

From: [Kenneth Kloet](#)
To: [EGLE-ROP](#)
Subject: A4302 - ROP Renewal Application
Date: Thursday, November 14, 2024 11:08:16 AM
Attachments: [A4302_12_Month_Rolling_HAPS.pdf](#)
[A4302_CO_NOx_Annual.pdf](#)
[A4302_Engine_Lab_Fuel_Usage.pdf](#)
[A4302_Fuel_Emissions.pdf](#)
[A4302_HAPS_Monthly.pdf](#)
[A4302_ROP_Markup.pdf](#)
[A4302_ROP_Renewal_Application_Signed.pdf](#)

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MAHLE's Muskegon MI facility, SRN A4302, has our ROP up for renewal. The attached documents make up our renewal application. You will find our renewal application form, a mark-up of our current ROP, and the requested reports and data related to our ROP. Printed copies of these documents are being mailed to the EGLE Grand Rapids office. Please use these documents to begin the processing of our ROP renewal application. Thanks

Kind regards,

Mr Kenneth Kloet
MAHLE Engine Components USA, Inc.
Corporate Research (CRRNTE)

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MAHLE internal (CL2)



RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to instructions for additional information to complete the Renewable Operating Permit Renewal Application Form.

GENERAL INSTRUCTIONS

This application form should be submitted as part of an administratively complete application package for renewal of a Renewable Operating Permit (ROP). This application form consists of nine parts. Parts A – H must be completed for all applications and must also be completed for each section of a sectioned ROP. Answer all questions in all parts of the form unless directed otherwise. Detailed instructions for this application form can be found at <http://michigan.gov/air> (select the Permits Tab, “Renewable Operating Permits (ROP)/Title V”, then “ROP Forms & Templates”).

PART A: GENERAL INFORMATION

Enter information about the source, owner, contact person and the responsible official.

SOURCE INFORMATION

| | | | | |
|--|------------------|----------------------|---|--------------------------------|
| SRN A4302 | SIC Code 8734 | NAICS Code 541380 | Existing ROP Number MI-ROP-A4302-2020a | Section Number (if applicable) |
| Source Name MAHLE Industries Incorporated and MAHLE Engine Components USA, Inc | | | | |
| Street Address 2020 Sanford St | | | | |
| City Muskegon Heights | State MI | ZIP Code 49444 | County Muskegon | |
| Section/Town/Range (if address not available) | | | | |
| Source Description This MAHLE facility performs testing on engines primarily for the automotive industry. The facility has several engine test cells that are used for emissions testing. This MAHLE facility has permitted and grandfathered (installed before August 14, 1967) engine test cells in operation. The engines are tested using gasoline, E85, diesel, LPG and natural gas fuels. A previous degreasing operation caused historical contamination of the groundwater. The facility now has a soil vapor extraction system located in a standalone building that is exempt from Rule 201 permitting requirements under Rule 290. | | | | |
| <input type="checkbox"/> Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP. | | | | |

OWNER INFORMATION

| | | | | |
|--|--------------------------------|-------------------|--------------------|----------------|
| Owner Name MAHLE Industries Incorporated and MAHLE Engine Components USA, Inc | Section Number (if applicable) | | | |
| Mailing address (<input checked="" type="checkbox"/> check if same as source address) | | | | |
| | | | | |
| City Muskegon Heights | State MI | ZIP Code 49444 | County Muskegon | Country USA |

☐ Check here if any information in this ROP renewal application is confidential. Confidential information should be identified on an Additional Information (AI-001) Form.

SRN: A4302

Section Number (if applicable):

PART A: GENERAL INFORMATION (continued)

At least one contact and responsible official must be identified. Additional contacts and responsible officials may be included if necessary.

CONTACT INFORMATION

| | | | | |
|---|-------|---|--------------------------|---------|
| Contact 1 Name Ken Kloet | | | Title EHS Coordinator | |
| Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address) | | | | |
| City | State | ZIP Code | County | Country |
| Phone number 231-724-1040 | | E-mail address Kenneth.kloet@mahle.com | | |

| | | | | |
|---|-------|--|---|---------|
| Contact 2 Name (optional) Max Maschewske | | | Title Manager Engine Test and Workshop | |
| Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address) | | | | |
| City | State | ZIP Code | County | Country |
| Phone number 231-724-1875 | | E-mail address Max.maschewske@mahle.com | | |

RESPONSIBLE OFFICIAL INFORMATION

| | | | | |
|---|-------|---|---------------------------------------|---------|
| Responsible Official 1 Name Mr. Kimm Karrip | | | Title Head of Muskegon Tech Center | |
| Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address) | | | | |
| City | State | ZIP Code | County | Country |
| Phone number 231-724-1665 | | E-mail address Kimm.karrip@mahle.com | | |

| | | | | |
|--|-------|----------------|--------|---------|
| Responsible Official 2 Name (optional) | | | Title | |
| Company Name & Mailing address (<input type="checkbox"/> check if same as source address) | | | | |
| City | State | ZIP Code | County | Country |
| Phone number | | E-mail address | | |

☐ Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

Identify the items that are included as part of your administratively complete application in the checklist below. For your application to be complete, it must include information necessary to evaluate the source and to determine all applicable requirements. Answer the compliance statements as they pertain to all the applicable requirements to which the source is subject. The source's Responsible Official must sign and date this form.

Listing of ROP Application Contents. Check the box for the items included with your application.

| | |
|---|---|
| <input checked="" type="checkbox"/> Completed ROP Renewal Application Form (and any AI-001 Forms) (required) | <input type="checkbox"/> Compliance Plan/Schedule of Compliance |
| <input checked="" type="checkbox"/> Mark-up copy of existing ROP using official version from the AQD website (required) | <input type="checkbox"/> Stack information |
| <input type="checkbox"/> Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required) | <input type="checkbox"/> Acid Rain Permit Initial/Renewal Application |
| <input type="checkbox"/> Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations | <input type="checkbox"/> Cross-State Air Pollution Rule (CSAPR) Information |
| <input type="checkbox"/> MAERS Forms (to report emissions not previously submitted) | <input type="checkbox"/> Confidential Information |
| <input type="checkbox"/> Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP | <input checked="" type="checkbox"/> Paper copy of all documentation provided (required) |
| <input type="checkbox"/> Compliance Assurance Monitoring (CAM) Plan | <input checked="" type="checkbox"/> Electronic documents provided (optional) |
| <input type="checkbox"/> Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.) | <input type="checkbox"/> Other, explain: |

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. ☒ Yes ☐ No

This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. ☒ Yes ☐ No

This source will meet in a timely manner applicable requirements that become effective during the permit term. ☒ Yes ☐ No

The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.

If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the specific condition number(s) or applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.

Name and Title of the Responsible Official (Print or Type)

Mr. Kimm Karrip - Head of Muskegon Tech Center

As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.



Signature of Responsible Official

Nov. 11, 2024

Date

PART C: SOURCE REQUIREMENT INFORMATION

Answer the questions below for specific requirements or programs to which the source may be subject.

| | | |
|--------------------------|---|--|
| C1. | Actual emissions and associated data from all emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C2. | Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C3. | Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If Yes , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C4. | Has this stationary source added or modified equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NO _x , PM ₁₀ , PM _{2.5} , SO ₂ , VOC, lead) emissions? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If No , criteria pollutant potential emission calculations do not need to be included. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C5. | Has this stationary source added or modified equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions must be included in HAP emission calculations. If No , HAP potential emission calculations do not need to be included. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C6. | Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If Yes , identify the specific emission unit(s) subject to CSAPR on an AI-001 Form. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C7. | Are any emission units subject to the federal Acid Rain Program? If Yes , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form. Is an Acid Rain Permit Renewal Application included with this application? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C8. | Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If Yes , identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy. Is a CAM plan included with this application? If a CAM Plan is included, check the type of proposed monitoring included in the Plan: 1. Monitoring proposed by the source based on performance of the control device, or 2. Presumptively Acceptable Monitoring, if eligible | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/> |
| C9. | Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If Yes , then a copy must be submitted as part of the ROP renewal application. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| C10. | Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <input type="checkbox"/> | Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI- | |

PART D: PERMIT TO INSTALL (PTI) EXEMPT EMISSION UNIT INFORMATION

Review all emission units at the source and answer the question below.

