

GOVERNOR

#### STATE OF MICHIGAN

# DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

LANSING



# ETHANOL SYRUP EXEMPTION (ANAEROBIC DIGESTION)

In accordance with the provisions of Section 11503(8) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), syrup generated in the production of ethanol (Syrup) is granted a source-separated exemption by the authorized representative of the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

This exemption is subject to the following conditions:

- 1. This approval is limited to syrup that is produced from the production of ethanol using corn.
- 2. The Syrup shall only be used as a feed stock in an anaerobic digester that is operated in compliance with Part 55, Air Pollution Control, of the NREPA. Anaerobic digestion is the harnessed and contained, naturally occurring process of anaerobic decomposition. An anaerobic digester is an industrial system that harnesses these natural processes to treat waste, produce biogas that can be used to power electricity generators, provide heat, and produce soil improving material.
- 3. Each generator intending to operate pursuant to this exemption shall notify the Director of EGLE, in writing, of his or her intent. Notification shall be sent to the Materials Management Division (MMD), District Office. A list of the District Offices is attached in Appendix A.
- 4. The notification to the MMD shall include a management plan that must be approved by EGLE that describes how the material will be managed during storage (both on-site and off-site), processing, and transportation.
- 5. The Syrup shall not be stored in a manner constituting speculative accumulation per R 299.4105(I). The owner/operator of a site must be able to demonstrate compliance with this condition.
- 6. The Syrup shall not come into direct contact with surface water, groundwater, or wetland areas as defined by the NREPA, and the administrative rules promulgated thereunder, unless approved or permitted by EGLE.
- 7. Processing, storage, transporting, or use of the Syrup shall be managed in such a way to prevent nuisance conditions in violation of Part 115 and Part 55 or the rules promulgated under Part 55.

- 8. Vehicles used to transport the Syrup shall be licensed under Part 121, Liquid Industrial By-Products, of the NREPA.
- 9. The generator of the Syrup shall obtain a Site Identification Number in compliance with Section 12103(1)(b) of Part 121 and manage the Syrup pursuant to Part 121.
- 10. The owner of the anaerobic digester shall obtain a Site Identification Number in compliance with Section 12112(1)(a) of Part 121 and manage the Syrup pursuant to Part 121.
- 11. Storage of the Syrup, prior to use, shall be in a tank; a container; a surface impoundment that has been permitted under Part 31, Water Resources Protection, of the NREPA; or other similar structure that is approved by the Director of EGLE.
- 12. The Syrup shall be tested on a quarterly basis for the parameters listed below unless EGLE has approved an alternate time frame or modified list of parameters. The results shall be kept by the company for a period of three years and shall be made available to EGLE upon request.

| Solids and Nutrients            | Toxicants                     |
|---------------------------------|-------------------------------|
| Percent Dry Solids              | Arsenic (milligrams/kilograms |
|                                 | [mg/kg])                      |
| Percent Total Kjeldahl Nitrogen | Barium (mg/kg)                |
| Percent Ammonium Nitrogen       | Cadmium (mg/kg)               |
| Percent Nitrate Nitrogen        | Chromium (mg/kg)              |
| Percent Phosphorus              | Copper (mg/kg)                |
| Percent Potassium               | Lead (mg/kg)                  |
| Calcium (mg/kg)                 | Mercury (mg/kg)               |
| Magnesium (mg/kg)               | Molybdenum (mg/kg)            |
| Sodium (mg/kg)                  | Nickel (mg/kg)                |
| Chloride (mg/kg)                | Selenium (mg/kg)              |
| Sulfate (mg/kg)                 | Silver (mg/kg)                |
| pH                              | Zinc (mg/kg)                  |
| 5-Day Biochemical Oxygen        | Aluminum (mg/kg)              |
| Demand                          | , , ,                         |
|                                 | Manganese                     |
|                                 | Iron (mg/kg)                  |
|                                 | Boron (mg/kg)                 |
|                                 | Ethanol                       |

13. The results of testing shall be submitted to each anaerobic digester using the Syrup.

14. By January 31 of each year, a report shall be submitted to EGLE that details the total volume of Syrup shipped and the location(s) where the Syrup was sent. The report shall be sent to:

Solid Waste Section
Materials Management Division
Michigan Department of Environment, Great Lakes, and Energy
P.O. Box 30241
Lansing, Michigan 48909-7741

- 15. This approval shall immediately become void for any of the following reasons:
  - a. The conditions of this approval are violated.
  - b. Additional information demonstrates that the processing, use, or storage of the Syrup is causing environmental contamination.
  - c. New state or federal regulations are promulgated that would cause this approval to become invalid.

