

STATE OF MICHIGAN
CIRCUIT COURT FOR THE 30TH JUDICIAL CIRCUIT
INGHAM COUNTY

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES,
AND ENERGY,

Plaintiff,

Case No. 17-000727-CE

v

HON. CLINTON CANADY, III

MICHIGAN SUGAR COMPANY,

Defendant.

STIPULATION AND ORDER TO MODIFY CONSENT JUDGMENT

The parties hereby stipulate and agree as follows:

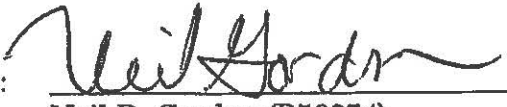
1. On December 28, 2018, the Court entered a Consent Judgment in this case. Paragraph 16.3 of the Consent Judgment states that where a modification of the Consent Judgment constitutes a material change, the modification shall be effective only upon approval by the Court.¹

2. The parties stipulate and agree that the Dissolved Oxygen Sampling Plan, which is Appendix B of the Consent Judgment, should be modified to address, among other things, the sampling of dissolved oxygen in the aeration ponds at Michigan Sugar Company's sugar beet processing facility in Bay City, Michigan during maintenance, repair, and calibration of the aeration equipment in the ponds.

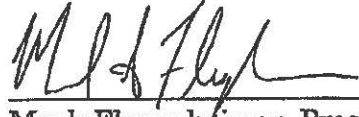
¹ Executive Order 2019-06, signed by Governor Gretchen Whitmer on February 20, 2019, renamed the Michigan Department of Environmental Quality as the Michigan Department of Environment, Great Lakes, and Energy, effective April 22, 2019. This Stipulation and Order to Modify Judgment identifies the Plaintiff as the Michigan Department of Environment, Great Lakes, and Energy.

3. The parties stipulate and agree that the modified Dissolved Oxygen Sampling Plan, which is attached hereto as Attachment 1 and which contains the modifications that the parties have agreed upon, shall replace the Dissolved Oxygen Sampling Plan in Appendix B of the Consent Judgment.

FOR PLAINTIFF Michigan Department of Environment, Great Lakes, and Energy

By:  Dated: November 4, 2020
Neil D. Gordon (P56374)
Assistant Attorney General
Environment, Natural Resources
and Agriculture Division
Michigan Department of Attorney General

FOR DEFENDANT Michigan Sugar Company

By:  Dated: 10/30, 2020
Mark Flegenheimer, President
Michigan Sugar Company

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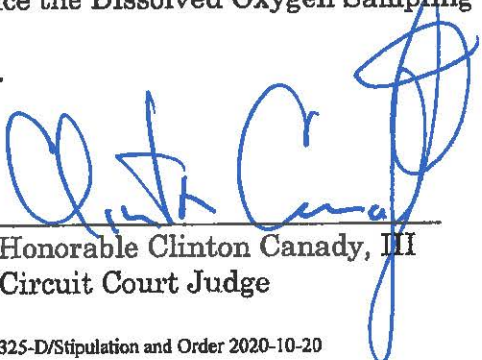
ORDER

At a session of said Court held in the Ingham County Courthouse in
Lansing, Michigan on this 4 day of November, 2020.

PRESENT: HONORABLE CLINTON CANADY, III
Circuit Court Judge

This matter having come before the Court pursuant to a stipulation of the
parties to modify the Consent Judgment the Court entered on December 28, 2018,

IT IS HEREBY ORDERED that the modified Dissolved Oxygen Sampling
Plan, which is attached hereto as Attachment 1 and which contains modifications
that the parties have agreed upon, shall replace the Dissolved Oxygen Sampling
Plan in Appendix B of the Consent Judgment.



