



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY



**STANDARD 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: ANC9802154

DATE Effective: April 25, 2016

This permit is valid only through December 31, 2019

Permittee Name and Address

Aquatic Nuisance Plant Control

PO Box 160

Swartz Creek, MI 48473

Name of Waterbody Affected

WB-1560-1 Runyan Lake: Aquatic Nuisance Plant Control, Inc.

County(ies) in which Waters are Located

Livingston

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

All submissions and notifications to the DEQ as required by this permit shall be accomplished through the MiWaters permitting database. 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) 284-5593, E-mail: DEQ-WRD-ANC@michigan.gov, Website: www.michigan.gov/anc.



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Original Signed by Ryan Crouch

Environmental Quality Analyst

Water Resources Division

Section A. Authorizations and Coverage Provisions

1. Chemical Application

The permittee may apply only those specific chemical products that are approved by the Department of Environmental Quality (DEQ) for Standard Permits in the areas identified by this permit and on the attached approved treatment map(s). Please consult the chemical table titled "Chemicals Approved for Use Under the Aquatic Nuisance Control Standard Permit." This table is updated as any new chemicals are approved. The table is available at www.michigan.gov/anc, "General Information," "Chemicals used for Treatment of Aquatic Nuisance Plants and/or Algae," "Chemicals Approved on Standard Permits."

The application of chemical pesticides to the areas identified on the approved treatment map(s) is restricted to the stated maximum application rates listed in the table. This rate may be lower than the maximum allowed under the federal product label. The maximum total amount of each chemical shall be based upon the application rates in the table, the actual area of treatment, the average depth of the treatment area, the treatment timing and location, plant or algae density, the target chemical concentration in the water, and the target species; or as otherwise indicated by the product label.

Some chemical products may require special applicator certifications. Refer to the federal product label for applicator certification requirements.

2. Treatment Intervals

With few exceptions, the products approved for use in Section A.1 of this Standard Permit have a minimum length of time required between each treatment in the same area(s) of impact, in accordance with the federal product label. Some of the federal product labels also have limits on the total amount of chemical applied annually per treatment area. Follow the federal treatment interval and annual limits unless a different interval or use limitation is specified in Section A.4 of this permit.

3. Authorized Areas

Control of nuisance aquatic plants or algae is authorized only in areas as defined by this permit and as delineated on the attached approved treatment map(s), or through an expansion due to an



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infestation of an adjacent area in accordance with Section 324.3311 of Part 33.

Areas where chemical control of nuisance plants or algae is undertaken must either be under the legal control of the permittee or the party(ies) who has/have granted the permittee permission to do the treatment, or otherwise under legal control as specified in Section 3308 of Part 33.

4. Special Conditions

Follow all federal product label instructions to protect human health and the environment. The label provided with the pesticide container explains how to use the pesticide safely and 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. This permit incorporates the product labels in effect at the time of application by reference. Violation of a label requirement is considered a violation of this permit.

All chemicals shall be applied in a manner to minimize impacts to non-target plant and animal species. Refer to the federal product label requirements and suggestions to optimize selectivity. In addition, refer to the best management practices handbooks, and other best practices for Michigan when available, found at www.michigan.gov/anc, "General Information," "Best Management Practices."

Do not treat within the outlet setback indicated on the approved treatment map(s) attached to this permit, if applicable. An outlet setback is not required when there is no discharge from the waterbody.

Due to the toxicity of copper to spawning fish, do not use copper products within 20 feet of a known, or suspected, spawning bed.

Treatment of wild celery (*Vallisneria americana*) shall not occur more than two times per year within the same treatment area.

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

Do not treat within 500 feet of loons' nests between April 15 and August 15.

For treatment of all waterbodies in Ingham County, the permittee must notify the Ingham County Drain Commission a minimum of two (2) working days prior to application of chemical(s). Notify Mr. Randy Abbott by e-mail at dr_abbot@ingham.org and copy the DEQ at deq-wrd-anc@michigan.gov. Notification must include the date, time, and location(s) of the proposed chemical use. The permittee is required to complete the schedule for this notification in the MiWaters permitting database under "Apps, Requests, Reports," "Compliance Reports." For general questions to the Ingham County Drain Commissioner, contact the office at telephone 517-676-8381



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between 8:00 a.m. and 5:00 p.m., Monday through Friday.

