

# Hearing Summary

Rule Package: Harmful Algal Blooms

Original filing date: 3/30/2022

Public comment start date: 3/30/2022

Public comment end date: 5/4/2022

Public hearing date: 5/4/2022

List of Rules: 3745-90-01, 3745-90-02, 3745-90-03, 3745-90-04, 3745-90-05, 3745-90-06, 3745-90-07

Were there any participants in this public hearing beyond Ohio EPA staff or JCARR staff?

☒ Yes

☐ No

Were there comments received during the public comment period outside of those presented at this hearing?

☒ Yes

☐ No

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This hearing summary has been compiled to meet the requirements of Section 119.03 of the Revised Code.

This hearing summary includes this cover sheet and the following attachments:

1. **Attachment A** - A copy of the public notice for this hearing.
2. **Attachment B** - A copy of the sign-in sheet for this hearing.
3. **Attachment C** - A copy of the script read into the record to begin and end the hearing.
4. **Attachment D** - A copy of the response to comments.

Ohio EPA's response to comments document includes the comments received, who commented, the agency response to comments, and a statement of whether or not the rule was changed due to the comments.

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Ohio EPA digitally records all public hearings for rules. The digital recordings are available upon request. These recordings may be sent out for transcription if necessary.



**BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY**

**3/30/2022**

**Public Notice: Proposed Rulemaking: Harmful Algal Blooms**

Notice is hereby given that the Ohio Environmental Protection Agency, Division of Drinking and Ground Waters (DDAGW) proposed revisions to rules in Chapter 3745-90 of the Ohio Administrative Code. DDAGW has reviewed the Harmful Algal Bloom rules to satisfy the five-year rule review requirements of section 106.03 and 106.031 of the Ohio Revised Code. OAC Chapter 3745-90 describes harmful algal bloom monitoring, reporting, analysis, and public notification for public water systems.

Proposed revisions to OAC Rules 3745-90-01, 3745-90-02, 3745-90-03, 3745-90-05, 3745-90-06, 3745-90-07 include the following:

- Defining the parameters of harmful algal bloom (HAB) season and off-season that adjust seasonal period (HAB season June through November, off-season December through May).
- Modify definition of cyanobacteria screening.
- Ending the same day requirement for total microcystin and cyanobacteria screening in 3745-90-03(A)(1)
- Remove monitoring requirement (sampling three times per week) when raw water microcystins exceed five micrograms per liter.
- Reduce monitoring requirement from daily to three times per week when microcystins are detected in finished water.
- Removal of the reporting violation issued in 3745-90-04(E) to public water systems and removal of the requirement to issue a Tier 3 notification if results are not reported in accordance with 3745-89-08.
- Adding written treatment optimization protocol requirements (requiring an annual review and requiring protocol submission to the director for review within 30 days of substantial change) for all Surface Water Public Water Systems (PWS).
- Adding requirements for PWS response to Ohio EPA comments regarding cyanotoxin general plan within 30 days of the comment date or other schedule provided by the director.
- Clarification of PN limited distribution requirements

The public comment period will run until May 4th, 2022. A public hearing on this proposed rulemaking will be held to consider public comments in accordance with Section 119.03 of the Ohio Revised Code. Ohio EPA will be holding an in-person and virtual public hearing on the rules on May 4th, 2022, at 10:30 am. The in-person hearing will be at the same time and date and will be located at Ohio EPA, Suite 700, 50 W. Town Street, Columbus, Ohio 43215. During the hearing, the public may submit written comments on the record about the proposed rules if participating virtually and verbally if participating in

person. To facilitate the scheduling of oral presentations, persons intending to give testimony in-person at the hearing should notify the Ohio EPA Public Interest Center, [mary.mccarron@epa.ohio.gov](mailto:mary.mccarron@epa.ohio.gov) or (614) 644- 2160.