D1. Does the source have any emission units that do not appear in the existing ROP but are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules? If Yes, identify the emission units in the table below. ☒ Yes ☐ No

If No, go to Part E.

Note: Emission units that are subject to process specific emission limitations or standards, even if identified in Rule 212, must be captured in either Part G or H of this application form. Identical emission units may be grouped (e.g. PTI exempt Storage Tanks).

| Emission Unit ID | Emission Unit Description | Rule 212(4) Citation [e.g. Rule 212(4)(c)] | Rule 201 Exemption Rule Citation [e.g. Rule 282(2)(b)(i)] |
|---------------------|--|---|---|
| EU-G-Boiler | 3.5MM Btu/hr natural gas fired boiler (heating only) | Rule 212(4)(c) | Rule 282(b)(i) |
| EU-Backup Generator | 2.0MM BTU/HR Natural Gas Backup Emergency Generator | Rule 212(4)(e) | Rule 285(2)(g) |
| EU-Space Heaters | Two 175,000 BTU/HR Infrared Heaters (heating only) | Rule 212(4)(c) | Rule 282(b)(i) |
| EU-Space Heater | One 60,000 BTU/HR Heater (heating only) | Rule 212(4)(c) | Rule 282(b)(i) |
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Comments:

☐ Check here if an AI-001 Form is attached to provide more information for Part D. Enter AI-001 Form ID: **AI-**

PART E: EXISTING ROP INFORMATION

Review all emission units and applicable requirements (including any source wide requirements) in the existing ROP and answer the questions below as they pertain to all emission units and all applicable requirements in the existing ROP.

| | |
|--|---|
| E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If <u>Yes</u> , identify changes and additions on Part F, Part G and/or Part H. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| E2. For each emission unit(s) identified in the existing ROP, <u>all</u> stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were <u>not</u> reported in the most recent MAERS reporting year? If <u>Yes</u> , identify the stack(s) that was/were not reported on applicable MAERS form(s). | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If <u>Yes</u> , complete Part F with the appropriate information. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| E4. Have any emission units identified in the existing ROP been dismantled? If <u>Yes</u> , identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Comments: | |
| <input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: AI- | |

PART F: PERMIT TO INSTALL (PTI) INFORMATION

Review all emission units and applicable requirements at the source and answer the following questions as they pertain to **all** emission units with PTIs. Any PTI(s) identified below must be attached to the application.

| F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u> , complete the following table. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If <u>No</u> , go to Part G. | | | |
|--|-------------------------------------|---|---|
| Permit to Install Number | Emission Units/Flexible Group ID(s) | Description (Include Process Equipment, Control Devices and Monitoring Devices) | Date Emission Unit was Installed/Modified/Reconstructed |
| | | | |
| | | | |
| | | | |
| | | | |

| |
|---|
| F2. Do any of the PTIs listed above change, add, or delete terms/conditions to established emission units in the existing ROP? If <u>Yes</u> , identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions, and deletions in a mark-up of the existing ROP. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| F3. Do any of the PTIs listed above identify new emission units that need to be incorporated into the ROP? If <u>Yes</u> , submit the PTIs as part of the ROP renewal application on an AI-001 Form, and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were <u>not</u> reported in MAERS for the most recent emissions reporting year? If <u>Yes</u> , identify the stack(s) that were not reported on the applicable MAERS form(s). <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into the ROP? If <u>Yes</u> , describe the changes on an AI-001 Form. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Comments: |
| <input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part F. Enter AI-001 Form ID: AI- |

PART G: EMISSION UNITS MEETING THE CRITERIA OF RULES 281(2)(h), 285(2)(r)(iv), 287(2)(c), OR 290

Review all emission units and applicable requirements at the source and answer the following questions.

G1. Does the source have any new and/or existing emission units which do not already appear in the existing ROP and which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.

If Yes, identify the emission units in the table below. If No, go to Part H.

☐ Yes ☒ No

Note: If several emission units were installed under the same rule above, provide a description of each and an installation/modification/reconstruction date for each.

| Origin of Applicable Requirements | Emission Unit Description – Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices | Date Emission Unit was Installed/ Modified/ Reconstructed |
|---|---|---|
| <input type="checkbox"/> Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation | | |
| <input type="checkbox"/> Rule 287(2)(c) surface coating line | | |
| <input type="checkbox"/> Rule 290 process with limited emissions | | |

Comments:

☐ Check here if an AI-001 Form is attached to provide more information for Part G. Enter AI-001 Form ID: **AI-**

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

Complete this part of the application form for all proposed additions, changes or deletions to the existing ROP. This includes state or federal regulations that the source is subject to and that must be incorporated into the ROP or other proposed changes to the existing ROP. **Do not include additions or changes that have already been identified in Parts F or G of this application form.** If additional space is needed copy and complete an additional Part H.

Complete a separate Part H for each emission unit with proposed additions and/or changes.

| | |
|--|---|
| H1. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H3. Does the source propose to add a new emission unit or flexible group to the ROP not previously identified in Parts F or G? If <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H4. Does the source propose to add new state or federal regulations to the existing ROP? If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H6. Does the source propose to add, change and/or delete source-wide requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H7. Are you proposing to streamline any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

| | |
|--|---|
| H8. Does the source propose to add, change and/or delete emission limit requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H9. Does the source propose to add, change and/or delete material limit requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H10. Does the source propose to add, change and/or delete process/operational restriction requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H11. Does the source propose to add, change and/or delete design/equipment parameter requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H12. Does the source propose to add, change and/or delete testing/sampling requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H13. Does the source propose to add, change and/or delete monitoring/recordkeeping requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| H14. Does the source propose to add, change and/or delete reporting requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H16. Does the source propose to add, change and/or delete any **other** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

☐ Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: **AI-**



RENEWABLE OPERATING PERMIT APPLICATION

AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: A4302

Section Number (if applicable):

1. Additional Information ID

AI-

Additional Information

2. Is This Information Confidential?

☐ Yes ☒ No

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**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

EFFECTIVE DATE: December 15, 2020
REVISION DATE: June 1, 2021

ISSUED TO

MAHLE Industries, Incorporated and MAHLE Engine Components USA, Inc.

~~K. KLOET; OCTOBER 31, 2024~~
~~KEEP ALL CONDITIONS. NO~~
~~CHANGES, ADDITIONS OR~~
~~DELETIONS ARE BEING MADE.~~

State Registration Number (SRN): A4302

LOCATED AT

2020 Sanford Street, Muskegon Heights, Muskegon County, Michigan 49444

Formatted: Underline

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A4302-2020a

Expiration Date: December 15, 2025

Administratively Complete ROP Renewal Application
Due Between June 15, 2024 and June 15, 2025

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-A4302-2020a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Heidi Hollenbach, Grand Rapids District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

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A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

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Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
- The date, location, time, and method of sampling or measurements.
 - The dates the analyses of the samples were performed.
 - The company or entity that performed the analyses of the samples.
 - The analytical techniques or methods used.
 - The results of the analyses.
 - The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

- 34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

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Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP.
(R 336.1210(9))

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216.
(R 336.1213(12))

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Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

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SOURCE-WIDE CONDITIONS**DESCRIPTION**

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, exempt equipment and any future equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|------------------------|--------------------|--|--|----------------------------|------------------------------------|
| 1. Each Individual HAP | Less than 9.0 tpy | 12-month rolling time period as determined at the end of each calendar month | All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment | SC VI.1 | R 336.1213(2)(d) |
| 2. Aggregate HAPs | Less than 22.5 tpy | 12-month rolling time period as determined at the end of each calendar month | All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment | SC VI.1 | R 336.1213(2)(d) |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall determine the HAP content of any material used, using manufacturer's formulation data or safety data sheet (SDS). (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall calculate and keep records of all the individual and/or aggregate facility HAP emissions using mass balance or an alternate method as approved by the AQD District Supervisor. (R 336.1213(3))
2. The permittee shall keep the following information on a monthly basis: (R 336.1213(3))
 - a. A record of the days of operation.
 - b. Gallons or pounds of each HAP containing fuel or material used.
 - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing fuel or material used.
 - d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.
3. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8-1

