

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTICE OF FINAL DETERMINATION TO MODIFY A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) GENERAL PERMIT NO. WI-0046515-07-0

General Permit Name: Mineral (Nonmetallic) Mining and/or Processing

Receiving Water and Location: Point source discharges to waters of the state of Wisconsin.

Brief Description of Facilities Covered under General Permit: This general permit is applicable to the point source discharge of pollutants to a water of the state associated with storm water and/or wastewater from nonmetallic mineral mining operations, nonmetallic mineral processing operations, or other similar activities.

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Date Permit Modification Signed/Issued: September 5, 2023

Date of Effectiveness: October 1, 2023

Date of Expiration: December 31, 2027

Following the public notice and comment period, the Department has made a final determination to modify the WPDES General Permit No. WI-0046515-07-0. The information from the WPDES permit file, comments received on the proposed permit, and applicable Wis. Adm. Code chapters were used as a basis for this final determination.

The Department has the authority to issue, modify, suspend, revoke and reissue or terminate WPDES permits and to establish effluent limitations and permit conditions under ch. 283, Wis. Stats.

The following is a summary of significant comments and any significant changes which have been made in the terms and conditions set forth in the draft modification of this permit. Any minor corrections to typographical errors; updating page numbers and headers/footers; adding and updating the table of contents and titles; and correcting formatting, renumbering headings, and web links are not included in this summary document.

Comments Received from the Applicants, Individuals or Groups:

**Opposition to and/or seeking clarification on delayed metals monitoring requirement:** The Department received the following public comments:

Badger Mining Corporation (BMC) stated it does not understand the Department's rationale for delaying the requirement that discharges of process wastewater to groundwater be monitored for metals until the 2nd year of the permit (Sections 4.2.3.1, 4.2.3.1.3.4, 4.5 and 4.6.2). It is unclear to BMC how delaying the metals sampling requirement for one year would allow permittees to "adjust processes" in order to comply with the new requirements. BMC requests that the Department clearly explain to all permittees and the public how nonmetallic mines (NMMs) will be "adjusting processes" in 2023 in order to comply with the requirements for annual metals sampling for process wastewater discharges to groundwater.

Clean Wisconsin also commented the reissued general permit should not be modified to delay sampling for dissolved metals for a full year. Clean Wisconsin expressed skepticism about the new information the Department received and whether facilities need more time to adjust to sampling requirements. Clean Wisconsin also stated the proposed modification does not present information supporting the Department's assertion that delayed monitoring would be sufficient for assuring compliance with applicable water quality standards and confirming that coverage under a general permit is appropriate for permittees. Clean Wisconsin stated the Department did not provide an explanation to the delayed monitoring nor to the position that four sampling results over four years are sufficient to determine whether a permittee poses a risk of discharge to groundwater and whether an individual permit is needed. Clean Wisconsin also expressed concern about delays in DNR's ability to respond to high metals concentrations.

**Department Response:** Causes for modification of WPDES permits are listed in s. NR 203.136, Wis. Adm. Code, and include "new information, other than revised regulations, guidance or test methods, that was not available at the time of permit issuance or reissuance and that would have justified different permit terms or conditions." After the reissued permit went into effect, the Aggregate Producers of Wisconsin (APW) provided a request for modification of this WPDES permit to the Department, which included new information. For delaying metals sampling for discharges to groundwater, new information included the explanation that the industry's difficulty in implementing the new permit provisions and electronic reporting requirements (including the lack of an option for bulk reporting for companies

operating many mines) has caused unexpected staff burdens, and the industry group has requested time to “allow permittees to adjust processes and staffing in preparation for the new requirements and any related legal and regulatory issues that will arise.”

While analysis of 5 samples for metals concentrations over the permit term would provide a marginal amount of additional certainty over that gained from analysis of 4 samples, the Department expects that analysis of 4 samples will still be sufficient for purposes of screening which, if any, discharges are more appropriately regulated by an individual permit, especially when the samples will capture variability over a 4-year period. For example, four data points will still allow identification of an outlier sample via comparison to three other samples, if those 3 other samples are relatively consistent in magnitude. On the other hand, in circumstances where it is unclear whether a data point is an outlier, the permittee may elect to collect additional data before being moved to an individual permit. Collection of 4 samples is also on par with or in excess of the number of samples required in WPDES individual permit applications for certain metals (See Table 1 in ch. NR 200, Wis. Adm. Code). In addition, BMC requested clarification on what processes would need to be adjusted to comply with the new requirements. In requesting the modification, APW requested time “to adjust processes and staffing in preparation for the new requirements and any related legal and regulatory issues that will arise.” Based on this statement, the Department understands the adjustment in processes to be a reference to compliance monitoring and reporting efforts rather than adjustments to mine processes or wastewater treatment processes. This may include time to prepare justifications for waivers to the metals sampling requirements under Outfall 006.