Except for waterbodies with a total surface area of less than 10 acres, the chemical treatment of native emergent and floating leaf vegetation, such as water lilies, cattails, arrowhead, pickerelweed, rushes, etc., is approved for the purpose of providing access to the waterbody and not for the purpose of beach grooming. Restrict treatment of native emergent and floating leaf vegetation to a 40 feet x 40 feet area for swimming and boat launching, and a 20 feet wide boat lane to reach open water per residentially developed parcel. Treatment of an infestation of non-native floating or emergent species in excess of a 40 feet x 40 feet area per residential parcel is approved using selective application methods and timing of treatment to prevent impacts to non-target native species.

Except for waterbodies with a total surface area of less than 10 acres, chemical treatment of developed shorelines for submersed species (algae, macroalgae, and macrophytes) is limited to 100 feet of frontage out to the 5-foot depth contour or 300 feet (whichever is closer to shore) per residential property.

Chemical treatment of an infestation of submersed, non-native invasive species in areas exceeding 100 feet of frontage per residential property, in areas along undeveloped shoreline, and in offshore areas is approved using only the chemical protocol in the table below to prevent impacts to non-target native species in these areas.

Non-native invasive species target	Chemical (maximum application rate)	Restrictions
Eurasian watermilfoil	Aquathol K (1 gal/ac)	one time per season prior to June 15
<i>(Myriophyllum spicatum</i> or hybrid watermilfoil)	diquat dibromide (1 gal/ac) ¹	None
Curly leaf pondweed	flumioxazin (200 ppb) 2,4-D (label maximum) triclopyr (label maximum) 2,4-D - triclopyr combination (label maximum) Aquathol K (1 gal/ac)	one time per season prior to June 15
<i>(Potamogeton crispus)</i>	diquat dibromide (1 gal/ac) ¹ chelated copper algaecides (1.2 gal/ac ft.)	None
Starry stonewort	copper sulfate (4.4 lb./ac ft.)	None
<i>(Nitellopsis obtusa)</i>	flumioxazin (200 ppb)	



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	Komeen Crystal (1 ppm)	
	Hydrothol 191 liquid (2.2 pints/acre foot)	
Fanwort	flumioxazin (200 ppb)	None
(<i>Cabomba caroliniana</i>)		
All other non-native	Chemicals approved include those listed on the table	
invasive species not	titled "Chemicals Approved for Use Under the Aquatic	None
identified above	Nuisance Control Standard Permit." ¹	

¹ Low-dose chelated copper only, at a rate not more than 0.11 ppm Cu, may be used with diquat in areas exceeding 100 feet of frontage per residential property, and in areas along undeveloped shoreline, but not in offshore areas.

Application of herbicides containing imazapyr can be made only by federal or state agencies, such as Water Management District personnel, municipal officials, and the U. S. Army Corps of Engineers, or those applicators who are licensed or certified as aquatic pest control applicators and are authorized by the state or local government.

Application of any herbicide on a per acre basis in shallow areas may result in a concentration of active ingredient exceeding the federal label maximum, which could result in unacceptable impacts to non-target organisms. The per-acre chemical amount must be adjusted to the depth of water being treated. Consult the federal product label to ensure proper application.

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.

Multiple products with the same active ingredient are approved by this permit. Consult the federal product labels to ensure that the total amount of the active ingredient applied does not exceed the amount allowed by label application rates and/or active ingredient concentration for the target species and site conditions.

The use of Hydrothol 191 liquid and/or granular herbicide has been approved at a rate in excess of 0.3 parts per million (ppm). The federal product label suggests that treatment be conducted only by a certified pesticide applicator. Apply product evenly in narrow margins or strips to control target vegetation so fish are not killed. Apply product from the shoreline out so fish are not trapped. Do not treat more than 10 percent of the waterbody, or a bay, at a time with doses greater than 1.0 part per million (54 pounds per acre foot granular or 1.4 gallons per acre foot liquid).