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|--|--|---------------------|
| EU-TestCell#14 | Engine Test Cell #14 | 01-01-1997 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#15 | Engine Test Cell #15 | 01-01-1997 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#16 | Engine Test Cell #16 | 01-01-1997 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#17 | Engine Test Cell #17 | 01-01-2002 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#18 | Engine Test Cell #18 | 01-01-1997 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#19 | Engine Test Cell #19 | 01-01-2002 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#20 | Engine Test Cell #20 | 01-01-1997 / 01-11-2011 | FG-TESTCELLS |
| EU-TestCell#21 | Engine Test Cell #21 | 01-01-2002 / 01-11-2011 | FG-TESTCELLS |
| EU-Parts Washer1 | Cold Cleaner <10 sq. ft. of air to vapor interface | 01-30-1996 | FG- COLDCLEANERS |
| EU-Parts Washer2 | Cold Cleaner <10 sq. ft. of air to vapor interface | 06-30-2020 | FG- COLDCLEANERS |

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D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|-------------------|--|--|
| FG-TESTCELLS | Eight engine dynamometer test cells using gasoline (E-85), diesel, LPG and CNG fuels. | EU-TestCell#14 EU-TestCell#15 EU-TestCell#16 EU-TestCell#17 EU-TestCell#18 EU-TestCell#19 EU-TestCell#20 EU-TestCell#21 |
| FG-COLDCLEANERS | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. | EU-Parts Washer1 EU-Parts Washer2 |

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**FG-TESTCELLS
FLEXIBLE GROUP CONDITIONS****DESCRIPTION**

Eight engine dynamometer test cells using gasoline (E-85), compressed natural gas (CNG), liquefied petroleum gas (LPG), and diesel fuel.

Emission Units: EU-TestCell#14, EU-TestCell#15, EU-TestCell#16, EU-TestCell#17, EU-TestCell#18, EU-TestCell#19, EU-TestCell#20, EU-TestCell#21

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|-----------|--|---|--------------|----------------------------------|---|
| 1. NOx | 0.15 lb/gallon gasoline (E-85), CNG, or LPG ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.2 | R 336.1205(3) R 336.1803 R 336.1804 40 CFR 52.21 (c) & (d) |
| 2. NOx | 0.138 lb/gallon diesel ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.2 | R 336.1205(3) R 336.1803 R 336.1804 40 CFR 52.21 (c) & (d) |
| 3. NOx | 34.3 tpy ² | 12-month rolling time period as determined at the end of each calendar month | FG-TESTCELLS | SC VI.1 & VI.2 | R 336.1205(3) R 336.1803 R 336.1804 40 CFR 52.21 (c) & (d) |
| 4. CO | 3.12 lb/gallon gasoline (E-85) ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.3 | R 336.1205(3) R 336.1804 40 CFR 52.21 (d) |
| 5. CO | 0.0137 lb/gallon diesel ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.3 | R 336.1205(3) R 336.1804 40 CFR 52.21 (d) |
| 6. CO | 2.1 lb/gal CNG ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.3 | R 336.1205(3) R 336.1804 40 CFR 52.21 (d) |
| 7. CO | 2.5 lb/gal LPG ² | Monthly as determined at the beginning of each calendar month. | FG-TESTCELLS | SC VI.1 & VI.3 | R 336.1205(3) R 336.1804 40 CFR 52.21 (d) |
| 8. CO | 89.9 tpy ² | 12-month rolling time period as determined at the end of each calendar month | FG-TESTCELLS | SC VI.1 & VI.3 | R 336.1205(3) R 336.1804 40 CFR 52.21 (d) |

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II. MATERIAL LIMIT(S)

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---|------------------------------|---|-------------------|----------------------------------|---|
| 1. Gasoline (E-85), CNG, and LPG | 55,709 gallons ² | 12-month rolling time period as determined at the end of each calendar month | Engine test cells | SC VI.1 | R 336.1205(3) R 336.1225 R 336.1702(a) |
| 2. Diesel | 437,000 gallons ² | 12-month rolling time period as determined at the end of each calendar month | Engine test cells | SC VI.1 | R 336.1205(3) R 336.1225 R 336.1702(a) |

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and record, in a satisfactory manner, the gasoline (E-85), CNG, LPG, and diesel usage rates for FG-TESTCELLS on a monthly and 12-month rolling basis as determined at the end of each calendar month.² **(R 336.1205(3), R 336.1225, R 336.1702(a))**
2. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission calculation records for FG-TESTCELLS.² **(R 336.1205(3))**
3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month CO emission calculation records for FG-TESTCELLS.² **(R 336.1205(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

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VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|------------------------------------|---|
| 1. SV-TESTCELLS | 24.0 ² | 60.0 ² | R 336.1225, R 336.1803, R 336.1804 40 CFR 52.21 (c) & (d) |

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Units: EU-Parts Washer1, EU-Parts Washer2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

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- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

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APPENDICES

Appendix 1-1. Acronyms and Abbreviations

| Common Acronyms | | Pollutant / Measurement Abbreviations | |
|---------------------------|--|---------------------------------------|---|
| AQD | Air Quality Division | acfm | Actual cubic feet per minute |
| BACT | Best Available Control Technology | BTU | British Thermal Unit |
| CAA | Clean Air Act | °C | Degrees Celsius |
| CAM | Compliance Assurance Monitoring | CO | Carbon Monoxide |
| CEM | Continuous Emission Monitoring | CO _{2e} | Carbon Dioxide Equivalent |
| CEMS | Continuous Emission Monitoring System | dscf | Dry standard cubic foot |
| CFR | Code of Federal Regulations | dscm | Dry standard cubic meter |
| COM | Continuous Opacity Monitoring | °F | Degrees Fahrenheit |
| Department/ department | Michigan Department of Environment, Great Lakes, and Energy | gr | Grains |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | HAP | Hazardous Air Pollutant |
| | | Hg | Mercury |
| | | hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H ₂ S | Hydrogen Sulfide |
| GACS | Gallons of Applied Coating Solids | kW | Kilowatt |
| GC | General Condition | lb | Pound |
| GHGs | Greenhouse Gases | m | Meter |
| HVLP | High Volume Low Pressure* | mg | Milligram |
| ID | Identification | mm | Millimeter |
| IRSL | Initial Risk Screening Level | MM | Million |
| ITSL | Initial Threshold Screening Level | MW | Megawatts |
| LAER | Lowest Achievable Emission Rate | NMOC | Non-methane Organic Compounds |
| MACT | Maximum Achievable Control Technology | NO _x | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM ₁₀ | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable | PM _{2.5} | Particulate Matter equal to or less than 2.5 microns in diameter |
| NAAQS | National Ambient Air Quality Standards | pph | Pounds per hour |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | % | Percent |
| PSD | Prevention of Significant Deterioration | psia | Pounds per square inch absolute |
| PTE | Permanent Total Enclosure | psig | Pounds per square inch gauge |
| PTI | Permit to Install | scf | Standard cubic feet |
| RACT | Reasonable Available Control Technology | sec | Seconds |
| ROP | Renewable Operating Permit | SO ₂ | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SNCR | Selective Non-Catalytic Reduction | THC | Total Hydrocarbons |
| SRN | State Registration Number | tpy | Tons per year |
| TEQ | Toxicity Equivalence Quotient | µg | Microgram |
| USEPA/EPA | United States Environmental Protection Agency | µm | Micrometer or Micron |
| VE | Visible Emissions | VOC | Volatile Organic Compounds |
| | | yr | Year |

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

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Appendix 2-1. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3-1. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4-1. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5-1. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6-1. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-A4302-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-A4302-2015 is being reissued as Source-Wide PTI No. MI-PTI-A4302-2020.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---------------------------------|------------------------------------|---|
| NA | NA | NA | NA |

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-A4302-2020.

| Permit to Install Number | ROP Revision Application Number - Issuance Date | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---|---|---|
| NA | 202100014 / June 1, 2021 | Separate the facility into two Sections, since Section 1 is owned by MAHLE Industries, Incorporated, which includes equipment FG-TESTCELLS and FG-COLDCLEANERS. The equipment included in FG-RULE290 is covered in Section 2 and owned by MAHLE Engine Components USA, Inc. | FG-TESTCELLS, FG-COLDCLEANERS |

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Appendix 7-1. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8-1. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Section 2 - MAHLE Engine Components USA, Inc.

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Section 2 - MAHLE Engine Components USA, Inc.