Since the Syrup has been designated a site/source-separated material, any facility that processes the Syrup will not be required to obtain a processing plant license pursuant to Part 115 provided they do not take regulated solid waste and they operate in compliance with the conditions contained in this approval.

Violation of the conditions of this approval is subject to the enforcement provisions of Parts 55, 115, and 121 of the NREPA or other applicable state and federal laws/statutes.

STATE OF MICHIGAN

Department of Environment, Great Lakes, and Energy

Bv:

Rhonda S. Oyer, Manager

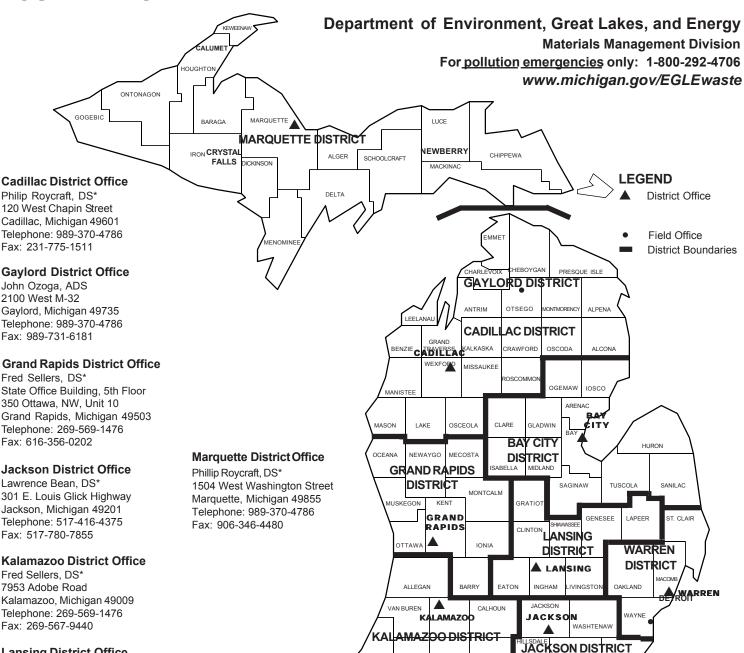
Solid Waste Section

Materials Management Division

Dated: April 28, 2020

Attachment

# **DISTRICT LOCATIONS & BOUNDARIES**



7953 Adobe Road Telephone: 269-569-1476 Fax: 269-567-9440

#### **Lansing District Office**

Lawrence Bean, DS\* Constitution Hall South Tower, 1st Floor (525 W. Allegan St.) P.O. Box 30242 Lansing, Michigan 48909 Telephone: 517-416-4375 Fax: 517-241-3571

# **Bay City District Office**

Phillip Roycraft, DS\* 401 Ketchum Street, Suite B Bay City, Michigan 48708 Telephone: 989-370-4786 Fax: 989-891-9237

## **Warren District Office**

Tracy Kecskemeti, DS\* 27700 Donald Court Warren, Michigan 48092 Telephone: 586-753-3840 Fax:586-753-3831

# **MAIN OFFICE Materials Management Division** Jack Schinderle, Division Director

Constitution Hall, 4th Floor, South Tower P.O. Box 30241 525 West Allegan Street Lansing, MI 48909-7741 Lansing, Michigan 48933

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# **Bay City District Office**

John Ozoga, ADS 989-370-4786

### Warren District Office

Grea Morrow, ADS 586-753-3852

### **Detroit District Office**

BERRIEN

Tracy Kecskemeti, DS\* Cadillac Place, Suite 2-300 3058 West Grand Bouleva Detroit, Michigan 48202 Telephone: 586-753-3840 Fax: 313-456-4692

Fax: 517-335-0610

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April 2020