

May 27, 2022

Mr. Chris Hare EGLE-AQD 401 Ketchum Street Bay City, Michigan 48708

Subject: Response to VN 20220509 Dated May 9, 2022 MI-ROP-B1493-2021 Michigan Sugar Company – Bay City Factory

Dear Mr. Hare:

Michigan Sugar Company (MSC) respectfully submits this response to the May 9, 2022 Violation Notice (VN) issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE). In that VN, EGLE alleged a violation of Rule 901 and MI ROP-B1493-2016 (current MI ROP-B1493-2021) General Condition 12 based on alleged odors in the vicinity of MSC's Bay City Facility.

The VN indicates that "In the professional judgment of AQD staff, the odors that were observed were of sufficient intensity, frequency, and duration so as to constitute a violation of Rule 901 of the administrative rules promulgated under Act 451 ("the Act") and General Condition 12 of ROP number MI-ROP-B1493-2016." Before submitting further response, MSC notes that the VN fails to provide any information regarding the observed intensity, frequency, or duration of odors or the protocol followed by the agency in making its determination. MSC reiterates its long-held position that EGLE has failed to establish any meaningful standards for determining compliance with (or violations of) Rule 901. As a result, any and all alleged violations set forth in the VN are premised solely on the subjective perception of the inspector (rather than any scientifically valid approach supported by relevant data). Moreover, EGLE has failed and refused to implement defined standards or protocols for the performance of odor investigations, and therefore, EGLE has not provided relevant information or data in support of alleged violations.

Subject to the objections set forth above, MSC further responds as follows with regard to the specific statements and allegations in the VN:

- Flume Ponds and Aeration Ponds While MSC has observed odors from the wastewater facilities, those odors are believed to have resulted from upset conditions in its wastewater treatment system, which are addressed in more detail below. As you are aware, MSC has previously communicated with WQD staff regarding the status of its wastewater operations and the upset conditions that have occurred. MSC has addressed those upset conditions consistent with the requirements of the Consent Judgment.
- 2. <u>Channel and Beet Piling Grounds</u> MSC disputes the allegation in the VN that the channel and beet piling grounds were a discernable source of increased odors (as suggested in the VN). MSC believes that that the VN inaccurately and inappropriately attempts to attribute alleged odors to the channel and beet piling grounds. No reasonable efforts were made to isolate odors from the beet piling grounds or the "chips and tails" area. By way of example, the VN alleges that the "Chips and Tails area had a putrid and rotting vegetable odor" when EGLE staff never walked within 50 yards of the chips and tails area

during the inspection. EGLE did not even attempt to collect subjective information (about odors) before asserting a violation. Thus, MSC believes that statements in the VN regarding the channel and beets pilings grounds are unfounded and without merit. MSC further notes that it did not observe increased odors from the channel, beet piling grounds or the chip and tails area at the time of the inspection or thereafter.

In addition to the responses to the alleged violations set forth above, the VN requested additional information regarding the operations at the facility that are addressed by the Consent Judgment and that MSC has provided or will provide to EGLE staff consistent with its obligations under that Consent Judgment. MSC is providing the following information that was requested by EGLE in the May 9, 2022 VN relating to the "Chips and Tails" area:

• The first date when placement of Chip and Tail material south of the Flume ponds occurred:

March 16, 2022

• The dates Chip and Tails accumulated during the 2021-2022 were removed from the area south of the Flume ponds:

March 28 and 29 April 11,12,13, 15, 16, 18, 20, 22, 23, 26, 27 and 28, 2022

• The date all accumulated Chip and Tail material south of the flume ponds was removed:

All remaining sugar beet chips and tailings were removed on April 28, 2022.

• A description of future management for Chips and Tails handling to prevent nuisance odors;

Before providing further response, MSC disputes that operation of the Chips and Tails has resulted in "nuisance odors" as discussed in more detail above. Notwithstanding the foregoing, MSC routinely removes the beet chips and tails.

In addition to the responses provided above, the May 9, 2022 VN concerning its wastewater treatment system. MSC notes that on March 18, 2022; MSC submitted notification to EGLE of a Force Majeure event indicating the Anaerobic Digester would be bypassed due to upset conditions. (See attached correspondence dated March 18, 2022.) As stated in the Force Majeure notification, high strength wastewater bypassing the Anaerobic Digester was routed to the Aeration Ponds. MSC undertook the necessary steps to bring the Anaerobic Digester back on-line (in order to end the bypass). These steps included, but were not limited to, completely stopping flow to the digester, treatment of the digester with nutrients that would aid in microbial health, application of sodium hydroxide for pH control and introduction of seed sludge from an off-site Anaerobic Digester. In further response, MSC is providing the following information that was requested by EGLE in the VN:

• The date the anaerobic digester was first bypassed

A partial bypass occurred on February 23, 2022 to direct wastewater to the Old Main Pond; however, the bypass into the wastewater system did not occur until March 17, 2022.