Section 2 - MAHLE Engine Components USA, Inc.

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A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

Section 2 - MAHLE Engine Components USA, Inc.

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6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

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Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
- The date, location, time, and method of sampling or measurements.
 - The dates the analyses of the samples were performed.
 - The company or entity that performed the analyses of the samples.
 - The analytical techniques or methods used.
 - The results of the analyses.
 - The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- The applicable requirements are included and are specifically identified in the ROP.
 - The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

- 34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

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Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP.
(R 336.1210(9))

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216.
(R 336.1213(12))

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Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

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SOURCE-WIDE CONDITIONS**DESCRIPTION**

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, exempt equipment and any future equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|------------------------|--------------------|--|--|----------------------------|------------------------------------|
| 1. Each Individual HAP | Less than 9.0 tpy | 12-month rolling time period as determined at the end of each calendar month | All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment | SC VI.1 | R 336.1213(2)(d) |
| 2. Aggregate HAPs | Less than 22.5 tpy | 12-month rolling time period as determined at the end of each calendar month | All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment | SC VI.1 | R 336.1213(2)(d) |

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall determine the HAP content of any material used, using manufacturer's formulation data or safety data sheet (SDS). (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall calculate and keep records of all the individual and/or aggregate facility HAP emissions using mass balance or an alternate method as approved by the AQD District Supervisor. (R 336.1213(3))
2. The permittee shall keep the following information on a monthly basis: (R 336.1213(3))
 - a. A record of the days of operation.
 - b. Gallons or pounds of each HAP containing fuel or material used.
 - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing fuel or material used.
 - d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.
3. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Emission Unit ID | Emission Unit Description (Including Process Equipment & Control Device(s)) | Installation Date/ Modification Date | Flexible Group ID |
|------------------|---|--|-------------------|
| EU-TRAYSTRIPPER | Tray-type air stripper used to treat groundwater | 10-17-2006 | FG-RULE290 |
| EU-SVESYSTEM | Soil vapor extraction system | 10-17-2006 | FG-RULE290 |

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D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Flexible Group ID | Flexible Group Description | Associated Emission Unit IDs |
|-------------------|---|---------------------------------|
| FG-RULE290 | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification. | EU-TRAYSTRIPPER EU-SVESYSTEM |

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FG-RULE290 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EU-TRAYSTRIPPER, EU-SVESYSTEM

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
 - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
 - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
 - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
 - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
 - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

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- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
 - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
- 2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**

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3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4-2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8-2

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

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APPENDICES

Appendix 1-2. Acronyms and Abbreviations

| Common Acronyms | | Pollutant / Measurement Abbreviations | |
|---------------------------|--|---------------------------------------|---|
| AQD | Air Quality Division | acfm | Actual cubic feet per minute |
| BACT | Best Available Control Technology | BTU | British Thermal Unit |
| CAA | Clean Air Act | °C | Degrees Celsius |
| CAM | Compliance Assurance Monitoring | CO | Carbon Monoxide |
| CEM | Continuous Emission Monitoring | CO _{2e} | Carbon Dioxide Equivalent |
| CEMS | Continuous Emission Monitoring System | dscf | Dry standard cubic foot |
| CFR | Code of Federal Regulations | dscm | Dry standard cubic meter |
| COM | Continuous Opacity Monitoring | °F | Degrees Fahrenheit |
| Department/ department | Michigan Department of Environment, Great Lakes, and Energy | gr | Grains |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | HAP | Hazardous Air Pollutant |
| | | Hg | Mercury |
| | | hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H ₂ S | Hydrogen Sulfide |
| GACS | Gallons of Applied Coating Solids | kW | Kilowatt |
| GC | General Condition | lb | Pound |
| GHGs | Greenhouse Gases | m | Meter |
| HVLP | High Volume Low Pressure* | mg | Milligram |
| ID | Identification | mm | Millimeter |
| IRSL | Initial Risk Screening Level | MM | Million |
| ITSL | Initial Threshold Screening Level | MW | Megawatts |
| LAER | Lowest Achievable Emission Rate | NMOC | Non-methane Organic Compounds |
| MACT | Maximum Achievable Control Technology | NO _x | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM ₁₀ | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable | PM _{2.5} | Particulate Matter equal to or less than 2.5 microns in diameter |
| NAAQS | National Ambient Air Quality Standards | pph | Pounds per hour |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | % | Percent |
| PSD | Prevention of Significant Deterioration | psia | Pounds per square inch absolute |
| PTE | Permanent Total Enclosure | psig | Pounds per square inch gauge |
| PTI | Permit to Install | scf | Standard cubic feet |
| RACT | Reasonable Available Control Technology | sec | Seconds |
| ROP | Renewable Operating Permit | SO ₂ | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SNCR | Selective Non-Catalytic Reduction | THC | Total Hydrocarbons |
| SRN | State Registration Number | tpy | Tons per year |
| TEQ | Toxicity Equivalence Quotient | µg | Microgram |
| USEPA/EPA | United States Environmental Protection Agency | µm | Micrometer or Micron |
| VE | Visible Emissions | VOC | Volatile Organic Compounds |
| | | yr | Year |

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

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Appendix 2-2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3-2. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4-2. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5-2. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6-2. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-A4302-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-A4302-2015 is being reissued as Source-Wide PTI No. MI-PTI-A4302-2020.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---------------------------------|------------------------------------|---|
| NA | NA | NA | NA |

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-A4302-2020.

| Permit to Install Number | ROP Revision Application Number - Issuance Date | Description of Equipment or Change | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---|---|---|
| NA | 202100014 / June 1, 2021 | Separate the facility into two Sections, since Section 1 is owned by MAHLE Industries, Incorporated, which includes equipment FG-TESTCELLS and FG-COLDCLEANERS. The equipment included in FG-RULE290 is covered in Section 2 and owned by MAHLE Engine Components USA, Inc. | FG-RULE290 |

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Appendix 7-2. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8-2. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