If a waterbody that is not eligible for a Certificate of Coverage under the General Permit for Ponds



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has been treated with fluridone within the previous two years, then the following requirement is in effect:

- Aquatic vegetation survey requirements as specified by the previous fluridone permit are incorporated by reference. Surveys must be submitted to the DEQ through the MiWaters permitting database not later than November 1 of the year the survey was performed.

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

- Conduct the chemical treatment only when a DEQ representative is present.
- Notify the DEQ not less than two working days in advance of chemical treatment.
- Submit an accurate map of the exact locations where each chemical was applied to the DEQ within 24 hours of the completion of each treatment.
- In addition to the normally required notification, also notify other person(s) specified by the DEQ.
- Notify the Michigan Loon Watch Coordinator, by e-mail (michiganloons@yahoo.com, copy deq-wrd-anc@michigan.gov) a minimum of two (2) business days prior to the initial application of chemicals to this waterbody. Notification must include the name and county of the waterbody, the anticipated treatment schedule for the season, and a telephone number where the permittee can be contacted.
- Allow the DEQ or its representative to collect a sample of the chemical(s) used before or during any chemical treatment.
- Apply chemicals so that swimming restrictions and fish consumption restrictions are not imposed on any Saturday, Sunday, or state-declared holiday.
- Take special precautions to avoid or minimize potential impacts to human health and safety, the environment, and non-target organisms.
- Perform lake water residue analysis to verify the chemical concentrations in the waterbody according to a frequency, timing, and methodology approved by the DEQ.
- Perform aquatic vegetation surveys according to a frequency, timing, and methodology approved by the DEQ.
- Use chemical control methods for nuisance aquatic vegetation that are consistent with the approved vegetation management plan submitted separately or as part of a lake management plan.
- Perform pretreatment monitoring of the target aquatic nuisance population according to a frequency, timing, and methodology that have been approved by the DEQ.
- Submit a copy of any vegetation management plan, lake management plan, lake report, written recommendations, and/or vegetation surveys that are prepared for the waterbody.
- Any other requirements determined by the DEQ as necessary to protect the natural resources or the public health and safety, to prevent economic loss or impairment of recreational uses, to protect non-target organisms, or to help ensure control of the aquatic nuisance.

5. Notification and Posting Requirements

The ANC statute allows a permittee to expand the area of impact, without a formal permit revision,



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beyond that authorized in the permit to include *adjacent* (as defined in Section E. Definitions) areas of the same waterbody or treatment area that became infested after the application was submitted. These areas allowed for expansion, without a formal revision, include only infestations of non-native species, as defined in Section E. Definitions. The expansion treatment must use the same chemicals and application rates as those currently authorized in the permit.

The permittee shall submit 1) a notification of an impending expansion treatment, and 2) an expansion report.

1. Notification of impending expansion treatment - If expanding the area of impact for treatment of an infestation, the permittee shall notify the DEQ prior to the initial treatment of the impending expansion area. This notification may be submitted by telephone at 517-284-5593 or by e-mail at deq-wrd-anc@michigan.gov, except in the following two situations:

- a. The original area of impact authorized on the permit or COC is greater than 100 acres and the proposed expansion exceeds 50 percent of the original authorized area.
- b. The treatment area expansion is proposed in a waterbody or treatment area that is located within or along the shoreline of the Great Lakes or inland waters in a municipality or township on the list in Appendix A.

In these two situations, the permittee shall complete the ANC Pre-Expansion Notification in the MiWaters permitting database not less than two (2) full business days before the planned treatment of the expanded area. This notification shall include a map of the proposed expansion area(s), a list of chemical(s) to be applied, the date and time of anticipated treatment, and contact information for the on-site chemical applicator. The DEQ has two (2) business days to notify the permittee of any specific concerns about the proposal.

2. Expansion Report Form - The permittee shall complete the ANC Treatment Expansion Report in the MiWaters permitting database no later than 15 days following the initial expansion treatment.