Citizens who want to participate virtually must register in advance for the meeting at <https://attendee.gotowebinar.com/register/2752405680825725453>

Comments can be submitted by email to [ddagw\\_rulecomments@epa.ohio.gov](mailto:ddagw_rulecomments@epa.ohio.gov). Comments should be received at the above address by close of business, May 4<sup>th</sup>, 2022.

To facilitate scheduling of oral presentations, persons intending to give testimony at the hearing should ensure that Ohio EPA receives notice of such intent by May 3<sup>rd</sup>, 2022. Persons who provide Ohio EPA with prior notice will be heard ahead of persons who register at the hearing. To provide notice of intent to give oral comments at the public hearing, contact Colin White by mail at Ohio EPA, DDAGW, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215, or by phone at (614) 644-2759.

In order to ensure that written comments are considered as part of the official record of this hearing, written comments must be received by Ohio EPA by the close of business May 4<sup>th</sup>, 2022. Written comments on the proposed rules may be given to the presiding officer during the hearing, sent by mail to Zach Winoker at the address above, or sent by email to the following address: [ddagw\\_rulecomments@epa.ohio.gov](mailto:ddagw_rulecomments@epa.ohio.gov).

To obtain a copy of the proposed rules, contact Zach Winoker at Ohio EPA at (614) 644-3387 or email at [Zachary.Winoker@epa.ohio.gov](mailto:Zachary.Winoker@epa.ohio.gov). Please request the "Harmful algal Blooms Amended Rules" and be sure to include your name, telephone number, and complete mailing address. There are amendments to the proposed rules. The proposed rules will be available on the Agency web page until their adoption or withdrawal. These rules and associated documents are available on DDAGW's Web page for electronic downloading here: <https://epa.ohio.gov/wps/portal/gov/epa/divisions-and-offices/drinking-and-ground-waters/regulations/proposed-rules>

Comments can be submitted in hard copy to the following address: "Ohio Environmental Protection Agency, DDAGW, P.O. Box 1049, Lazarus Government Center, Columbus, Ohio 43216-1049, Attn: Zach Winoker" or by email to [ddagw\\_rulecomments@epa.ohio.gov](mailto:ddagw_rulecomments@epa.ohio.gov). Comments should be received at the above address by close of business, May 4<sup>th</sup>, 2022.

**Attendee Report: Public Hearing: Harmful Algal Bloom Proposed Rules (Statewide)**Report Generated:  
05/05/2022 10:44 AM EDT

<b>Webinar ID</b>	<b>Actual Start Date/Time</b>	<b>Duration</b>	<b># Registered</b>	<b># Attended</b>	<b>Clicked Registration Link</b>	<b>Opened Invitation</b>
351-088-571	05/04/2022 10:15 AM EDT	45 minutes	27	19	41	0