A4302_MAHLE_Muskegon_MI

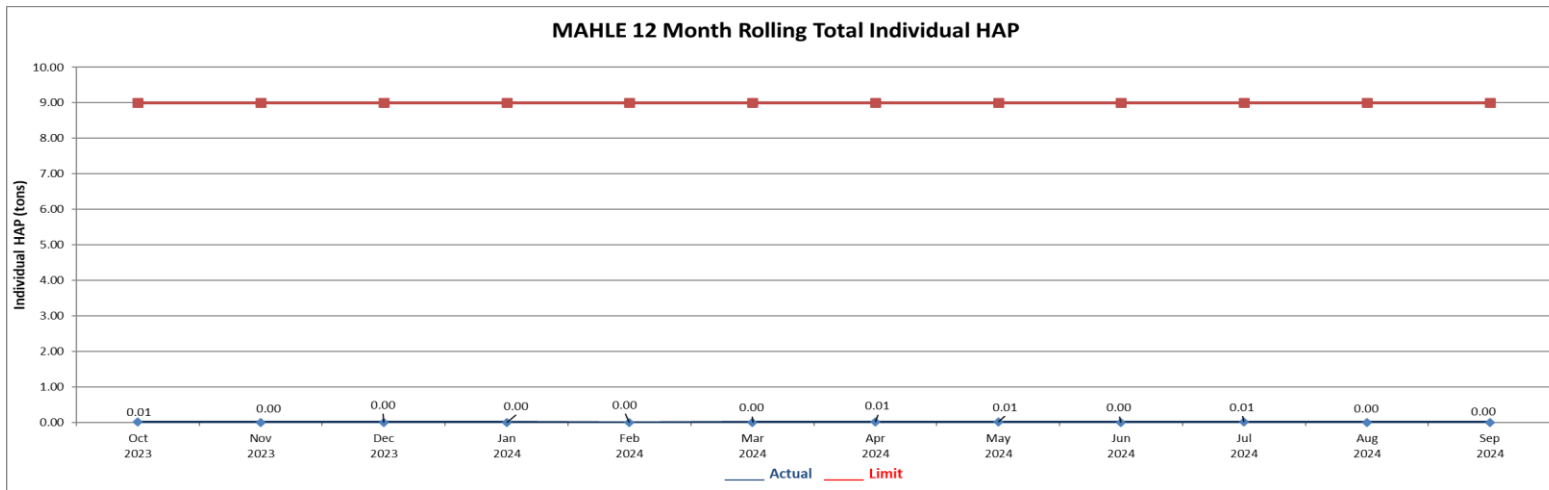
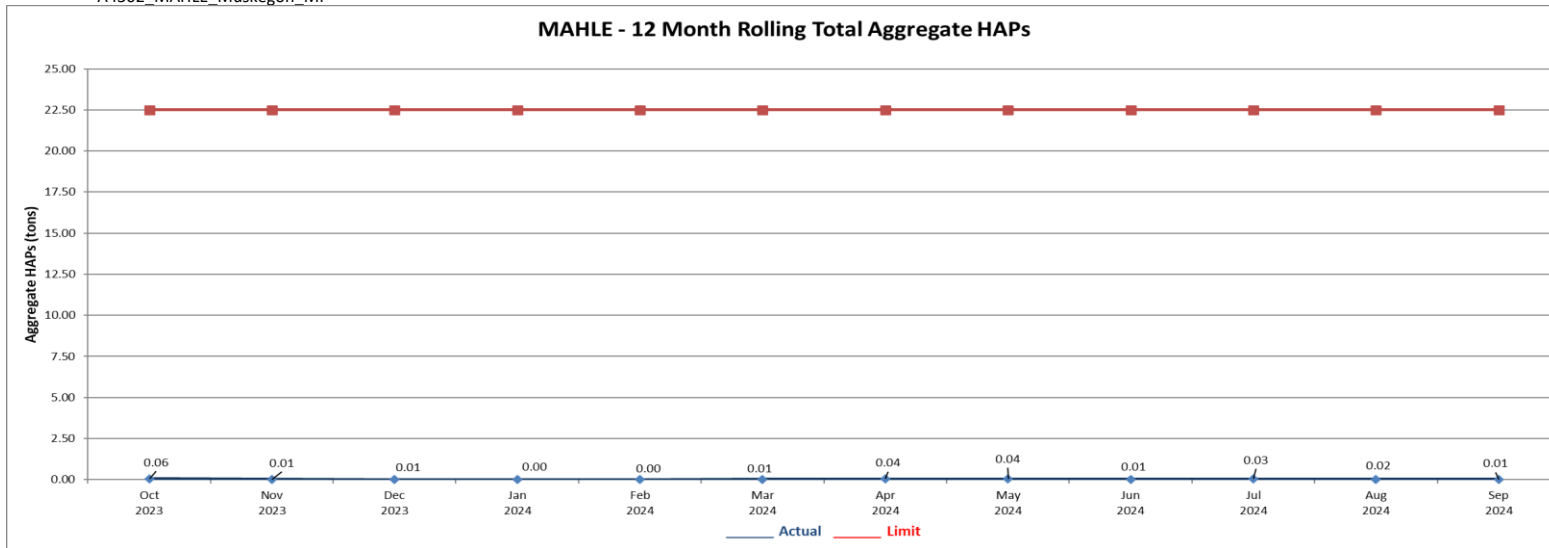
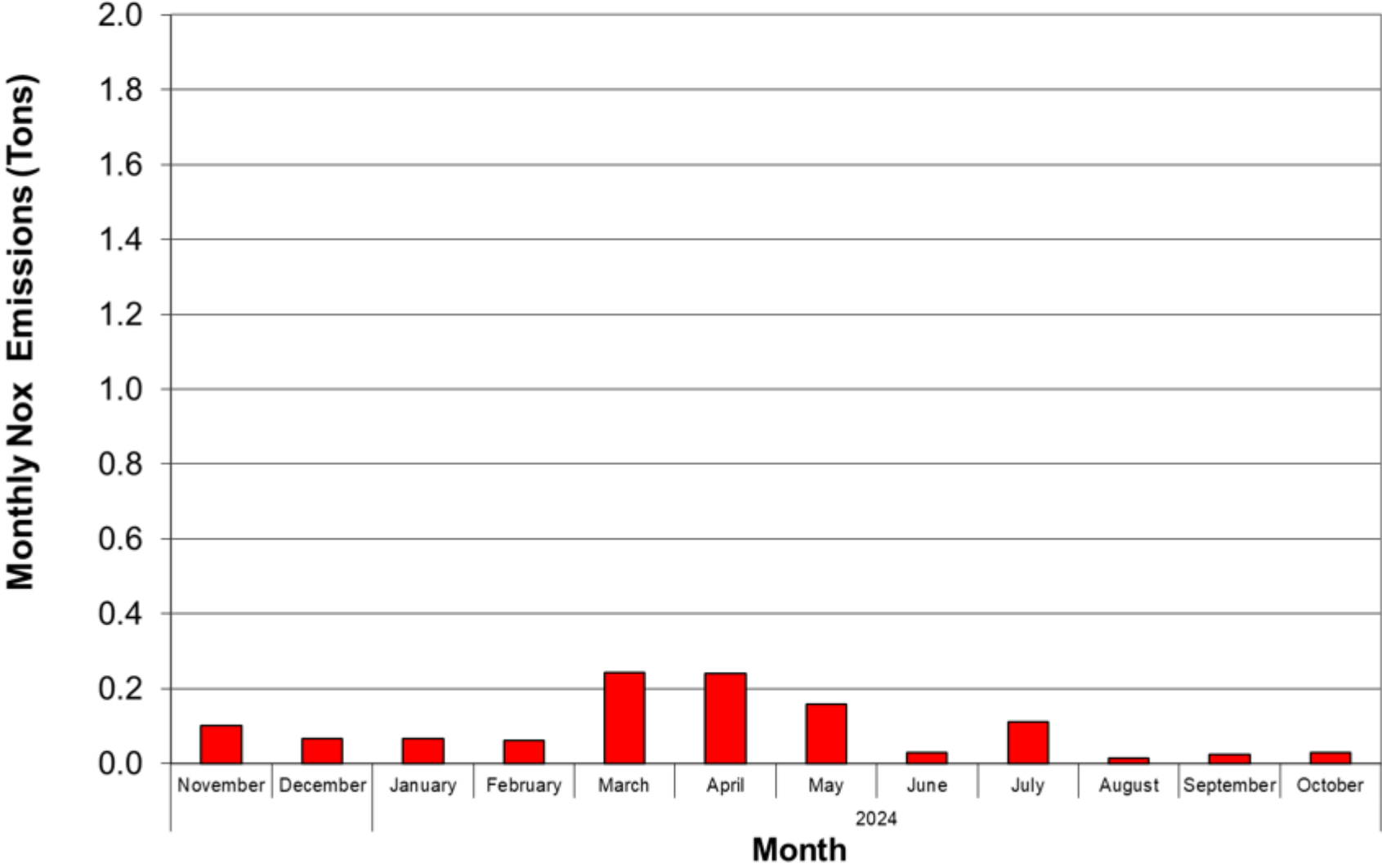