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 each initial chemical treatment of the treatment season, in accordance with 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. This notification requirement applies to each new, or expanded, area of impact added during the treatment season.

Notice of the chemical application must be posted prior to each chemical application, in accordance with Section 324.3310(d) of Part 33 and shall remain posted for a minimum of 24 hours or until all water use restrictions have expired, whichever is later. Alternate posting locations may be approved on a case-by-case basis by DEQ upon written request from the permittee. The written request must explain the necessity for alternative posting locations and a description of the proposed posting locations, including a map for clarification. An alternate posting request shall be submitted through the MiWaters permitting database as an attachment to the permit application or revision request.



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Water use restrictions listed on the label for the specific product (i.e. trade name) used shall be included on the posting sign. In addition a 24-hour water use restriction for swimming/entry shall be indicated for all chemical applications, except for copper-based algae treatments and dyes when approved for use as a tracer or marker. All signs shall also include a recommendation that swimming/entry in the treatment area be avoided while applicators are applying chemicals. A posting sign template is available at www.michigan.gov/anc, "Application & Permit Information," "Posting Sign."

Section B. Permit Revisions

The permittee may request a revision of this permit if the proposed revision(s) does not involve a change in the scope of the project, as defined under Revision Criteria in Section E. Definitions, and the permittee requests the revision(s) in writing, using the Aquatic Nuisance Control (ANC) Permit Revision Request Form in the MiWaters permitting database. A revision that involves a change in scope of the original project requires submittal of a new permit application. A revision for a DEQ error may be requested through an e-mail to the permit writer or to deq-wrd-anc@michigan.gov.

Section C. Reporting and Record Keeping

1. Environmental Impacts

The permittee is required to immediately contact the DEQ, WRD, at 517-284-5593 and complete the Schedule "ANC Treatment Impact Report" in the MiWaters permitting database if any fish or wildlife damage or significant non-target plant impacts occur in association with any chemical application.

2. Treatment Report

An ANC Treatment Report shall be submitted in the MiWaters permitting database no later than November 30 of each year that this permit is in effect, even if treatment is not undertaken.

3. Record Retention

The permittee shall keep written or electronic records as required in this permit. These records must be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. All records shall be made available within two (2) calendar days to the DEQ upon request, or a within a timeframe agreed upon by the DEQ and the permittee.

The permittee shall obtain and maintain written permission from each bottomland owner in the area of impact for a minimum of one (1) year from the expiration date of the permit, unless exempt under Section 324.3308 of Part 33.

All other records shall be retained for a minimum of one (1) year beyond the expiration date of this permit.

Section D. Liability



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1. Noncompliance

Initiation of any work on the permitted project confirms the permittee'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 revocation of this permit. Further, the DEQ may initiate criminal and/or civil proceedings to correct deficiencies, protect public health and natural resources, 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.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve any permittee from any responsibilities, liabilities or penalties to which the Permittee may be subject under the Endangered Species Act of 1973 (16 U.S.C. § 1531 et seq.) or Endangered Species Protection, Part 365 of the Michigan Act.

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 permittee 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 permittee, or employees, agents, or representatives of the permittee, 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 permittee or any other person.

4. Right of Entry

The permittee shall allow the Department the following actions 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
- To copy any records required to be kept under the terms and conditions of this permit
- At reasonable times to have access to waterbodies regulated under this permit
- To inspect equipment for use under this permit
- To sample chemicals, discharges, chemical products, and waterbodies

5. Laboratory and Analytical



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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 or volunteers are utilized to perform sampling and analysis, the permittee shall ensure that said contractors or volunteers are sufficiently qualified to perform the required sampling and analysis, and that the quality control measures listed above are properly executed.

6. Permission to Treat

The permittee shall obtain authorization to chemically treat the proposed area of impact by obtaining written permission from each property owner who owns bottomlands in the area of impact. Written authorization from all property owners within the area of impact is required for each season that this permit is in effect, prior to chemical treatment. It is the responsibility of the permittee to ensure all permissions within the permitted treatment area are up to date each season.

Written authorizations shall be maintained for 1 year from the expiration date of this permit and shall be made available to the Department upon request.

