



DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU

GUIDANCE FOR AQUATIC NUISANCE CONTROL CHEMICAL EVALUATION TREATMENTS

Part 33, Aquatic Nuisance Control (ANC), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 33), and the administrative rules promulgated thereunder, allow the Department of Environmental Quality (DEQ) to issue ANC permits to conduct evaluations of the impacts and effectiveness of chemicals, application rates, and/or means of application to control an aquatic nuisance in waters of the state.

This document provides guidance to ANC permit applicants regarding the requirements of an evaluation treatment proposal. The guidance provided is the minimum information required. Applicants are encouraged to submit additional information, if available, and the DEQ may request additional information on a case-by-case basis as needed to evaluate the proposal. Please contact the ANC program staff at 517-241-7734, or by email at DEQ-LWM-ANC@michigan.gov for additional guidance.

A proposal for an evaluation treatment must include the following:

I. Proposal Title

Include the waterbody name and location [township(s), county(ies) and town, range, and section(s)].

II. Problem Statement

State the management problem the evaluation protocol is designed to address and the hypotheses to be tested. Include the management objective(s) for this evaluation protocol.

III. Waterbody Background

Provide a description of the waterbody characteristics including:

- lake size, depth (maximum and mean depths), size of littoral zone in acres, retention time, outlet flow rate, surrounding land use, water quality information;
- a description of the aquatic plant community including survey results (survey must be conducted using DEQ's "Procedures for Aquatic Vegetation Surveys" and include the survey map, summary sheet, date of survey, and name(s) of surveyor);
- the history of aquatic plant management (within the past ten years, if available) including chemical and biological control, harvesting, location of management activities, targeted plant species, and the success of the management activities;
- recreational use of the waterbody including the extent and location of swimming, boating, fishing, etc.;
- presence of special concern, threatened, or endangered plant/animal species and potential impacts due to the proposed treatment.

If a Lake Management Plan is required, duplicate information is not necessary.

IV. Evaluation Protocol

Outline the evaluation protocol, including the chemical(s) proposed for use, the application rate, the location of treatment, the means of application, and the duration of the evaluation.

V. Data Collection and Methods

Include a description of what data will be collected during and after the proposed chemical treatment, and the proposed methods for conducting all sampling (e.g., plant sampling, residue sampling, etc.), treatment and sampling schedules, and a map indicating the location of sampling sites. Data collection must be sufficient to support a rigorous assessment of the success or failure of the evaluation protocol.

For fluridone evaluations: pre-treatment PlanTEST™ data and post-treatment residue sampling are required.

VI. Discussion

Please include the following information:

- Explain why the past management practices used in this waterbody have not been successful and why the proposed protocol is expected to provide a successful outcome.
- Provide a discussion of and citations for published scientific documentation to support that the proposed evaluation treatment will control the aquatic nuisance without causing unacceptable impacts on: 1.) non-target native aquatic vegetation: 2.) other aquatic or terrestrial life: or 3.) human health and safety.
 - In addition, for any proposed whole lake treatment, also provide scientific documentation to support that the proposed evaluation treatment will provide selective control of the aquatic nuisance.

Scientific documentation includes citations from peer-reviewed scientific literature or any scientific paper published by a recognized resource or environmental management organization that includes research data obtained through a scientific process. Provide copies of the publications to the DEQ, upon request.

- Provide a discussion of anticipated or possible water quality impacts.
- If chemical concentration monitoring activities are included (e.g., FasTEST™, PlanTEST™, EffecTEST™, etc), provide justification that the number of samples are representative of the population.
- Describe suitable controls or other actions that will be taken to avoid or minimize impacts to non-target species, and contingency plans for mitigating any unexpected impacts.

VII. Reporting

Include a description of how the data will be analyzed, what type of report(s) will be submitted to the DEQ, and a timeline for report submittal.

VIII. Project Team and Other Support

Identify people who will be conducting each portion of the evaluation protocol and describe their past experience in their area of participation. Also, include any treatment recommendations or support offered by the chemical or equipment manufacturer, distributor, and/or other stakeholders.

IX. Literature Cited

Include a list of citations for all literature cited in the evaluation protocol.

In addition, please submit the following information as Appendices:

- Standard Long-Form Permit Application Form
- August/September pre-treatment aquatic vegetation survey conducted per DEQ's "Procedures for Aquatic Vegetation Surveys"
- For Whole-lake Applicants: Lake Management Plan
- For Partial-lake Applicants: Water Quality Data, if an LMP is not required (see LMP guidance for parameters and sampling schedule)