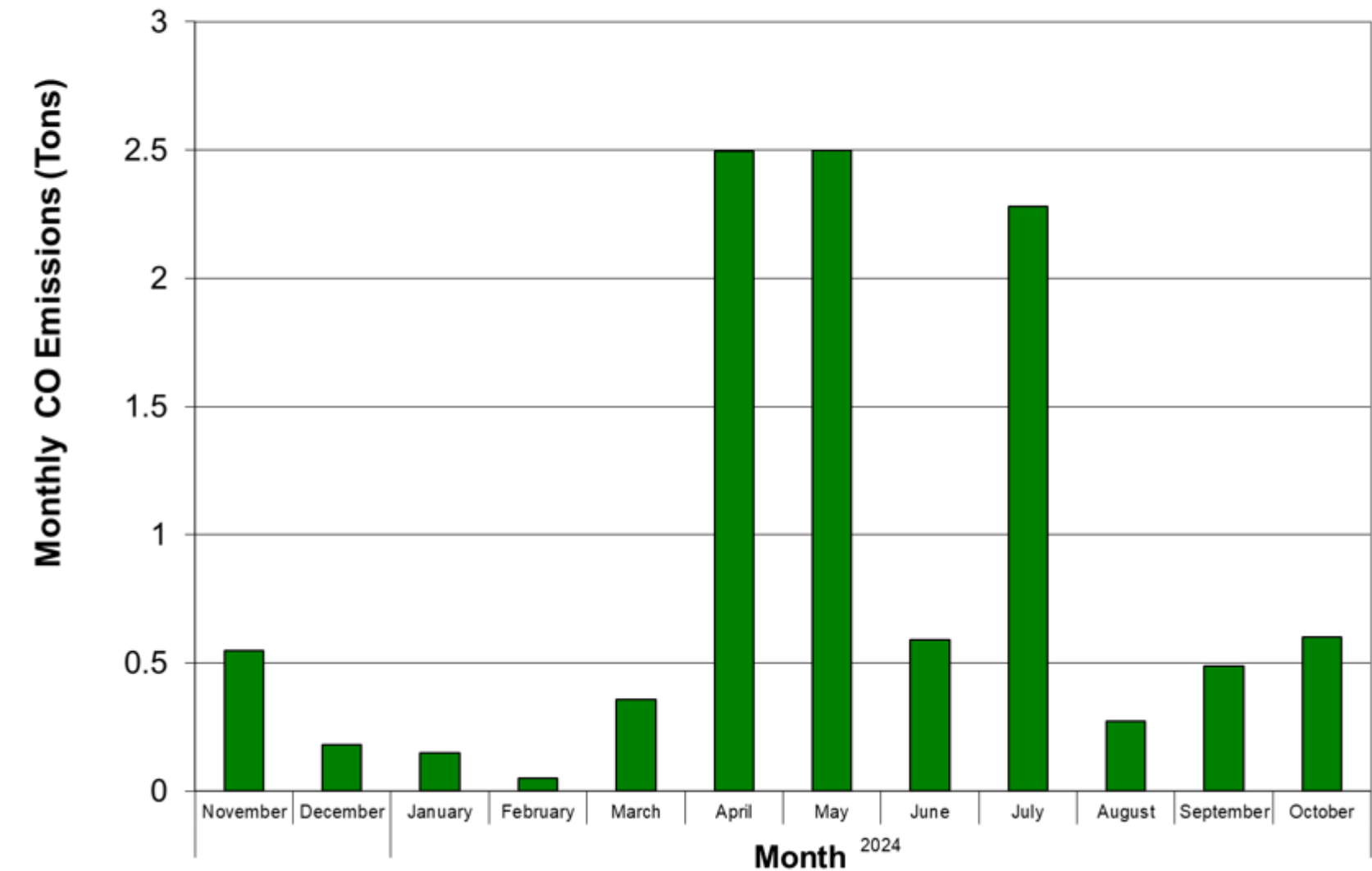
Chart Data

| | Oct 2023 | Nov 2023 | Dec 2023 | Jan 2024 | Feb 2024 | Mar 2024 | Apr 2024 | May 2024 | Jun 2024 | Jul 2024 | Aug 2024 | Sep 2024 |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Aggregate Limit | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Aggregate HAPs | 0.06 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.04 | 0.04 | 0.01 | 0.03 | 0.02 | 0.01 |
| Individual Limit | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| Individual HAPs | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 |

NOx Emissions Detail for MAHLE Engine Test Lab per EGLE MI-ROP-A4302-2020a



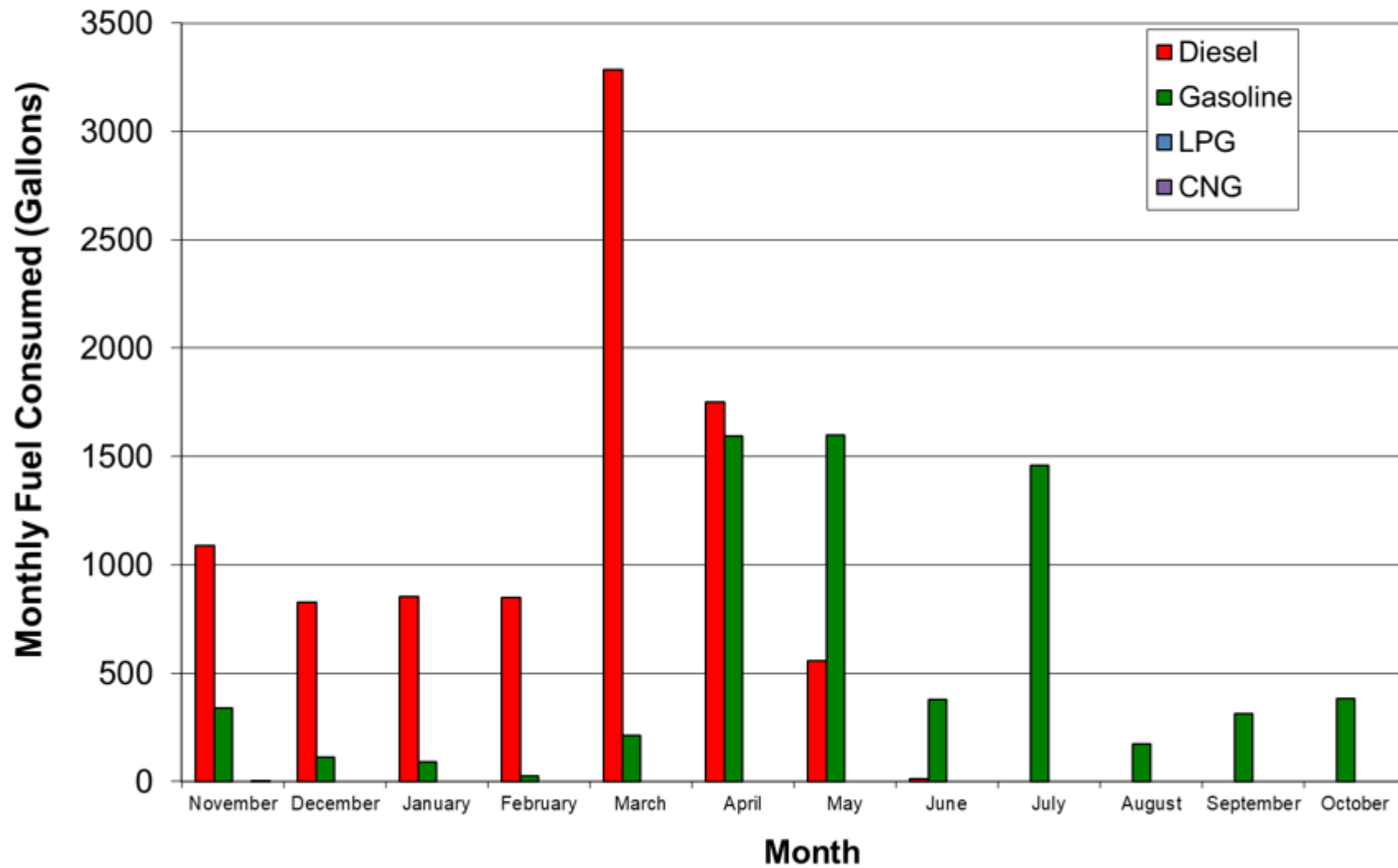
CO Emissions Detail for MAHLE Engine Test Lab
per EGLE MI-ROP-A4302-2020a



