed in this table. Follow the federal treatment interval unless a different interval or use limitation is specified in Section A(4) of this permit.

<u>Active Ingredient</u>	<u>Minimum Treatment Interval</u>
2,4-D	14 days minimum between treatments (Navigate); 21 days minimum between treatments (Aquacide)
Chelated copper	7 days minimum between treatments (except Komeen and Nautique: 4 weeks minimum; Copper-EDA, Current, Formula F-30, Harpoon, PondWeed Defense: 10 days minimum)
Copper sulfate	7 days minimum between treatments (swimmer's itch treatment – 1 time only)
Diquat dibromide	14 days minimum between treatments
Endothall	5 days minimum between treatments
Glyphosate	24 hours minimum between treatments
Hydrogen dioxide	48 hours minimum between treatments
Imazamox	No label requirement
Imazapyr	10 days minimum between treatments
Sodium carbonate peroxyhydrate	48 hours minimum between treatments
Triclopyr	10 days minimum between treatments
Water dye	24 hours minimum between treatments

**3. Authorized Areas**

Control of aquatic nuisances is authorized only in areas as defined on the attached treatment map(s).

Areas where control of aquatic nuisances is undertaken must be either under the legal control of the permittee or the party(ies) who has/have granted the permittee permission to do the treatment.

**4. Special Conditions**

Do not apply granular endothall or granular 2,4-D products within 75 feet of ANY active drinking water well OR within 250 feet of wells less than 30 feet deep. Distances are measured from the well location not from the shoreline. Wells and isolation distances are not necessarily shown on the treatment map. Prior to treatment, locate the water wells and observe the appropriate isolation requirements. If well location and/or depth are unknown, then assume the full 250-foot isolation distance.

Do not treat within 300 feet of the outlet, when flowing.

Do not damage non-targeted wetland vegetation, such as lilies, rushes, arrowhead, cattails, etc.

Do not damage native vegetation beyond the five-foot depth contour or beyond 300 feet from shore, whichever is closer to shore.

Do not treat for algae, including macroalgae (e.g., Chara), beyond the five-foot depth contour or beyond 300 feet from shore, whichever is closer to shore, except where needed in conjunction with the treatment of exotics.

Because of fisheries management concerns, such as fish stocking, fish surveys, or other management activities or special concerns, you are required to coordinate the date of the proposed treatment with the DNRE, Fisheries Division District Staff. Please contact the following individual(s) at least three working days prior to the proposed treatment date: Fisheries Biologist Jeff Braunscheidel, Telephone # 248-359-9048, e-mail braunscheidelj@michigan.gov.

Use reduced rate of 80 lbs/acre (or less) of 2,4-D for milfoil control in approved areas within or adjacent to wetlands.

## **5. Notification and Posting Requirements**

The applicant 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.

Notice of the chemical application must be posted prior to each chemical application, in accordance with Section 324.3310(d) of Part 33. Water use restrictions listed on the label for the specific product (i.e., trade name) used shall be included on the posting signs. In addition, a 24-hour water use restriction for swimming/entry shall be indicated on the signs for each chemical application of 2,4-D, chelated copper herbicides, diquat dibromide, endothall, fluridone, glyphosate, hydrogen dioxide, imazamox, imazapyr, sodium carbonate peroxyhydrate, triclopyr, and/or water dye (except when approved for use as a tracer dye). A 48-hour swimming restriction shall be indicated on the signs for swimmer's itch treatments with copper sulfate.

## **Section B. Permit Amendments**

The DNRE may make minor revisions to this permit to minimize the impacts to the natural resources, public health and safety, or to improve aquatic nuisance control, if the proposed revisions do not involve a change in the scope of the project and the permittee requests the revisions in writing. A revision that involves a change in the scope of the original project requires submittal of a new permit application. As part of the amendment request, the permittee shall include all of the following information: (a) the proposed changes to the permit; (b) an explanation of the necessity for the proposed changes; (c) maps that clearly delineate any proposed changes to the area of impact; and (d) additional information that would help the DNRE reach a decision on the permit amendment.

## **Section C. Reporting and Record Keeping**

### **1. Environmental Impacts**

The applicant is required to immediately contact the DNRE, Water Bureau, at 517-241-7734 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 DNRE form, must be returned postmarked no later than November 30 of the year this permit 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 and Remedial Action Unit, Water Bureau, Department of Natural Resources & Environment, PO Box 30273, Lansing MI 48909-7773; fax 517-335-4381; or e-mail DEQ-LWM-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 permit, unless exempt under Section 324.3308 of Part 33. The records shall be made available to the DNRE 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 permit. Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this permit, shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the DNRE 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 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 DNRE permits, or approvals from other units of government as may be required by law.

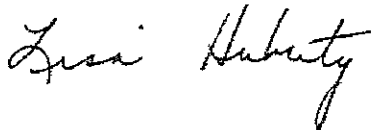
**2. Property Rights**

This 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 permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the applicant or any other person.