**Attendee Details**

Attended	Interest Rating	Last Name	First Name	Email Address	Registration Date/Time	Join Time - Leave Time (Time in Session)	Time in Session	Organization	Unsubscribed	Webinar Question 1
Yes	93	Briland	Ruth	ruth.briland@epa.ohio.gov	05/04/2022 09:59 AM EDT	05/04/2022 10:15 AM EDT - 05/04/2022 10:27 AM EDT (12 minutes)	12 minutes		No	
Yes	96	DeLeve	Skipp	sdeleve@painesville.com	05/04/2022 10:27 AM EDT	05/04/2022 10:27 AM EDT - 05/04/2022 10:52 AM EDT (25 minutes),05/04/2022 10:32 AM EDT - 05/04/2022 10:55 AM EDT (23 minutes)	28 minutes	Painesville Water Treatment Plant	No	
Yes	93	DiFranco	Stivo	sdi franco@aquaaamerica.com	04/01/2022 03:26 PM EDT	05/04/2022 10:28 AM EDT - 05/04/2022 10:40 AM EDT (13 minutes)	13 minutes		No	
Yes	98	Fouche	Greg	gfouche@icarr.state.oh.us	05/04/2022 10:23 AM EDT	05/04/2022 10:23 AM EDT - 05/04/2022 11:00 AM EDT (38 minutes)	38 minutes	JCARR	No	
Yes	93	Graydon	Ryan	graydon.ryan@epa.gov	04/04/2022 10:59 AM EDT	05/04/2022 10:26 AM EDT - 05/04/2022 10:39 AM EDT (14 minutes),05/04/2022 10:39 AM EDT - 05/04/2022 10:41 AM EDT (2 minutes)	15 minutes		No	
Yes	97	Hohman	Erin	erin.hohman@alloway.com	05/02/2022 03:05 PM EDT	05/04/2022 10:15 AM EDT - 05/04/2022 10:47 AM EDT (32 minutes)	32 minutes	Alloway	No	
Yes	94	Hurd	Megan	megan.hurd@alloway.com	05/02/2022 11:15 AM EDT	05/04/2022 10:27 AM EDT - 05/04/2022 10:46 AM EDT (19 minutes),05/04/2022 11:00 AM EDT - 05/04/2022 11:00 AM EDT (1 minute)	19 minutes	Alloway	No	
Yes	97	Klonicki	Tricia	patricia.klonicki@gcww.cincinnati-oh.gov	05/03/2022 05:01 PM EDT	05/04/2022 10:25 AM EDT - 05/04/2022 10:56 AM EDT (32 minutes)	32 minutes	Greater Cincinnati Water Works	No	
Yes	97	Kneisel	Brittney	brittney.kneisel@carr.state.oh.us	04/29/2022 10:49 AM EDT	05/04/2022 10:27 AM EDT - 05/04/2022 10:57 AM EDT (31 minutes),05/04/2022 10:27 AM EDT - 05/04/2022 10:27 AM EDT (1 minute)	31 minutes	JCARR	No	
Yes	97	Lacy	Charles	clacy@akronohio.gov	04/26/2022 10:45 AM EDT	05/04/2022 10:15 AM EDT - 05/04/2022 10:47 AM EDT (32 minutes)	32 minutes	City of Akron Watershed Div	No	+The public comment for The City of Akron Watershed Division regarding the upcoming HAB rules (3745-90-01) was that in regard to 3745-90-03 (b), that utilities have the option to use qPCR screening in lieu of ELISA testing during HAB "off-seasons" explicitly stated in the rule. This would ensure that administrative changes don't remove the choice for utilities who desire to use qPCR as a screening tool.