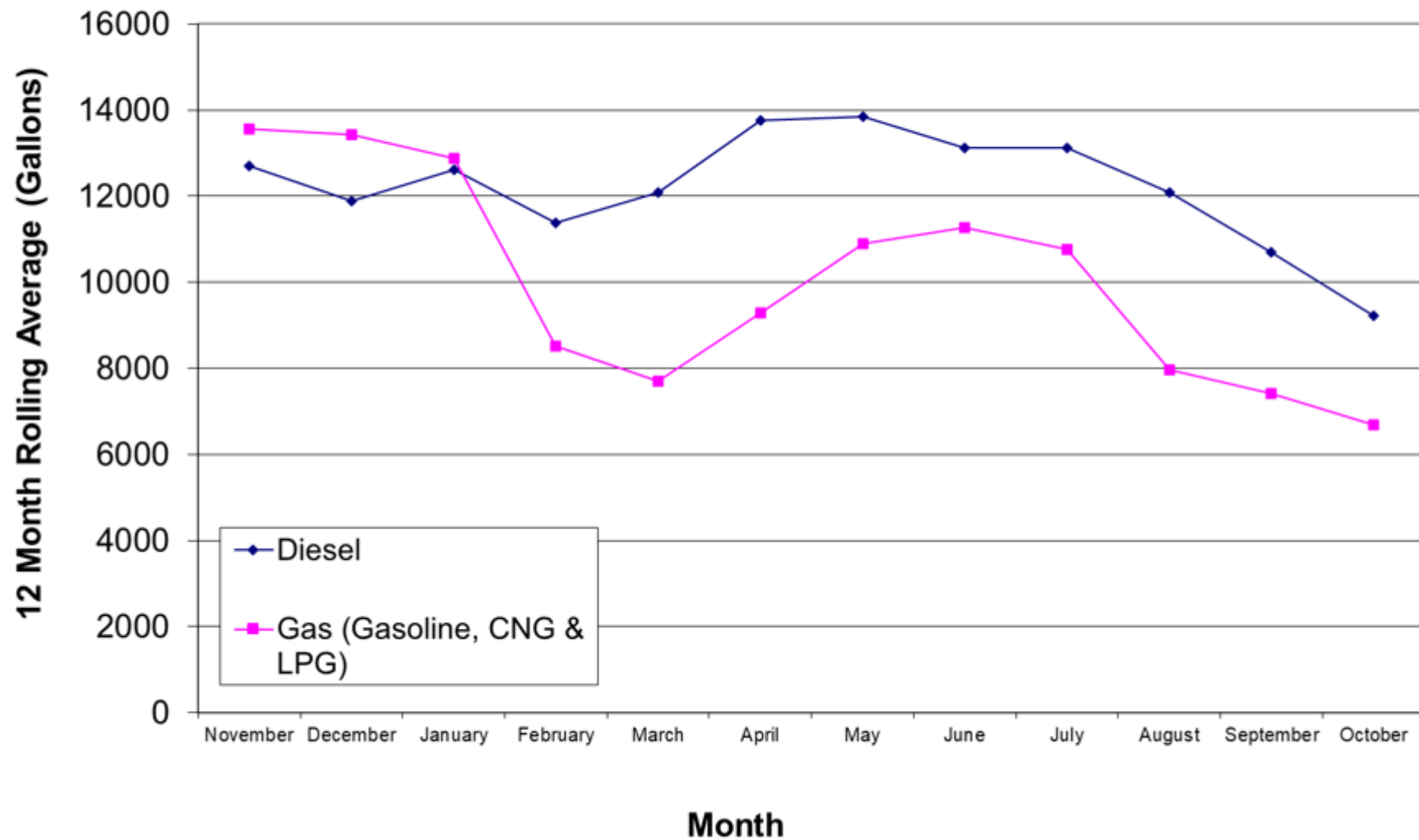
A4302_MAHLE_Muskegon_MI - Monthly Emissions

| Year | Month | NO _x (Tons) | CO (Tons) | | |
|------|-----------|---------------------------|--------------|--|--|
| 2021 | January | 0.0735 | 0.6807 | | |
| | February | 0.0365 | 0.7594 | | |
| | March | 0.2831 | 0.8704 | | |
| | April | 0.0169 | 0.1427 | | |
| | May | 0.1645 | 3.0244 | | |
| | June | 0.3354 | 2.5838 | | |
| | July | 0.0525 | 0.4102 | | |
| | August | 0.0656 | 0.3068 | | |
| | September | 0.135 | 2.4115 | | |
| | October | 0.3333 | 4.7906 | | |
| | November | 0.7964 | 0.5206 | | |
| | December | 1.0983 | 0.5831 | | |
| 2022 | January | 0.9317 | 4.2993 | | |
| | February | 0.1967 | 1.5809 | | |
| | March | 0.4678 | 2.199 | | |
| | April | 0.5699 | 6.1556 | | |
| | May | 0.3071 | 5.5656 | | |
| | June | 0.3229 | 6.7164 | | |
| | July | 0.083 | 1.7256 | | |
| | August | 0.3011 | 0.7082 | | |
| | September | 0.3086 | 2.5597 | | |
| | October | 0.4537 | 3.0658 | | |
| | November | 0.3629 | 3.2547 | | |
| | December | 0.1336 | 0.4056 | | |
| 2023 | January | 0.0558 | 0.9993 | | |
| | February | 0.3178 | 3.6299 | | |
| | March | 0.3331 | 3.2415 | | |
| | April | 0.0825 | 1.6107 | | |
| | May | 0.033 | 0.0033 | | |
| | June | 0.0505 | 0.005 | | |
| | July | 0.1466 | 3.0498 | | |
| | August | 0.2953 | 4.6438 | | |
| | September | 0.1608 | 1.3643 | | |
| | October | 0.1838 | 1.7376 | | |
| | November | 0.1012 | 0.5465 | | |
| | December | 0.0654 | 0.1788 | | |
| 2024 | January | 0.0658 | 0.1478 | | |
| | February | 0.0608 | 0.0493 | | |
| | March | 0.2428 | 0.3579 | | |
| | April | 0.2402 | 2.4962 | | |
| | May | 0.1584 | 2.4998 | | |
| | June | 0.0293 | 0.5913 | | |
| | July | 0.1096 | 2.2792 | | |
| | August | 0.0131 | 0.2731 | | |
| | September | 0.0235 | 0.4883 | | |
| | October | 0.0288 | 0.599 | | |
| | November | | | | |
| | December | | | | |

Fuel Consumed Detail for MAHLE Engine Test Lab per EGLE MI-ROP-A4302-2020a



Fuel Usage Detail for MAHLE Engine Test Lab 12 Month Rolling Average per EGLE MI-ROP-A4302-2020a



A4302_MAHLE_Muskegon_MI

Sep-24

| | | | | | | |
|-----------------|----------------|--------|------------------|-------------------|------------------|-------------------------|
| Total Test Lab | Gallons Gas | 313 | Hours Gas | 120.9 | | |
| | Gallons Diesel | 1,349 | Hours Diesel | 186 | | |
| | Gallons LPG | - | Hours LPG | 0 | | |
| | SCF CNG | - | Hours CNG | 0 | | |
| Permitted Cells | Hours Diesel | 0.00 | Monthly | Annual Projection | | 12 Month Rolling Total% |
| | Hours Gas | 120.90 | Percent of Limit | (Gal or Tons | Percent of Limit | (Gal or Tons |
| | Hours LPG | 0.00 | | | | |
| | Hours CNG | 0.00 | | | | |
| | Gallons Diesel | - | 0% | 9749.71 | 2% | 10688.28 |
| | Gallons Gas | 313.00 | | | | |
| | GGE LPG | 0.00 | 7% | 7805.80 | 14% | 7420.27 |
| | GGE CNG | 0.00 | | | | |
| | Nox | 0.02 | 1% | 1.26 | 4% | 1.29 |
| | CO | 0.49 | 7% | 12.24 | 14% | 11.65 |