Rebecca A. Humphries, Director  
Department of Natural Resources & Environment

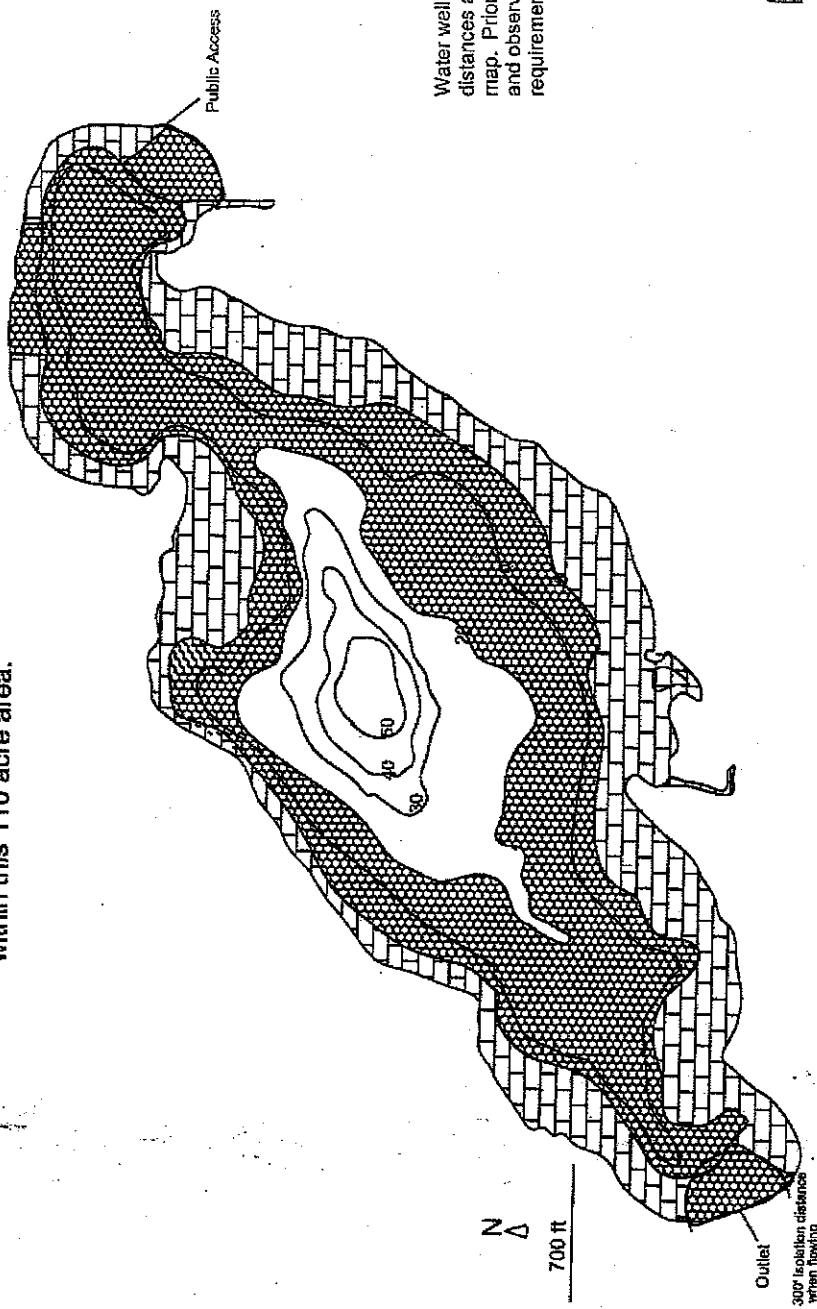


By: Lisa Huberty  
Environmental Quality Analyst  
Water Bureau

For additional information or questions regarding this permit, please contact the DNRE at:  
DNRE, Water Bureau, Constitution Hall, 525 West Allegan Street, P.O. Box 30273, Lansing, Michigan, 48909-7773,  
Telephone: (517) 241-7734, E-mail: DEQ-LWM-ANC@michigan.gov, Website: <http://www.michigan.gov/dnre>

 Weed and algae treatment area for Eurasian watermilfoil, Curlyleaf pondweed, nuisance natives, Chara, algae and Starry stonewort (35 acres within this 75 acre area)

 Eurasian Watermilfoil Treatment area using 2, 4-D (60 acres within this 110 acre area) Optional pretreatment or simultaneous treatment with algaecides to reduce periphyton and improve EWM uptake of product. Maximum of 40 acres within this 110 acre area.



Water well locations and appropriate isolation distances are not represented on this treatment map. Prior to treatment, locate the water wells and observe the appropriate isolation requirements as noted in the permit document.

**North Lake**  
**227 Surface Acres**  
**Washtenaw County**  
**Dexter Township**  
 T1S R4E Sec 18

Approved Treatment Map  
 Permit No. 10-98-0300-0  
 Map 1 of 1

