

State Registration Number
B1991

RENEWABLE OPERATING PERMIT
JUNE 24, 2021 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-B1991-2021

Purpose

A Staff Report dated April 12, 2021, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	John Lancaster, Plant Director 989-757-1433
AQD Contact:	Gina McCann, Senior Environmental Quality Analyst 989-439-2282

Summary of Pertinent Comments

Comments received from US EPA and AQD Responses:

EPA Comment No. 1

In EU-PREMACHINING and EU-MACHASM, both 2,000 scfm and 2,000 cfm are used to quantify the exhaust for machines in these emission units. While I understand the technical distinction between these two units of measurement, could you describe the functional or operational differences?

AQD Response No. 1

There are no differences in the exhaust between EU-PREMACHINING and EU-MACHASM. The localized exhaust from each machine has a mist eliminator to remove excess moisture from the exhaust stream before release into the general in-plant environment. The exhaust rate in the descriptions is for standard conditions or standard cubic feet per minute (scfm).

EPA Comment No. 2

Throughout multiple emission units (EU-PSANDPROCESS, EU-PSANDCORERROOM, EU-SPMPROCESSSAND, EU-SPMCORERROOM, EU-SPMCASTLINE, EU-SPMCASTLINE4), it states that the permittee shall not operate the emission units unless the control equipment is installed, maintained, and operated in a **satisfactory manner**, without ever defining what satisfactory manner entails. Satisfactory manner is defined in some of the emission units, and even within the same emission unit, but not in others. Could there be specificity added to those conditions by referencing the MAP, permit conditions found in the monitoring and recordkeeping requirements in those sections, or clearly define what satisfactory manner means?

AQD Response No. 2

The specific language or conditions in the renewable operating permit (ROP) for these emission units were from the Title I, New Source Review permits that were incorporated into this ROP. These conditions will remain in the ROP as the State of Michigan, Air Pollution Control Rules do not allow

changes to conditions from new source review permits. However, the requirement for a malfunction abatement plan (MAP) can be added for each emission unit including the monitoring necessary to show that the emission unit is operating in a satisfactory manner. Many of these emission units have the requirement to maintain a malfunction abatement plan for the control devices and also have additional monitoring requirements to ensure proper operation of control devices such as requirements pursuant to the federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64. EU-PSANDPROCESS has monitoring requirements for the associated baghouses under condition IV.1. EU-PSANDCOREROOM has monitoring conditions under IV. DESIGN/EQUIPMENT PARAMETER(S) and VI. MONITORING/RECORDKEEPING ensuring proper operation of control devices. EU-SPMPROCESSSAND has a requirement for a malfunction abatement plan that addresses proper operation of control devices. EU-SPMCOREROOM has a requirement for a malfunction abatement plan that addresses proper operation of control devices. There are also monitoring requirements for proper operation of the control devices found under VI. MONITORING/RECORDKEEPING. EU-SPMCASTLINE has conditions under IV. DESIGN/EQUIPMENT PARAMETER(S) and VI. MONITORING/RECORDKEEPING ensuring proper operation of control devices. EU-SPMCASTLINE4 has monitoring conditions under VI. MONITORING/RECORDKEEPING ensuring proper operation of control devices. No changes to the renewable operating permit were made.

EPA Comment No. 3

In EU-PSANDCASTLINE, under Pollution Control Equipment, shouldn't the 60,000 scfm RTO be included under the Pouring and Cooling section as well?

AQD Response No. 3

The pollution control equipment description states: "Pouring and cooling emissions are controlled through a 30,000 scfm cartridge collector followed by a 60,000 scfm regenerative thermal oxidizer. Shakeout emissions are heated by the duct burner and controlled through a 30,000 scfm fabric filter collector then routed to the 60,000 scfm RTO it shares with the pouring and cooling activities." The description then goes on to state what pieces of control equipment are subject to the Compliance Assurance Monitoring Rule, 40 CFR Part 64. No changes to the renewable operating permit were made.

EPA Comment No. 4

In EU-SPMALUMINUM, under Section II, what are the units for the Flux usage rate? (pounds per year?)

AQD Response No. 4

The flux usage rate is pounds per 12 month rolling time period. Special condition VI.1.f. identifies monthly and 12-month rolling time period records of flux usage in pounds to be kept. No changes to the renewable operating permit were made.

EPA Comment No. 5

EU-SPMCASTLINE and EU-SPMCASTLINE-4 seems to be missing the provision about verifying emission rates by request from the AQD Supervisor found in the other emission units under Section 5. Is there a reason that these emission units do not have this provision?

AQD Response No.5

Under Section V. TESTING/SAMPLING, "Upon request" testing condition for VOCs, NOx, and CO for EU-SPMCASTLINE was added to the renewable operating permit. EU-SPMCASTLINE4 already had the upon request testing condition in the renewable operating permit. General Condition 13 of the renewable operating permit gives the Air Quality Division authority to ask for emissions testing. These emission units previously had emissions testing performed and the results were less than 50% of the emission limits for these emission units. The AQD believes there should not be significant differences in emissions based on the fact that there has been no change in the materials or process since testing. Also, the particulate matter control devices are subject to monitoring pursuant to CAM, 40 CFR Part

64. The NOx hourly emission rates for these units are either based on AP-42 factors for natural gas combustion or previous performance test data. There are no control devices associated with NOx control.

EPA Comment No. 6

For emission units with NOx hourly limits, under Section VI of the permit, there does not seem to be any recordkeeping requirements for those hourly limits. Is this because they are using standard emission factors for natural gas combustion?

AQD Response No.6

Several emission units are using standard emission factors to verify compliance with hourly NOx limits and do not have low NOx burners or control equipment. Several other emission units have had previous emission testing for NOx and the test results were well below 50% of the applicable NOx limits. Most of these emission units have very low NOx limits. The AQD feels without changes in the processes or fuels, the NOx emissions should not change. Also, the AQD has authority to ask for emission testing, if necessary, based on General Condition 13 of the renewable operating permit. No changes to the renewable operating permit were made.

EPA Comment No. 7

In FG-6ML-ALMELT under Section III, there are requirements that the permittee shall only actively add flux to one of the aluminum furnaces during any one-hour period... and the permittee shall not dross more than 180 hours per year. However, under the monitoring and recordkeeping requirements under Section VI, these requirements do not seem to have any associated monitoring or recordkeeping requirements.

AQD Response No.7

A condition was added under VI. Monitoring/Recordkeeping, 5., to record the date and time of flux addition to each furnace.

Changes to the April 12, 2021 Draft ROP

Changes to the draft ROP in response to No.1

The pollution control equipment descriptions for both emission units were revised from cfm to scfm.

Changes to the draft ROP in response to No.5

Added: "Upon request" testing condition for VOCs, NOx, and CO for EU-SPMCASTLINE.

Changes to the draft ROP in response to No.7

The following condition was added under VI.5.

The permittee shall record the date and time of flux added to Aluminum Reverberatory Furnace #1 (West) and Aluminum Reverberatory Furnace #2 (East). (R 336.1213(3))

No changes were made in response to EPQ comments 2, 3, 4, or 6.