Yes	93	Luessenhop	Andrew	aluessenhop@in-situ.com	04/05/2022 02:48 PM EDT	05/04/2022 10:33 AM EDT - 05/04/2022 10:46 AM EDT (13 minutes)	13 minutes	In-Situ, Inc.	No	
Yes	93	McMonigle	Orin	omcmonigle@painesville.com	03/30/2022 12:53 PM EDT	05/04/2022 10:31 AM EDT - 05/04/2022 10:46 AM EDT (16 minutes),05/04/2022 10:31 AM EDT - 05/04/2022 10:34 AM EDT (3 minutes)	16 minutes	Painesville Water Plant	No	
Yes	99	Payton	Mandi	amanda.payton@epa.ohio.gov	05/04/2022 10:20 AM EDT	05/04/2022 10:20 AM EDT - 05/04/2022 10:26 AM EDT (6 minutes),05/04/2022 10:26 AM EDT - 05/04/2022 11:00 AM EDT (34 minutes)	40 minutes		No	
Yes	92	Phillips	Jason	jphillips@findlayohio.com	03/30/2022 04:41 PM EDT	05/04/2022 10:30 AM EDT - 05/04/2022 10:40 AM EDT (11 minutes)	11 minutes	City of Findlay	No	
Yes	92	Thompson	Steven	sthompson@burnsmcd.com	04/27/2022 12:36 PM EDT	05/04/2022 10:29 AM EDT - 05/04/2022 10:37 AM EDT (9 minutes)	9 minutes	Burns and McDonnell	No	
Yes	94	Walling	Sara	swalling@greatlakes.org	04/04/2022 02:07 PM EDT	05/04/2022 10:28 AM EDT - 05/04/2022 10:32 AM EDT (4 minutes),05/04/2022 10:32 AM EDT - 05/04/2022 10:35 AM EDT (3 minutes),05/04/2022 10:34 AM EDT - 05/04/2022 10:41 AM EDT (7 minutes)	18 minutes	Alliance for the Great Lakes	No	
Yes	91	Weaver	Chris	crweaver@columbus.gov	03/31/2022 01:33 PM EDT	05/04/2022 10:35 AM EDT - 05/04/2022 10:41 AM EDT (6 minutes)	6 minutes		No	
Yes	94	Weisbrodt	Cody	cody.weisbrodt@tnc.org	04/04/2022 03:47 PM EDT	05/04/2022 10:30 AM EDT - 05/04/2022 10:47 AM EDT (18 minutes)	18 minutes	The Nature Conservancy	No	
Yes	75	Winoker	Zachary	zachary.winoker@epa.ohio.gov	03/30/2022 12:25 PM EDT	05/04/2022 10:18 AM EDT - 05/04/2022 10:19 AM EDT (1 minute)	1 minute	Ohio EPA	No	
No	0	Crafton	Elizabeth	ecrafton@hazenandsawyer.com	04/04/2022 08:55 AM EDT	--	--	Hazen and Sawyer	No	I joined a couple minutes late. Will you be giving a presentation/overview on the proposed rule changes?
No	0	Gonya	Cory	cory.gonya@nutrien.com	03/31/2022 02:37 PM EDT	--	--		No	
No	0	Guglielmi	Stefania	guglielmi.stefania@epa.gov	03/30/2022 03:48 PM EDT	--	--	US EPA - Pegasus Technical Services Inc	No	
No	0	Lemin	Niki	ndlemin@franklincountyohio.gov	03/31/2022 03:59 PM EDT	--	--	Franklin County Public Health	No	
No	0	Ramirez	Jennifer	jennyramirez1019@gmail.com	04/29/2022 11:30 PM EDT	--	--		No	
No	0	Risner	Shannon	srisner@clermontcountyohio.gov	03/31/2022 09:43 AM EDT	--	--	Clermont County Water Resources	No	
No	0	Symanski	Megan	msymanski@ccbh.net	03/30/2022 03:48 PM EDT	--	--	Cuyahoga County Board of Health	No	
No	0	Zimnicki	Tom	tzimnicki@greatlakes.org	05/03/2022 01:11 PM EDT	--	--		No	