Honorable Clinton Canady, III
Circuit Court Judge

LF: Michigan Sugar Co. Bay City (DEQT) Post C. Judgment/AG# 2015-0116325-D/Stipulation and Order 2020-10-20

ATTACHMENT 1

APPENDIX B

DISSOLVED OXYGEN SAMPLING PLAN

Consent Judgment

Michigan Department of Environmental Quality v Michigan Sugar Company
Ingham County Circuit Court, Case No. 17-000727-CE

I. GENERAL PROVISIONS

- A. Incorporation of the Operations Plan: This Dissolved Oxygen Sampling Plan is incorporated by reference into the terms and conditions of the Consent Judgment.
- B. Defined Terms: Unless otherwise specified herein, any capitalized terms that have been defined in the Consent Judgment shall have the meaning set forth in the Consent Judgment.
- C. "Sample" Defined. For the purposes of this Dissolved Oxygen Sampling Plan, the term "sample" as used herein may include or reference a reading from a meter, probe, sensor or monitor in addition to any physical or chemical sampling, testing, or analysis.
- D. "Sampling" Defined. For the purposes of this Dissolved Oxygen Sampling Plan, the term "sampling" as used herein may include monitoring or metering using a probe, monitor, sensor or meter to measure the concentration of dissolved oxygen in addition to any physical or chemical sampling, testing, or analysis.

II. DISSOLVED OXYGEN SAMPLING REQUIREMENTS

Michigan Sugar shall sample and monitor the dissolved oxygen concentration in each of the Aeration Ponds as follows:

- A. Dissolved Oxygen Profile: Michigan Sugar shall conduct a dissolved oxygen profile in each of the Aeration Ponds (the "Dissolved Oxygen Profile") by May 1, 2019. The Dissolved Oxygen Profile shall be performed pursuant to the Dissolved Oxygen Profile Workplan attached hereto as **Exhibit 1**.
- B. Dissolved Oxygen Profile Report: Michigan Sugar shall prepare a report summarizing the results of the Dissolved Oxygen Profile, including the sampling results and locations (the "Dissolved Oxygen Profile Report").

- C. Dissolved Oxygen Meter Locations: The Dissolved Oxygen Profile Report shall identify proposed locations for the placement of continuous dissolved oxygen meters that measure dissolved oxygen at least once every hour (the "Dissolved Oxygen Meters"). The proposed locations for the Dissolved Oxygen Meters shall be: (1) representative of the average dissolved oxygen concentrations in the uppermost five feet of each pond; (2) not located within fifty (50) feet of the inlet point where wastewater enters each such pond; and (3) not located within twenty feet of the bank or edge of each such pond.
- D. Dissolved Oxygen Meters Per Pond: The number of Dissolved Oxygen Meter locations for each pond shall be as follows:
- (1) Three (3) Dissolved Oxygen Meters in East Aeration Pond
 - (2) Three (3) Dissolved Oxygen Meters in West Aeration Pond
 - (3) One (1) Dissolved Oxygen Meter in New Aeration Pond
 - (4) One (1) Dissolved Oxygen Meter in the Final Aeration Pond
- E. Submittal of Dissolved Oxygen Profile Report: By May 1, 2019, Michigan Sugar shall submit the Dissolved Oxygen Profile Report to the DEQ for review and approval pursuant to Section X of the Consent Judgment (Review and Approval of Submittals), provided, however, that the time for the DEQ and Michigan Sugar to perform the actions identified in Paragraphs 10.1 and 10.2 of the Consent Judgment shall be 15 days for each such action. Notwithstanding the foregoing, any and all approved locations for Dissolved Oxygen Meters shall be consistent with the parameters identified in Paragraph II.C of this Dissolved Oxygen Sampling Plan (above).
- F. Dissolved Oxygen Meter Installation: Michigan Sugar shall install the Dissolved Oxygen Meters within 21 days after the DEQ's approval of the Dissolved Oxygen Profile Report at the locations in the approved Dissolved Oxygen Profile Report.
- G. Operation and Maintenance of Dissolved Oxygen Meters: After installation, Michigan Sugar shall operate and maintain the Dissolved Oxygen Meters in accordance with the manufacturer's recommendations. Michigan Sugar shall keep at least two (2) spare Dissolved Oxygen Meters at the Bay City Facility that it shall use when a Dissolved Oxygen Meter is removed for maintenance or repairs.
- H. Dissolved Oxygen Sampling: After installation of the Dissolved Oxygen Meters, Michigan Sugar shall sample and record the dissolved oxygen concentration of each Aeration Pond. Michigan Sugar shall be deemed to be in compliance with Paragraph 5.6 of the Consent Judgment if the dissolved

