

COPPER USAGE

Frequently Asked Questions (FAQ)

Part 33, Aquatic Nuisance Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and Aquatic Nuisance Control Standard Permits

In 2021 the Aquatic Nuisance Control (ANC) Program within the Water Resources Division of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) instituted additional restrictions on copper usage in May and June to protect spawning fish. These additional restrictions were developed after careful consideration along with literature research and conversations with Michigan Department of Natural Resources Fisheries Division and pesticide applicators. Section 323.3309 of Part 33, Aquatic Nuisance Control, of the NREPA, allows the department to impose additional conditions to protect the natural resources or the public health, to prevent economic loss or impairment of recreational uses, to protect nontarget organisms, or to help ensure control of the aquatic nuisance. The copper usage condition was developed to balance pesticide treatment with the harmful impacts of copper on nontarget species, in particular spawning centrarchids or sunfish. Centrarchids, such as Bluegill, Pumpkinseed, Redear Sunfish and Rock Bass are of great ecosystem and recreational value in the state of Michigan. These objectives of the additional restrictions include: (1) avoiding the use of copper sulfate in inland lakes in Michigan during May and June when fish are spawning, (2) to reduce the spatial extent of copper treatments during May and June to protect spawning fish, and (3) to allow treatment of the nonnative macroalgae, starry stonewort (*Nitellopsis obtusa*) with chelated copper during May and June to continue efforts to control the spread of this aquatic invasive species.

The language of the copper usage condition in Aquatic Nuisance Control Standard Permits states:

Except for waterbodies with a total surface area of less than 10 acres and canals and marinas on the Great Lakes and connecting waters, copper treatments for algae, macroalgae, and submersed macrophytes are restricted to chelated copper products during May and June. No more than a cumulative total of 25 percent of the potential spawning area (the area of the waterbody within the 0-10 feet depth contours) may be treated with copper products during May and June. The 25 percent limit is a cumulative total of unique areas treated. Treatments of starry stonewort with chelated copper may exceed percent restriction of a cumulative total of 25 percent of the potential spawning area. However, if starry stonewort is treated under this exemption, then treatment of filamentous algae, planktonic algae, and native macroalgae is not allowed during May and June; and treatment of starry stonewort during May and June is restricted to one time only per starry stonewort treatment area. In the event of a harmful algae bloom (HAB) during May or June (documented by positive algal toxin test results, positive identification of HAB species, or other approved EGLE methodology), alternative treatment patterns may be considered by EGLE to protect public health.

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1. Can SeClear be used in May and June?

SeClear is listed as a copper sulfate solution on the global and Standard Permit approved products lists. As such, for basic use under the condition, SeClear cannot be used during May and June. However, there is potential for the product to be used under an approved response to a HAB event, because of the products phosphorus mitigation potential.

2. Will exemptions to the copper condition be considered for lakes severely impacted by starry stonewort or those with conflicts between filamentous algae and starry stonewort management?

The condition contains language for a starry stonewort exemption to treat up to the entire littoral zone one time with chelated copper. Additional treatment beyond this exemption would need additional information, such as historical data and vegetation survey data. For waterbodies with significant algae and starry stonewort issues, requests for variance would also require survey data and historical treatment data.

Any exemption would require an Individual Permit or an amendment to an already in effect permit.

3. How will the 25 percent spatial restriction be applied when there is more than one applicator permitted to treat portions of the lake? The applicators may not be aware that someone else is permitted to treat or may not know what amount of surface area is being treated by the other permittee.

Any needed adjustments will be handled on a case-by-case basis. If permit modifications or coordination by permittees is needed, it will be the responsibility of the ANC Program to notify the permittees.

4. What does “cumulative” mean in the context of this permit condition? Is it cumulative in space or cumulative in time? Is it one time only per treatment area during May and June?

The 25 percent is cumulative in space as surface area treated. Repeated treatment within that 25 percent of the potential littoral zone can be done on timing consistent with product labels.