## **DDAGW Harmful Algal Blooms Proposed Rules**

May 4, 2022

Hello and welcome to Ohio EPA's public meeting regarding Division of Drinking and Ground Water's proposed rules. My name is Mary McCarron and I'm hosting today's public meeting. With me today from Ohio EPA's Division of Drinking and Ground Waters is Zach Winoker and rules coordinator Mandi Payton. In a moment, we will move to the public hearing where we will take official comments on the proposed rule.

For those attending, you may submit any comments you have about the proposed rules in the Questions pane at any time.

We will not be responding to any comments submitted during the public hearing today. I will read aloud any comments we receive in the GoTo platform.

Before we get started, I'd like to go over a few items to help our attendees navigate the GoTo platform.

On this slide here you will see an example screenshot of your Attendee interface. You should see something that looks like this on your computer desktop on the right-hand side of your screen. For this public meeting you are listening in using your computer audio. If you are having sound issues or if the slides stop advancing, try refreshing your browser. If that doesn't work, try logging off and logging back in.

Please submit public comments by clicking on the question mark icon and typing them into the Questions pane on your attendee interface. You may send your comments in at any time. All comments submitted will be read aloud for the whole audience to hear.

You can also click on the document icon to view included handouts.

We will now begin the hearing.

**PUBLIC HEARING SPEECH**

Thank you for taking time to attend this hearing before Ohio EPA. The purpose of the hearing today is to obtain comments from any interested person regarding Ohio EPA's proposed rules.

Ohio EPA's Division of Drinking and Ground Waters proposed revisions to Harmful Algal Bloom Rules in chapter 3745-90

DDAGW has reviewed the Harmful Algal Bloom rules to satisfy the five-year rule review requirements of section 106.03 and 106.031 of the Ohio Revised Code. OAC Chapter 3745-90 describes harmful algal bloom monitoring, reporting, analysis, and public notification for public water systems. Proposed revisions to OAC Rules 3745-90-01, 3745-90-02, 3745-90-03, 3745-90-05, 3745-90-06, 3745-90-07 include the following:

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- Adding requirements for PWS response to Ohio EPA comments regarding cyanotoxin general plan within 30 days of the comment date or other schedule provided by the director.
- Clarification of PN limited distribution requirements

These rules have been filed with the Joint Committee on Agency Rule Review. Copies of the rules are available for public review on our website and in the handouts section in GoTo.

All interested persons are entitled to attend or be represented, and to present written comments concerning the proposed rules. All written comments received as part of the official record will be considered by the director of Ohio EPA.

To be included in the official record, written comments must be received by Ohio EPA by the close of business, today, May 4, 2022. These comments may be typed into the chat today or emailed to [ddagw\\_rulecomments@epa.ohio.gov](mailto:ddagw_rulecomments@epa.ohio.gov). All emailed comments submitted for the record receive the same consideration as typed testimony given today.

Written statements submitted after today may be considered as time and circumstances permit but will not be part of the official record of the hearing.

This hearing affords citizens an opportunity to provide input. Therefore, we will not be able to answer questions today.

**YOU MAY NOW SUBMIT COMMENTS IN WRITING. I will read aloud any comments we receive in the hearing chat. I will keep the chat open until 11:00 a.m. to provide time for participants to type in comments.**

### **CLOSING**

After the hearing closes, we will accept written comments through 5:00 p.m. today. You can send those comments to the email address on the screen.

Thank you for your comments, cooperation, and participation in Ohio EPA's decision-making process. The time is now \_\_\_\_\_ and this hearing is concluded.



## Division of Drinking and Ground Waters Response to Comments

### **Proposed Harmful Algal Blooms**

- 3745-90-01 – Harmful Algal Blooms – Definitions
- 3745-90-02 – Harmful Algal Blooms – Applicability and Action Levels
- 3745-90-03 – Harmful Algal Blooms - Monitoring
- 3745-90-04 – Harmful Algal Blooms – Analytical Methods and Reporting
- 3745-90-05 – Harmful Algal Blooms – Treatment Techniques
- 3745-90-06 – Harmful Algal Blooms - Tier 1 Public Notification and Consumer Confidence Reports
- 3745-90-07 – Harmful Algal Blooms – Record Keeping

### **Agency Contact for this Package**

Zach Winoker, Division of Drinking and Ground Waters (DDAGW)  
(614) 644-2752, [Zachary.Winoker@epa.ohio.gov](mailto:Zachary.Winoker@epa.ohio.gov)

Ohio EPA issued public notice and requested comments for the period of March 30<sup>th</sup>, 2022 to May 4<sup>th</sup>, 2022 on proposed rules in the Ohio Administrative Code (OAC). This document summarizes the comments and questions received during the comment period.

Ohio EPA reviewed and considered all comments received during the comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. The name of the commenter follows the comment in parentheses.

### **3745-90-01, Harmful Algal Blooms - Definitions**

**Comment 1:** Suggests clarifying the definitions of “resample” and “repeat”. The definitions specify collection at the “finished water sampling point” however 3745-90-03(A)(4)(a) and (A)(4)(b) refer to resample and repeat samples being collected at raw water and finished water sampling points. (Patricia Klonicki, Greater Cincinnati Water Works)

**Response 1:** The definitions of “resample” and “repeat” states these are triggered by action level exceedances at the finished water sampling point. All details on monitoring requirements for “resample” and “repeat” samples are provided in 3745-90-03(A)(4)(a) and (A)(4)(b). No change to definition language necessary.



