STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY CIRCUMSPIC

INDIVIDUAL 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: 12-98-1406-0 DATE EFFECTIVE: 04/23/2012 This permit is valid only through December 31, 2012.

Permittee Name and Address

Aquatic Nuisance Plant Control, Inc. **PO Box 160** Swartz Creek, Michigan 48473

Name of Waterbody Affected

Runyan Lake

County(ies) in which Waters are Located

Livingston

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.

CHEMICAL(S) AND APPLICATION RATE(S)	APPLIED PER
Aquathol K - endothall 1.3 - 1.9 gallon(s)/acre foot	16
Chelated Copper Algaecides (algae) 0.6 gallon(s)/acre foot	72
Clipper - flumioxazin (submergent) 0.53 - 2.1 pound(s)/acre foot	16
Copper Sulfate (algae) 2.6 pound(s)/acre foot	3
Copper Sulfate (macroalgae) 4.4 pound(s)/acre foot	52
Cygnet Plus - adjuvant (submergent) 1.5 - 2.5 pint(s)/acre foot	30
Diquat dibromide (submergent) 0.5 - 2.0 gallon(s)/acre	83
GreenClean Liquid - hydrogen dioxide 1.2 - 30.0 gallon(s)/acre foot	3,
GreenClean PRO - sodium carbonate peroxyhydrate 2 - 90 pound(s)/acre	e foot 6,
Hydrothol 191 - endothall (submergent) 1 gallon(s)/acre	4(
Komeen - chelated copper 3.34 gallon(s)/acre foot	36
Nautique - chelated copper 3.0 gallon(s)/acre foot	39
Navigate - 2,4-D (milfoil) 100 - 150 pound(s)/acre	6,
Navigate - 2,4-D (milfoil) 28.4 - 56.8 pound(s)/acre foot	7,

MAXIMUM AMOUNT(S) TO BE APPLIED PER TREATMENT 60.0 gallon(s)

72.0 gallon(s) 6.5 pound(s) 312.0 pound(s) 528.0 pound(s) 300.0 pint(s) 33.0 gallon(s) 3,600.0 gallon(s) 6,000.0 pound(s) 10.0 gallon(s) 360.0 gallon(s) 396.0 gallon(s) 6,450.0 pound(s) 7,327.0 pound(s) • **Please note** - due to recent revisions in the product label, two different rates and amounts of Navigate 2,4-D may be listed above. The dosage on the updated label is based on water volume (acre-feet) rather than treatment surface area (acre) for submersed plants. Product with the old label has not yet cleared the channels of trade. Please carefully read the label supplied with the product that you are using and apply it accordingly.

Application of 2,4-D granular herbicide in shallow areas may result in disproportionate product concentration, which could result in unacceptable impacts to non-target organisms. The application rate must be adjusted as necessary to compensate. Consult the product label to ensure proper application.

The applicant may apply only those specific chemical products that are approved by the Department of Environmental Quality (DEQ). If only an active ingredient is approved in the table above, consult the list of DEQ-approved aquatic pesticides and related products to determine if the brand name product you plan to use is approved. This document is available at http://www.michigan.gov/deqinlandlakes, or 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. Follow the federal treatment interval unless a different interval or use limitation is specified in Section A(4) of this permit.

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.

Prior to June 1st, do not treat within 1,000 feet of the outlet, when flowing. After June 1st do not treat within 750 feet of the outlet, when flowing. Treatment within the outlet setback, within the approved shoreline can be performed using Clipper. No treatment of any kind can be done within 50 feet of the outlet.

Do not damage non-targeted native 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 native algae, including native macroalgae (e.g., Chara), beyond the five-foot depth contour or beyond 300 feet from shore, whichever is closer to shore.

Treatment of wild celery (Vallisneria americana) with a chelated copper herbicide product shall not occur more than two times per year.

Chemical treatment of offshore/undeveloped areas using diquat dibromide and / or aquathol k is restricted to a one-time only treatment for exotic species control using a rate of 1 gal/acre, on or before June 15. "Offshore" areas are defined as those areas beyond the five-foot depth contour or 300 feet from shore, whichever is closer to shore.

Chemical treatment of shoreline areas with contact herbicides and algaecides is limited to a maximum 100 feet of frontage per residential property. Treatment of non-native aquatic vegetation with selective herbicides, or low-dose contact herbicides with or without algaecides, may exceed this limit where necessary. Treatment in excess of 100 feet of frontage per residential property using low-dose contact herbicides is restricted to a one-time only treatment using a rate of 1 gal/acre, on or before June 15.

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 all chemical applications, except for copper-based algae treatments and dyes when approved for use as a tracer or marker. A 48-hour swimming restriction shall be indicated on the signs for swimmer's itch treatments with copper sulfate.

Section B. Permit Amendments

The DEQ 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 DEQ reach a decision on the permit amendment.

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 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 Program, Water Resources Division, Department of Environmental Quality, P.O. Box 30458, Lansing, Michigan 48909-7958; 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 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 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 DEQ may initiate criminal and/or civil proceedings to correct project deficiencies, protect public health and natural resource values, and secure compliance with statutes.

Federal pesticide label requirements are incorporated into this permit by reference. Violation of federal pesticide label requirements is considered a violation of this permit.

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 DEQ 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.

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 regulated or required to be kept under the same 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 ensure 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

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By: Tom Alwin Environmental Quality Analyst Water Resources Division

For additional information or questions regarding this permit, please contact the DEQ at: DEQ, Water Resources Division, Constitution Hall, 525 West Allegan Street, P.O. Box 30458, Lansing, Michigan 48909-7958, Telephone: (517) 241-1554, E-mail: DEQ-LWM-ANC@michigan.gov, Website: http://www.michigan.gov/deq