5. Can canals on inland lakes be excluded from the estimate of the potential littoral zone for purposes of this copper condition?

In many inland lakes, canal systems provide valuable habitat. The ANC Program can review site specific information based on historical and survey data and determine if a possible exemption could be granted. Any exemption would require an Individual Permit.

6. If an applicator conducts an early season treatment of planktonic or filamentous algae or Chara, then are they prohibited from treating more than cumulative 25 percent for starry stonewort after an algae or native macroalgae treatment?

Yes.

- 7. Will the permit cover page and/or treatment map have statement by reviewer of estimate of 0-10 feet contour and 25 percent limit so that permittee and permit writer have clarity on copper restrictions for the waterbody?**

Yes. The ANC permit writer will include this information on the permit treatment maps and/or the map page in the permit.

- 8. Are in effect multiyear ANC permits issued prior to 2021 subject to the copper restriction?**

No. Permittees will continue to conduct treatments as allowed under the in effect permit until a new permit is issued for the waterbody (i.e., following permit termination or expiration).

- 9. Will large waterbodies such as golf course lakes or corporate campus waterbodies be exempt from the new copper restriction?**

Most of these waterbodies are less than 10 acres and would not be subject to this condition. For those larger individual commercial waterbodies that are greater than 10 acres, an exemption under an individual permit may be considered if the following criteria are met and documentation is supplied with the permit application:

- Waterbody is man-made and not connected to a river or stream flowing through landscape
- Waterbody's only purpose is aesthetic and/or stormwater management

- 10. Why does the new copper restriction not apply to water bodies less than 10 acres?**

Historically 10 acres has been a mark of differentiation for how waterbodies are permitted and conditioned under ANC permits. For ease of compliance, this surface area boundary is maintained for this new permit condition.

- 11. When treating starry stonewort in May and June with chelated copper, how much starry stonewort must be present for the treatment area to be defined as a “starry stonewort area”? Does starry stonewort just have to be present?**

The condition allows for the exempted treatment(s) of starry stonewort where it occurs in a monoculture. If starry stonewort occurs in mixture with native macroalgae and selective control of starry stonewort is not an option, then the treatment area is considered as being managed for both native and non-native macroalgae and is subject to the 25 percent spatial restriction.

- 12. Is treatment allowed for filamentous algae in May and starry stonewort in June in the same areas using chelated copper products as long as the cumulative treatment area is under 25 percent of the surface area of the 0-10 feet contour?**

Yes.

13. During May and June, can separate areas be treated on different dates under the label treatment interval timeline?

If the cumulative treatment area does not exceed 25 percent of the estimated potential littoral zone, then the spot treatment areas may be retreated following product label requirements for treatment intervals. If utilizing the exemption to treat only starry stonewort at more than 25 percent of the potential littoral zone, then each area can only be treated once during the May and June time window, but separate areas can be treated on different days.

14. Is the use of chelated copper as an “algal/microbial wash” component of non-native species treatments with contact or systemic herbicides exempt from the copper restriction?

While this activity is not explicitly exempt from the condition, ANC staff understands that some waterbodies have historical concerns. Program staff can, if requested, on a case-by-case basis, review plant survey data and historical treatment records to determine whether an exemption could be granted under an Individual Permit or an amendment to an in-effect permit.

15. Some waterbodies have sufficient water clarity to allow plant growth past the 10 feet depth contour. Is the targeting of invasive species beyond the 10 feet depth contour subject to the copper usage condition?

No. The condition does not regulate copper usage beyond the 10 feet depth contour.

Additional Information and Resources

- [Michigan.gov/ANC](https://www.michigan.gov/ANC)
- [Part 33, Aquatic Nuisance Control, of the NREPA](#)
- [Aquatic Nuisance Control administrative rules promulgated pursuant to Part 33, Aquatic Nuisance Control, of the NREPA](#)

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