• The last date of anaerobic digester bypass

April 26, 2022

• An estimated volume bypassed daily

Estimated 360,000 - 430,000 gallons per day

• The date the flume clarifier was taken out of service

February 8, 2022

• The date the flume clarifier returned to service;

The flume clarifier is not currently in service because it is undergoing maintenance and repairs

• The date the Old Main Pond began receiving wastewater;

February 23, 2022

• The date the Old Main Pond began hydrogen peroxide application;

February 26, 2022

• The date the Old Main Pond stopped receiving wastewater

April 19, 2022

• The dates the Odor Boss was operated;

The Odor Boss was operated from April 19, 2022 to present. As previously discussed with EGLE staff, the OMI system was operated in place of the Odor Boss from February 23, 2022 until April 19, 2022. From April 19, 2022 to present, MSC elected to run both systems concurrently.

• The dates the OMI system was operated.

February 23, 2022 to present

In addition to the responses provided above, the VN requests that MSC identify operating contingency plans and technical options to be taken to reduce the detrimental impact of equipment failures of the WWTP. MSC continues to investigate options to improve the operation of its wastewater treatment system and is conducting a Basis of Design Study pursuant to the terms of Consent Judgment No. 17-000727-CE in order to evaluate the current wastewater treatment system. This document will be submitted to EGLE pursuant to the terms of the Consent Judgment.

As a final note, we feel it necessary to express MSC's frustration with EGLE's apparent attempt to utilize the VN as an information request. Although MSC has attempted to provide information requested by EGLE in response to the VN in the spirit of cooperation, MSC notes that much of the information requested relates to matters addressed within the Consent Judgment. Requests for information relating to compliance with the terms of the Consent Judgment should be made pursuant to the terms and conditions of the Consent Judgment that both MSC and EGLE agreed to.

Notwithstanding the foregoing, MSC desires to cooperate with EGLE to the extent possible. Please feel free to contact me directly should you wish to discuss this matter further.

Sincerely,

Eric M. Rupprecht, PE Water and Wastewater Compliance Manager

Attachment:

March 18, 2022 EGLE Force Majeure of Digester Malfunction and NPDES Permit Bypass Notification

ec: Jason Lowry, MSC - Vice President of Operations Kelly Scheffler, MSC – Bay City Factory Manager Meaghan Martuch, MSC – Air Compliance Manager Angel Pichla, MSC – Environmental Superintendent Matthew Eugster, Varnum Matthew Zimmerman, Varnum



March 18, 2022

Attention: Michigan Department Environmental, Great Lakes and Energy Staff

Subject: Michigan Sugar Company - Bay City Factory Consent Judgment Case No. 17-000727-CE Digester Malfunction NPDES Permit Bypass Notification

Michigan Sugar Company (MSC) is providing written notice to Consent Judgment Case No. 17-000727-CE so ordered on December 28, 2018 of a Force Majeure Event. This notification is in the Consent Judgment.

MSC began observing declining anaerobic digester performance on or about February 6, 2022. As such, the flow to the digester was decreased in an effort to improve the health and performance of the vessel. Water from the Outer Pond was already being routed to the Main Aeration Pond (as discussed with EGLE due to flume clarifier maintenance). Due to rising pond levels and continued diminished performance of the digester, MSC began routing additional flume water from the Outer Pond to the Main Aeration Pond as a temporary storage basin, as allowed by the Consent Judgment, Appendix C, Section VIII. MSC believed the malfunctioning of the anaerobic digester would be remedied before the Main Aeration Pond was full. However, the digester malfunctioning has continued despite MSC's best efforts, including involving its consulting engineer who specializes in anaerobic digester performance. As a result, as of March 17, 2022, MSC had to start bypassing the anaerobic digester with a flow of approximately 300 GPM and direct that flow to the aeration pond system.

The water in the Outer Pond is high strength, and because of the size of the flow that has to bypass the anaerobic digester (~300 GPM), it is likely that MSC will not be able to comply with Sections 5.6 and 5.23 of the Consent Judgment (compliance with dissolved oxygen concentration and effluent limitations of MSC's NPDES permit). Along with notice of the Force Majeure event (the anaerobic digester malfunctioning) that will likely lead to effluent limit violations, this letter is also a notice of bypass in accordance with Part II, Section C.9 of MSC's NPDES permit. The bypass is unavoidable to prevent severe property damage. MSC examined every alternative to the bypass (including diverting water to the Main Aeration Pond, sending the water from the Outer Pond, or from one of the aeration ponds, to the City of Bay City's wastewater treatment plant, trucking it to MSC's Carrollton facility, and using other treatment technologies in place, to name a few), but none are feasible. This notice is filed within 24 hours of the bypass.

MSC requests EGLE consider this Force Majeure notification under the Consent Judgment. If you have any questions or require additional information, please contact me at (989) 686-0161 ext. 317 or by e-mail at eric.rupprecht@michigansugar.com

Sincerely,

Eric M. Rupprecht, PE Water and Wastewater Compliance Manager

- Cc: Chris Hare, EGLE Air Quality Division District Supervisor Jenine Camilleri, EGLE Air Quality Division - Enforcement Unit Manager Charles Bauer, EGLE Water Resources Division - District Supervisor David Pingel, EGLE Water Resources Division - Enforcement Unit Manager
- Ec: Jason Lowry, MSC Vice President of Operations Kelly Scheffler, MSC – Bay City Factory Manager Meaghan Martuch, MSC – Air Compliance Manager Matthew Eugster, Varnum Matthew Zimmerman, Varnum