A4302_MAHLE_Muskegon_MI - Monthly Usage of each fuel

| Year | Month | Diesel (Gallons) | Gasoline (Gallons) | LPG (GGE) | CNG (GGE) |
|------|-----------|---------------------|-----------------------|--------------|--------------|
| 2021 | January | 593.0982 | 433.764238 | 0 | 0 |
| | February | 0 | 486.783162 | 0 | 0 |
| | March | 3512.52 | 542.524324 | 0 | 0 |
| | April | 145.8789 | 90.8071066 | 0 | 0 |
| | May | 278.6251 | 1937.50275 | 0 | 0 |
| | June | 3074.879 | 1642.77964 | 0 | 0 |
| | July | 477.9962 | 260.843416 | 0 | 0 |
| | August | 739.9467 | 192.815217 | 0 | 0.8526 |
| | September | 277.2908 | 1544.6462 | 0 | 0 |
| | October | 1500 | 3064.29113 | 0 | 0 |
| | November | 11231 | 280.504789 | 0 | 5.8104 |
| | December | 15585 | 305.354717 | 0 | 0 |
| 2022 | January | 10556.96 | 2709.60792 | 0 | 0 |
| | February | 1757.456 | 1005.70432 | 0 | 0 |
| | March | 5272.344 | 1386.47876 | 0 | 0 |
| | April | 3989 | 3928.3513 | 0 | 0 |
| | May | 576 | 3565.15822 | 0 | 0 |
| | June | 0 | 4305.3965 | 0 | 0 |
| | July | 0 | 1106.14734 | 0 | 0 |
| | August | 3888.315 | 436.915493 | 0 | 0 |
| | September | 2701.398 | 1629 | 0 | 0 |
| | October | 4459.971 | 1945.69945 | 0 | 0 |
| | November | 3004 | 2069.26855 | 0 | 5.8104 |
| | December | 1661.898 | 252.707965 | 0 | 0 |
| 2023 | January | 112.6262 | 640.065531 | 0 | 0 |
| | February | 2086.627 | 2317.68419 | 0 | 0 |
| | March | 2580.735 | 2066.53688 | 0 | 0 |
| | April | 73.91436 | 1032.14472 | 0 | 0 |
| | May | 477.929 | 0 | 0 | 0 |
| | June | 731.3189 | 0 | 0 | 0 |
| | July | 0 | 1955 | 0 | 0 |
| | August | 1049.359 | 2972.1872 | 0 | 0 |
| | September | 1386.887 | 868.462151 | 0 | 0 |
| | October | 1460 | 1107.46269 | 0 | 0 |
| | November | 1089 | 341.654804 | 0 | 5.8104 |
| | December | 827 | 111 | 0 | 0 |
| 2024 | January | 855 | 91 | 0 | 0 |
| | February | 850.3281 | 27.8873239 | 0 | 0 |
| | March | 3285.574 | 215 | 0 | 0 |
| | April | 1750.944 | 1592.41957 | 0 | 0 |
| | May | 557.0979 | 1600 | 0 | 0 |
| | June | 13.33633 | 379 | 0 | 0 |
| | July | 0 | 1461 | 0 | 0 |
| | August | 0 | 175.039823 | 0 | 0 |
| | September | 0 | 313 | 0 | 0 |
| | October | 0 | 384 | 0 | 0 |

| Equipment | October-23 | November-23 | December-23 | January-24 | February-24 | March-24 | April-24 | May-24 | June-24 | July-24 | August-24 | September-24 | 12 Month Total |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|
| Boilers | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | |
| DTE Meter Reading (Incl. Pressure Factor) | 0.356832174 | 0.41 | 0.443372617 | 0.417079 | 0.391613611 | 0.463769269 | 0.233079063 | 0.004667805 | 0.000644885 | 0.003730271 | 0.000598538 | 0.001275205 | 2.72 |
| CNG Usage (ICE) | 0.0012725 | 0.001754 | 0.001018 | 0.0012725 | 0.001018 | 0.001018 | 0.001018 | 0.0012725 | 0.001018 | 0.0012725 | 0.001018 | 0.001018 | 0.01 |
| 3.5MMBtu Boiler & Infrared Heater Usage | 0.367 | 0.434 | 0.473 | 0.446 | 0.431 | 0.489 | 0.256 | 0.008 | 0.000 | 0.002 | 0.000 | 0.000 | 2.91 |
| | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | |
| Garage Propane Heater (gallons) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dyno Fuel Usage (19 Test Cells) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | |
| Diesel | 1.46 | 1.089 | 0.827 | 0.855 | 1.164 | 6.142 | 2.988 | 3.593 | 0.304 | 0 | 0 | 1.349 | 19.77 |
| Gasoline | 2.544 | 0.455 | 0.111 | 0.091 | 0.044 | 0.215 | 1.626 | 1.6 | 0.379 | 1.461 | 0.884 | 0.313 | 9.72 |
| LPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| CNG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Part Washer | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | (gals) | |
| Mineral Spirits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ground Water Remediation (Tray Stripper) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | |
| TCE | 0.265 | 0.488 | 0.444 | 0.252 | 0.173 | 2.800 | 0.145 | 0.086 | 0.127 | 0.102 | 0.149 | 0.000 | 5.03 |
| BTEX | 2.734 | 3.051 | 3.848 | 3.913 | 3.630 | 2.403 | 2.340 | 1.851 | 1.088 | | 2.201 | 0.000 | 27.058721 |
| HVOF Fuel (Thermal Spray Lab) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | (1000 gals) | |
| Lab not in use. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HVOF Metal Deposition Materials (Thermal Spray Lab) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | (lbs) | |
| Lab not in use. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Emergency Generator | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | (MMcf) | |
| Natural Gas** | 0.0012725 | 0.001018 | 0.001018 | 0.0012725 | 0.001018 | 0.001018 | 0.001018 | 0.0012725 | 0.001018 | 0.0012725 | 0.001018 | 0.001018 | 0.013234 |
| Storage Tanks (3 UST, AST) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | (1000 gal/mo) | |
| Gasoline | 2.5 | 0.5 | 0.1 | 0.1 | 0.0 | 0.2 | 1.6 | 1.6 | 0.4 | 1.5 | 0.9 | 0.3 | 9.7 |
| Diesel | 1.5 | 1.1 | 0.8 | 0.9 | 1.2 | 6.1 | 3.0 | 3.6 | 0.4 | 0.0 | 0.0 | 1.3 | 19.8 |
| Racing Fuel (Reported in MAERS w/Gasoline throughput) | | | | | | | | | | | | | 0.0 |

Notes:

**Fuel usages based on 1/2 hour per week or 26 hours per year and based on actual measurement (September, 2016)

**Emergency Generator 0.0002545/Tuesday in each month

* Generator failed on Jan. 30th 2024

| Ending Month of 12mo Average | Oct-23 | Nov-23 | Dec-23 | Jan-24 | Feb-24 | Mar-24 | Apr-24 | May-24 | Jun-24 | Jul-24 | Aug-24 | Sep-24 |
|----------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Pollutant | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) | Annual Actual Emissions (t) |
| NSR Regulated Pollutants | | | | | | | | | | | | |
| CO | 25.7 | 17.7 | 16.6 | 55.0 | 51.5 | 47.7 | 39.5 | 50.9 | 47.9 | 49.7 | 49.8 | 33.8 |
| NOX | 4.7 | 3.7 | 2.6 | 5.2 | 4.9 | 4.7 | 4.2 | 7.1 | 6.7 | 6.7 | 6.5 | 6.1 |
| PM (Filterable) | 1.1 | 0.9 | 0.5 | 0.8 | 0.8 | 0.8 | 0.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.4 |
| PM10 (Filterable + Condensable) | 1.1 | 0.9 | 0.5 | 0.8 | 0.8 | 0.8 | 0.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.4 |
| PM2.5 (Filterable + Condensable) | 1.1 | 0.9 | 0.5 | 0.8 | 0.8 | 0.8 | 0.7 | 1.5 | 1.4 | 1.4 | 1.3 | 1.4 |
| SO2 | 1.0 | 0.8 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 | 1.4 | 1.3 | 1.3 | 1.2 | 1.3 |
| VOC | 2.4 | 1.8 | 1.4 | 3.8 | 3.4 | 3.1 | 2.7 | 4.1 | 3.8 | 3.9 | 3.8 | 3.2 |
| Lead | 2.420E-06 | 2.411E-06 | 7.631E-07 | 1.6E-05 | 9.8E-06 | 5.400E-06 | 4.669E-06 | 2.230E-06 | 2.636E-06 | 2.636E-06 | 2.636E-06 | 2.651E-06 |
| Aggregate HAPs Total | 0.38 | 0.27 | 0.25 | 0.79 | 0.74 | 0.69 | 0.58 | 0.74 | 0.69 | 0.72 | 0.71 | 0.50 |
| Aggregate HAPs (Maximum) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| *Individual HAPs | 0.09 | 0.06 | 0.06 | 0.19 | 0.18 | 0.16 | 0.13 | 0.17 | 0.16 | 0.17 | 0.17 | 0.12 |
| * Individual HAPs (Maximum) | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| Green House Gas (GHG) | | | | | | | | | | | | |
| CO2 | 910.4 | 750.9 | 536.0 | 1298.8 | 1089.4 | 944.4 | 855.1 | 1249.5 | 1185.9 | 1182.9 | 1158.1 | 1111.2 |
| CH4 | 0.0 | 0.0 | 0.0 | 0.05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| N2O | 0.0066 | 0.0052 | 0.0034 | 0.011 | 0.0 | 0.0070 | 0.0063 | 0.0081 | 0.0089 | 0.0089 | 0.0087 | 0.0083 |
| GHG as CO2e | 872.6 | 712.5 | 537.5 | 914.9 | 867.0 | 831.5 | 759.2 | 1207.2 | 1143.3 | 1140.4 | 1115.5 | 1068.4 |