Section E. Definitions

1. Adjacent – an area of impact, contiguous to an approved treatment area, permissible for expansions for an infestation per Section 3311(3) of Part 33.
2. Change of scope – a request that does not meet the revision criteria for a permit revision.
3. Emergent plants – a plant that is rooted in the sediment with most parts of the plant maintained above the waterline.
4. Floating-leaf plants – plants with leaves and flowers that float on the water surface.
5. Infestation – includes any non-native invasive species that have grown into dense, monotypic stands causing ecological or economic harm.
6. Initial chemical treatment – the first treatment, of each season, at approved treatment areas as well as at expanded treatment areas for infestations.
7. Native – an indigenous species to the ecosystem of Michigan prior to European settlement necessary for environmental health, habitat production, and economic development of fisheries and wildlife recreation.
8. Non-native invasive – an introduced species that did not occur in Michigan's ecosystem prior to European settlement and where introduction causes or is likely to cause habitat, environmental, or economic harm, or harm to human health.



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
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KEITH CREAGH
DIRECTOR

9. Offshore -- areas beyond the five-foot depth contour or 300 feet from shore, whichever is closer to shore.

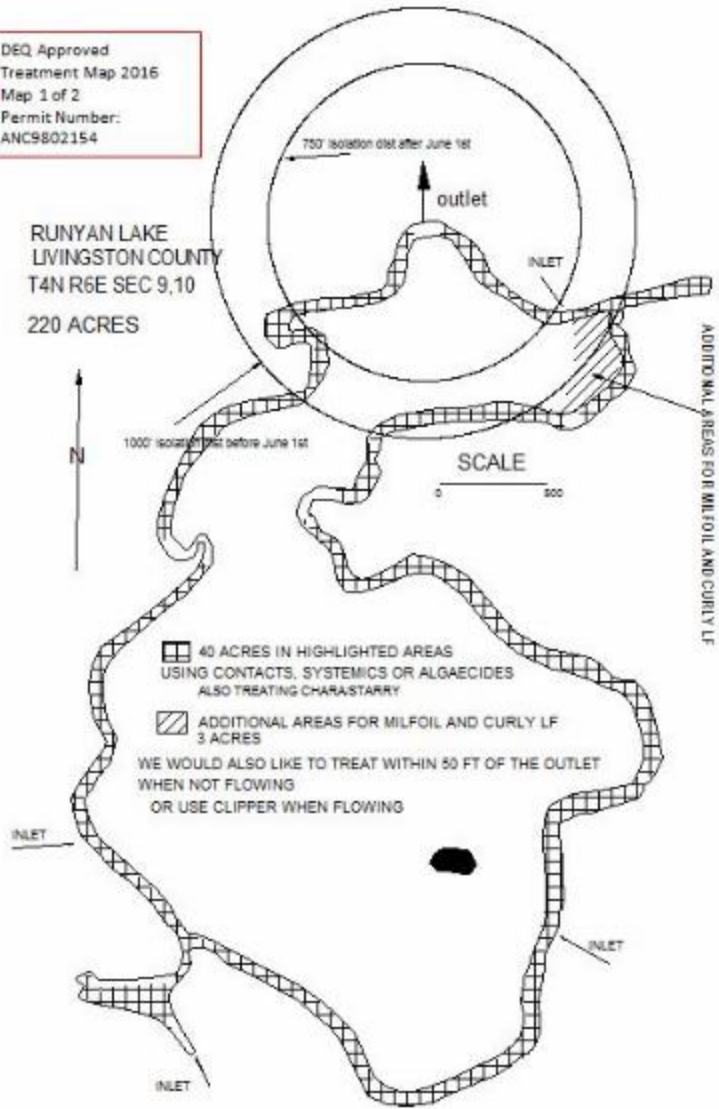
10. Revision criteria—one or more of the following only: 1) addition of chemical(s) or modification of chemical amount(s) for an existing approved treatment area(s); 2) addition, deletion, or modification of permit conditions to protect natural resources or improve treatment efficacy or operations; 3) addition of treatment area(s) which are consistent with Section A.4 of this permit to a site absent of environmental, public health, and endangered and/or threatened species of concern; and/or 4) a correction of a DEQ error.