oxygen concentration in each of the Aeration Ponds is at least 1.0 milligram per liter (mg/l) measured as a calendar day average. The "calendar day average" for the dissolved oxygen concentration in each Aeration Pond shall be calculated by averaging the dissolved oxygen levels at each Dissolved Oxygen Meter over the 24-hour period in each calendar day. For the East and West Aeration Ponds (in which three (3) meters will be used in each pond to sample dissolved oxygen concentrations), the dissolved oxygen concentration for each of the three Dissolved Oxygen Meters will be averaged to determine the "calendar day average" for each such pond.

- I. Sampling During Aeration Pond Clean-Out and During Required Maintenance, Repair or Calibration of Dissolved Oxygen Meters and Aeration Equipment: Michigan Sugar may temporarily cease sampling at any Dissolved Oxygen Meter: (1) during Aeration Pond clean-out activities, and (2) as necessary to perform maintenance, repairs, or calibration of the Dissolved Oxygen Meters and the aeration equipment that Michigan Sugar uses to maintain a dissolved oxygen concentration in each of the Aeration Ponds of at least 1.0 milligram per liter pursuant to Paragraph 5.6 of the Consent Judgment ("Aeration Equipment"). In all such instances, and subject to the provisions set forth below, Michigan Sugar shall use best efforts to resume operation of any such Dissolved Oxygen Meters as soon as practicable.

(1) The temporary cessation of sampling as necessary to perform maintenance, repairs, or calibration of the Dissolved Oxygen Meters shall not exceed 24 hours.

(2) The temporary cessation of sampling as necessary to perform maintenance, repairs, or calibration of the Aeration Equipment shall not exceed seven days.

(3) If Michigan Sugar temporarily ceases sampling at any Dissolved Oxygen Meter to maintain, repair, or calibrate the Aeration Equipment, then Michigan Sugar shall perform dissolved oxygen sampling as follows:

(a) If Michigan Sugar temporarily ceases sampling at one of the three Dissolved Oxygen Meters in either the East Aeration Pond or West Aeration Pond, then the dissolved oxygen concentration for the two remaining Dissolved Oxygen Meters in each such pond shall be averaged to determine the "calendar day average" for that pond.

(b) If Michigan Sugar temporarily ceases sampling at two of the three Dissolved Oxygen Meters in either the East Aeration Pond or West Aeration Pond, then Michigan Sugar shall continue performing sampling at the remaining Dissolved Oxygen Meter in each such pond

and shall perform sampling three times per calendar day at equal intervals over an eight-hour period using handheld dissolved oxygen meters ("Handheld Dissolved Oxygen Probes") in each pond. The locations for the Handheld Dissolved Oxygen Probes shall be: (1) representative of the average dissolved oxygen concentrations in the uppermost five feet of each pond; (2) not located within fifty (50) feet of the inlet point where wastewater enters each pond; and (3) not less than five feet from the pond bank or edge closest to the location of the Dissolved Oxygen Meter at which sampling has ceased. The "calendar day average" for the dissolved oxygen concentration in each such pond shall be calculated by averaging the dissolved oxygen levels at the Handheld Dissolved Oxygen Probe and the remaining Dissolved Oxygen Meter over the 24-hour period in each calendar day.