**Opposition to metals monitoring requirement:** The Department received the following public comments:

1. Aggregate Producers of Wisconsin (APW) and Wisconsin Transportation Builders Association (WTBA) commented that the administrative and financial burden on mines subject to the metals monitoring requirement is significant and that the online sample reporting is time consuming and complex and does not allow bulk reporting for an operator with multiple facilities. APW and WTBA also stated permittees expect additional staff or consultants will be necessary to meet compliance obligations. APW and WTBA propose the Department samples only select mines to evaluate the concentration of metal and to remove the metals monitoring requirement in this permit.
2. BMC remains concerned about language regarding treatment pond sampling in the Permit, and believes the Department is attempting to construct a new framework for regulating discharges to groundwater from treatment ponds. Exceeding groundwater quality standards in the treatment pond itself cannot be presumed to result in an exceedance of groundwater quality standards at a point of standards application-noncompliance with groundwater quality standards in the treatment pond itself tells the Department nothing about groundwater quality. BMC believes requiring response actions based on wastewater samples is also inconsistent with the framework set forth in Chapter NR 140, Wis. Adm. Code. Chapter NR 140 contemplates actions in response to exceedances of groundwater quality standards based on monitoring data that show exceedances at a point of standards application. The Permit contemplates response actions for exceedances of NR 140 enforcement standards in wastewater itself. The Department’s current modification, to rely on 4 sampling results over 4 years, does not address this serious concern.

**Department Response:**

These comments are outside the scope of this permit modification since this modification only addresses the frequency of sampling that was established in the reissued permit. The Department would like to clarify a few items, however. The metals sampling of process wastewater discharges to groundwater in the modified permit entails 4 samples over 4 years. The cost of metals analysis is approximately \$54 (cost obtained from the Wisconsin State Lab of Hygiene’s FY23 price list). The Department therefore estimates that analysis costs would be approximately \$216 per permittee for the entire permit term. Costs for collection of samples will vary based on the hourly wages of staff collecting samples but would not be expected to exceed hourly wages for 4 days of work during the permit term.

The Department recognizes that some mining companies own and operate a large number of mine sites throughout the state and that a bulk reporting option (i.e., the ability for many facilities’ monitoring reports to be combined into one report) would yield efficiencies for electronic reporting for those companies. Unfortunately, the Department does not currently have this feature available on its electronic reporting system. That said, the Department is exploring options for adding such a feature, although resource constraints and current developer workload will preclude this from being available in the next 1-2 years. In the meantime, electronic reporting of discharge monitoring reports for general WPDES permittees is required by EPA’s electronic reporting rule (40 CFR 122.41(l)(4)(i) and 40 CFR 122.44(i)).

As mentioned in the Notice of Final Determination for the reissued permit, this permit does not include any effluent

limitations for metals concentrations in discharges to groundwater. The Department has clear authority to require monitoring in general permits pursuant to s. NR 205.08(2), Wis. Adm. Code, and also to require a permittee to apply for an individual permit when that point source is a significant contributor of pollution or the point source is more appropriately regulated by an individual permit under s. NR 205.08(5)(a), Wis. Adm. Code. The permit does not dictate that a permittee *shall* be required to apply for an individual permit if metals results exceed NR 140 standards; rather, it specifies that the Department will not exercise this authority to require a permittee to apply for an individual permit if its results are below NR 140 standards. The Department fully recognizes that the presence of concentrations exceeding NR 140 standards in a discharge does not necessarily indicate that the NR 140 standards will be exceeded at the point of standards application in groundwater. However, in instances where metals concentrations are exceedingly high and further monitoring may be warranted either via effluent sampling or groundwater monitoring wells, an individual permit may be required under s. NR 205.08(5)(a), Wis. Adm. Code. This authority is separate from the authorities in ss. NR 140.24-27, Wis. Adm. Code.

**Opposition to metals monitoring requirement:** The Department received the following public comments from Badger Mining Corporation (BMC):

1. BMC asks what the Department will do to educate the public on how effluent concentrations exceeding NR 140 standards are not groundwater standard exceedances at the point of standards application. BMC requests the Department present data to the NMM industry demonstrating whether there are any public health or groundwater, or surface water quality issues related to this industry's discharge.