11. Shoreline – the line marking the edge of a body of water.

12. Submersed plants –plants rooted in the sediment, growing almost entirely underwater.

DEQ Approved
Treatment Map 2016
Map 1 of 2
Permit Number:
ANC9802154

RUNYAN LAKE
LIVINGSTON COUNTY
T4N R6E SEC 9,10
220 ACRES

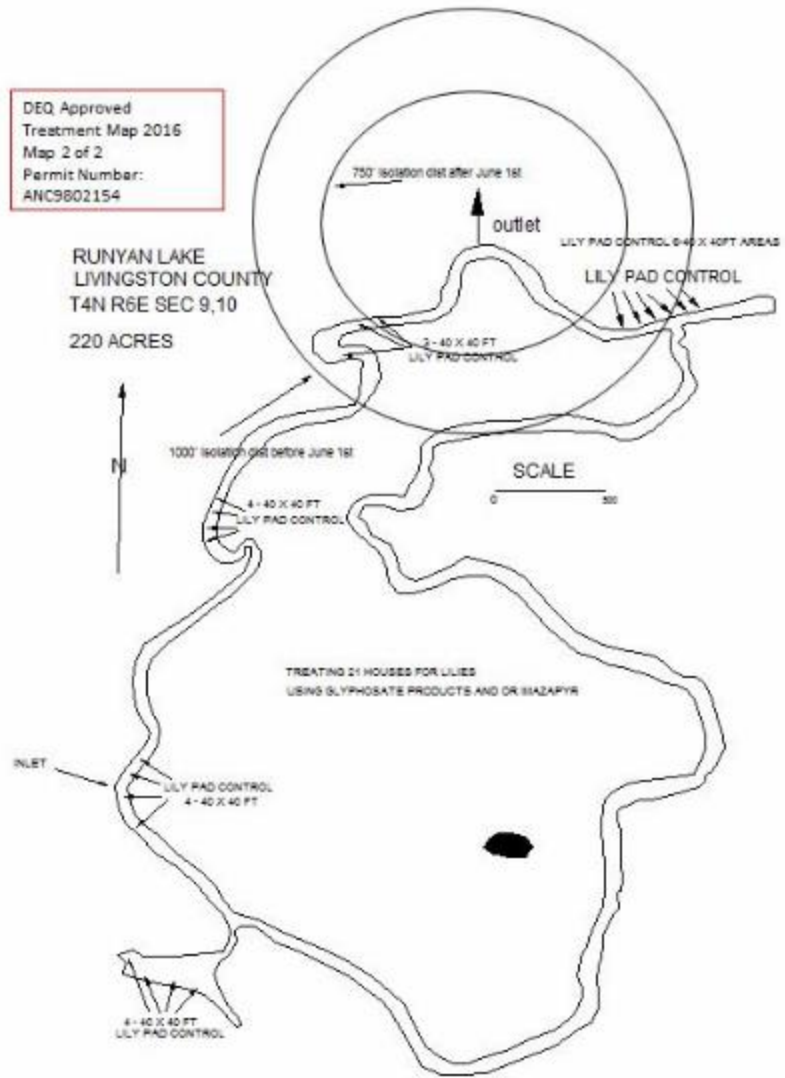


ADDITIONAL AREAS FOR MILFOIL AND CURLY LF

- 40 ACRES IN HIGHLIGHTED AREAS
USING CONTACTS, SYSTEMICS OR ALGAEICIDES
ALSO TREATING CHARASTARRY
- ADDITIONAL AREAS FOR MILFOIL AND CURLY LF
3 ACRES

WE WOULD ALSO LIKE TO TREAT WITHIN 50 FT OF THE OUTLET
WHEN NOT FLOWING
OR USE CLIPPER WHEN FLOWING

DEQ Approved
Treatment Map 2016
Map 2 of 2
Permit Number:
ANC9802154



RUNYAN LAKE
LIVINGSTON COUNTY
T4N R6E SEC 9,10
220 ACRES

SCALE
0 500