(c) If Michigan Sugar temporarily ceases sampling at all three Dissolved Oxygen Meters in either the East Aeration Pond or West Aeration Pond or at either of the Dissolved Oxygen Meters in the New Aeration Pond or the Final Aeration Pond, then Michigan Sugar shall perform sampling three times per calendar day at equal intervals over an eight-hour period using Handheld Dissolved Oxygen Probes in each such pond. The locations for the Handheld Dissolved Oxygen Probes shall be: (1) representative of the average dissolved oxygen concentrations in the uppermost five feet of each pond; (2) not located within fifty (50) feet of the inlet point where wastewater enters each pond; and (3) not less than five feet from the pond bank or edge closest to the location of the Dissolved Oxygen Meter at which sampling has ceased. The "calendar day average" for the dissolved oxygen concentration in each such pond shall be calculated by averaging the dissolved oxygen levels at each Handheld Dissolved Oxygen Probe over the 24-hour period in each calendar day.

(4) If, in order to maintain, repair, or calibrate Aeration Equipment, a Dissolved Oxygen Meter can be moved to a different location in an Aeration Pond rather than be removed from that pond, then Michigan Sugar shall move the Dissolved Oxygen Meter temporarily to a location that is as close as possible to its original location. The temporary relocation of the Dissolved Oxygen Meter shall not exceed seven days, after which time Michigan Sugar shall return the Dissolved Oxygen Meter to its original location.

(5) Michigan Sugar shall notify EGLE at least seven days in advance of any temporary cessation of sampling or temporary relocation of a Dissolved Oxygen Meter that will last more than 24 hours to perform planned maintenance, repair, or calibration of Aeration Equipment. The

notification shall describe the maintenance, repair, or calibration to be performed.

EXHIBIT 1

Dissolved Oxygen Profile Workplan

Purpose

Dissolved oxygen (DO) testing will be performed to identify locations for DO meters in the Aeration Ponds which will provide representative readings suitable for long term DO sampling. The same procedure will be used for the East Aeration Pond, West Aeration Pond, New Aeration Pond, and Final Aeration Pond. The results and recommendations will be summarized in a Dissolved Oxygen Profile Report.

Workplan

1. A site-specific health and safety plan will be prepared in coordination with Michigan Sugar's safety program. Two workers will be in a boat with life jackets with one observer on the shore. Each worker will wear a gas monitor. Air-packs will be available in the boat for use in the event of an air quality issue.
2. Michigan Sugar will develop an up to date site plan including:
 - a. Outline of the bank and water level in each pond
 - b. Locations of aeration equipment
 - c. Work will be done in State Plane coordinates
3. Work will be performed in one Aeration Pond at a time. Any chemical feed systems will be shut down and locked out until work on that pond is completed. It is intended that aeration equipment will remain online while the work is being done. If it is necessary to take this equipment offline, the approach will be as follows:
 - a. Specific lockout procedure will be outlined in the aforementioned health and safety plan.
 - b. The number of aeration units taken offline at any one time will be minimized.
 - c. Shutdowns will be as brief as possible, with readings taken within a short period of time after the equipment is shutdown.
 - d. All Aeration Ponds will be returned to normal operation after completion of data collection.
4. DO measurements will be taken throughout each pond from a boat using a handheld DO probe. DO measurements will be taken and recorded at depths of 1, 3, and 5 feet below the water surface at test points throughout each pond. The DO probe will be calibrated before the beginning of work each day.

- a. A GPS unit will be used to record the location of each DO measurement.
- b. Test points will be spaced as evenly as possible across the entire surface of each pond.
- c. The number of test points in each pond will be as follows:
 - i. Approximately 30 test points in the East Aeration Pond
 - ii. Approximately 25 test points in the West Aeration Pond
 - iii. Approximately 40 test points in the New Aeration Pond
 - iv. Approximately 40 test points will be measured in the Final Aeration Pond
- d. DO measurements at additional test points may be taken if initial observations suggest a need for increased data resolution.
- e. Note that guy wires, diffusers, air piping, and electrical cables may limit access for DO testing, causing some variation in test point spacing.

5. Field data will be tabulated and imported to AutoCAD Civil 3D along with survey data. The data will be developed into Dissolved Oxygen contour lines, allowing for easy visual interpretation of the data.

6. Recommendations will be prepared for long term DO meter locations which will provide measurements representative of the average DO concentrations in the uppermost five feet of each Aeration Pond.