**3745-90-03, Harmful Algal Blooms - Monitoring**

**Comment 2:** The public comment for The City of Akron Watershed Division regarding the upcoming HAB rules (3745-90-01) was that in regard to 3745-90-03 (b), that utilities have the option to use qPCR screening in lieu of ELISA testing during HAB “off-seasons” explicitly stated in the rule. This would ensure that administrative changes don’t remove the choice for utilities who desire to use qPCR as a screening tool. (Charles Lacy, City of Akron Water Supply)

**Response 2:** Thank you for your comment. Ohio EPA has used the flexibility through section 3749-90-03 of the Harmful Algal Bloom monitoring rule and Ohio’s Harmful Algal Bloom Strategy for Public Water Systems (PWS) to offer reduced monitoring and flexibility with optional for sampling during Off-season. The proposed rule revisions retain the paragraph in 3749-90-03(1)(A)(3) of the rule that allows the director to revise monitoring. This paragraph will continue to allow for flexibility, which are outlined in the PWS HAB Response Strategy, in addition to the reduced monitoring codified in revised rule. Water systems are encouraged to monitor source waters to inform treatment.

**Comment 3:** GCWW still has concerns about monitoring the finished water in the off season with ELISA method which research has shown should be used with caution at low concentration in treated water (Guo et al, published in JAWWA March 2017). Instead of monitoring finished water in the off season, GCWW suggests that OEPA consider continuing cyanobacteria screening of the raw water during the off season in conjunction with monitoring optimized treatment processes through the strengthened treatment optimization protocol requirements.  
We again encourage the use of advanced analytical instrumentation like LC/MS/MS to confirm positive finished water detections. Research has shown that quantification with ELISA is semi-quantitative at best and particularly problematic at low concentrations in treated water.] (Patricia Klonicki, Greater Cincinnati Water Works)

**Response 3:** Thank you for your comment. Please see response to Comment 3 above regarding cyanobacteria screening and monitoring flexibility during Off-season.

Ohio EPA has reviewed the analytical methodologies currently available for microcystins, including performing a comparative analysis and an evaluation of potential interferences. Ohio EPA considers the ELISA-ADDA method as suitable for quantitative analysis. Aside from ELISA, the other analytical methods for microcystins detection are currently limited in their ability to measure all congeners, and therefore underreport total microcystins. The ELISA MC-ADDA kit is U.S. EPA ETV certified. Validation is part of the ETV certification process. In addition, U.S. Geological Survey selected the ELISA MC-ADDA kit for use in the National Lakes Assessment sample analysis after a comprehensive review of available ELISA kits and comparison of ELISA MC-ADDA and LC-MS/MS results. U.S. EPA has also included ELISA MC-ADDA as a monitoring tool for UCMR 4. While not explicitly stated in the proposed rules or strategy, Ohio EPA anticipates

additional sampling and technical assistance would occur in response to finished drinking water exceedances and/or drinking water advisories.

Most U.S. EPA approved organic analytical methods for drinking water allow for acceptance limits for quality control standards of  $\pm 50\%$  at or near the reporting limit and acceptance limits of  $\pm 30\%$  near the midrange of the analytical method. Additionally, U.S. EPA method 544 for detection of 6 microcystin congeners allows for acceptance limits for quality control standards of  $\pm 50\%$  at or near the reporting limit and acceptance limits of  $\pm 40\%$  near the midrange. After completing accuracy and precision studies, Ohio EPA tightened accuracy and precision acceptance limits for quality control standards of the ELISA-ADDA method to  $\pm 40\%$  (near reporting limit) and  $\pm 25\%$  (midrange).

**End of Response to Comments**