**Department Response:**

The Department understands any reference to “public educational campaigns” in the modification request to be in reference to efforts from APW and industry members rather than DNR. In the request for modification, APW stated that, “permittees will incur substantial costs related to educational campaigns explaining what the values [effluent concentrations] actually represent.” This said, DNR will answer questions about applicability of standards as received but is not planning any coordinated outreach efforts, as the permit and supporting documentation, including this NFD (see comment response above), are clear that NR 140 standards are not applied as enforceable limits in the permit.

The Department currently does not require groundwater monitoring wells or effluent metals monitoring for mines, so the Department, at this time, does not have the means to identify and address contamination before sites are abandoned or unplanned releases occur. However, existing data, available at a few mine sites, indicates that elevated metals concentrations may be present in the groundwater or surface water around some mines. In interest of brevity, this data is not included in this NFD response but was shared with the commenter and is available upon request to other interested parties. The goal of this permit's required metals sampling is to allow DNR to identify potential contamination before it becomes a larger issue.

2. BMC asserts that the study on metals concern never went forward because the Department failed to complete it and recommends recommencement of the study rather than sampling in permits.

**Department Response:**

In 2016, the Department collaborated with industry stakeholders to develop a two-phase study with an estimated cost of approximately \$100,000. Cost for subsequent phases would have been dependent on the outcome of the first two phases and under separate considerations. This initial study was not funded, and the study was not conducted. In the absence of data from the discussed study, the Department will rely on permit sampling authority to collect this data.

**In favor of sampling frequency reduction and discharge screening delay:** The Department received the following public comments:

WTBA, BMC, and APW support the proposals to modify the sampling frequency for pH, TSS and additives for new non-metallic aggregate mines, other than industrial sand mines (Sections 4.1.2.1 and 4.1.2.3), and to delay the due date for discharge screening results for discharges of process wastewater to surface water (Sections 4.1.3.4.2 and 9). These changes will reduce significant administrative burdens and compliance costs while providing the data necessary to assess compliance and address any actual or potential exceedances in a timely manner.

**Department Response:** The Department did not make any changes in response to these comments.

**Regarding delaying the due date for discharge screening results for discharges of process wastewater to surface water by 90 days:** The Department received the following public comments:

Clean Wisconsin commented the proposed modification to give permittees 180 days to submit discharge screening results, not 90 days, is reasonable due to the seasonal operation of many mines which presents a practicable problem with regard to collecting sampling results.

Department Response: In accordance with s. NR 203.136(1)(b), Wis. Adm. Code, the Department received new information from multiple permittees that many mines will not be operating during the first 90 days of the permit term (January 1-March 31, 2023). When delaying the permit's initial effective date to January 1, 2023, the Department did not consider that some mines would not be operating during this time. The Department did not make any changes in response to these comments.

**Opposition to sampling frequency reduction:** The Department received the following public comments:

Clean Wisconsin commented that the reissued general permit should not be modified to change monitoring and reporting requirements from monthly to quarterly for TSS and pH and believes the Department has not presented a valid basis for a permit modification. Clean Wisconsin is skeptical that a monitoring frequency change from 12 to 4 samples per year will assure the same degree of compliance.

Department Response: In accordance with s. NR 203.136(1)(b), Wis. Adm. Code, the Department received new information from APW that, "... additional staffing will be needed to keep up with reporting for small facilities and to manage different report schedules for existing and new facilities owned by a single operator." Additionally, the mining protocols and wastewater from mine dewatering activities by new permittees is expected to be similar to that of existing permittees; therefore, quarterly samples would give representative data that can be used to adequately determine compliance using standard limit methods. The Department did not make any changes in response to these comments.

**Comments Received from EPA or Other Government Agencies:** No comments were received from EPA or any other government agencies.

#### Public Adjudicatory Hearing and Permit File Information

As provided by s. 283.63, Wis. Stats., and ch. 203, Wis. Adm. Code, persons desiring further adjudicative review of this final determination may request a public adjudicatory hearing. A request shall be made by filing a verified petition for review with the Secretary of the Department of Natural Resources within 60 days of the date the permit was signed (see permit signature date above). Further information regarding the conduct and nature of public adjudicatory hearings may be found by reviewing ch. NR 203, Wis. Adm. Code, s. 283.63, Wis. Stats., and other applicable law, including s. 227.42, Wis. Stats.

Information on file for this permit action, including the draft permit and fact sheet may be reviewed on the internet at the above web link or may be inspected and copied at the permit drafter's office during office hours. Information on this permit may also be obtained by calling the permit drafter or by writing to the Department. Reasonable costs (usually 20 cents per page) will be charged for copies of information in the file other than the public notice, permit and fact sheet. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.