

From: [Wallace, William T.](#)
To: [EGLE-ROP](#)
Cc: [Sweeley, Brian J.](#); [Matthews, Cindi A.](#)
Subject: B9073 - ROP Renewal Application
Date: Monday, April 15, 2024 3:13:47 PM
Attachments: [image001.png](#)
[B9073_Cover Letter - Niles ROP Renewal Application .pdf](#)
[B9073_ROP Renewal Application Form EQP 6000 RO Signed.pdf](#)
[B9073_ROP Markup.docx](#)
[B9073_Niles CAM Plan Mark-Up.docx](#)
[B9073_Niles CAM Plan Changes Accepted.docx](#)
[B9073_Niles Maintenance and Inspection Plan Mark-Up.docx](#)
[B9073_Niles Maintenance and Inspection Plan Mark-Up CHANGES ACCEPTED.docx](#)
[B9073_Niles ROP Renewal Emission Calculations Printed.docx](#)
[Niles Butane Storage Emissions-Terminal Fugitives.xlsx](#)

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear Sir/Madam,

Please find enclosed the required five-year ROP renewal application covering continued operation of the MPLX Terminals LLC marketing terminal located in Niles, MI (SRN: B9073).

The enclosed documents include the following:

- Renewal Application Cover Letter
- ROP Renewal Application form EQP 6000 (signed by the Responsible Official)
- Mark up edits of existing ROP
- Two versions of the existing Compliance Assurance Monitoring Plan (mark-up edits and a clean copy with edits accepted)
- Two versions of the existing Maintenance and Inspection Plan (mark-up edits and a clean copy with edits accepted)
- Two Potential to emit documents.
 - Niles ROP Renewal Emission Calculations Printed
 - Niles Butane Storage Emissions – Terminal Fugitives
 - Pertaining to EQP 6000 G1

A hardcopy of the application package is being submitted to the Kalamazoo District Office Supervisor concurrent with this submittal.

Please do not hesitate to contact me at 618-553-3095 or wtwallace@marathonpetroleum.com if you have any questions or require additional information.

Thank you,



Will Wallace
Environmental Engineer
Office: 317-260-3285

Mobile: 618-553-3095

Email: w.wallace@marathonpetroleum.com

1304 Olin Ave
Indianapolis, IN 46222



MPLX Terminals LLC

539 South Main Street
Findlay, OH 45840

3/13/2024

Supervisor
Kalamazoo District
MDEQ, Air Quality Division
7953 Adobe Road
Kalamazoo, MI 49009-5026

Re: Submittal of ROP Renewal Application, MPLX Terminals LLC, Niles Terminal (SRN:B9073)

To Whom It May Concern,

Please find enclosed the required five-year Renewable Operating Permit (ROP) renewal application covering continued operation of the MPLX Terminals LLC Marketing Terminal located in Niles, Michigan (SRN: B9073). The enclosed documents include the following:

- ROP Renewal Application Form certified via Responsible Official signature.
- Mark-up edits of the existing ROP.
- AI-001 – Additional Information Form
- Two versions of the existing Compliance Assurance Monitoring Plan (CAM). These include mark-up edits and a clean copy with edits accepted.
- Two versions of the existing Maintenance and Inspection Plan. These include mark-up edits and a clean copy with edits accepted.
- Potential to emit calculations.

An electronic copy of the aforementioned documents is being submitted concurrent with this submittal. Please do not hesitate to contact me at (618)553-3095 or wtwallace@marathonpetroleum if you have any questions or require additional information.

Sincerely,
MPLX Terminals LLC

Will Wallace
Environmental Engineer
wtwallace@marathonpetroleum.com
C: 618-553-3095



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 B9073	SIC Code 5171	NAICS Code 42710	Existing ROP Number MI-ROP-B9073-2019	Section Number (if applicable)
Source Name Niles Terminal				
Street Address 2216 South Third St				
City Niles	State MI	ZIP Code 49120	County Berrien	
Section/Town/Range (if address not available)				
Source Description Petroleum Bulk Station and Terminal				
<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 MPLX Terminals LLC	Section Number (if applicable)			
Mailing address (<input type="checkbox"/> check if same as source address) 539 South Main St				
City Findlay	State OH	ZIP Code 45840-2169	County Hancock	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:	Section Number (if applicable):
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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 William Wallace		Title Environmental Engineer		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) Marathon Petroleum, 1304 Olin Ave				
City Indianapolis	State IN	ZIP Code 46222	County Marion	Country USA
Phone number 618-553-3095		E-mail address Wtwallace@marathonpetroleum		

Contact 2 Name (optional) Brian Sweeley		Title Environmental Compliance Supervisor		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) Marathon Petroleum				
City Findlay	State OH	ZIP Code 45840	County Hancock	Country USA
Phone number 409-370-6368		E-mail address Bjsweeley@marathonpetroleum.com		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Angela Brown		Title Vice President MPLX Terminals LLC		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) 539 S Main St				
City Findlay	State OH	ZIP Code 45840	County Hancock	Country USA
Phone number 419-421-3774		E-mail address asbrown@marathonpoetroleum.com		

Responsible Official 2 Name (optional) Regina Zolnor		Title Vice President MPLX Terminals LLC		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) 539 S Main St				
City Findlay	State OH	ZIP Code 45840	County Hancock	Country USA
Phone number 419-672-5510		E-mail address RMZolnor@marathonpetroleum.com		

<input type="checkbox"/> 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 checked="" 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 checked="" 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

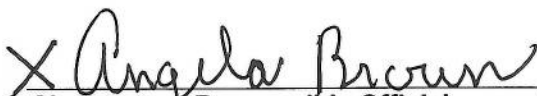
The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.


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)

Angela Brown, Vice President

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


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 checked="" type="checkbox"/> Yes <input 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 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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 checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/>	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI-01	

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)]
EUTKAA1-7	550 gallon fixed roof storage tank that stores additive.	Rule 212(4)(d)	Rule 284(2)(i)
EUWA-10-1	68,400 gallon fixed roof storage tank that stores petroleum contact water	Rule 212(4)(d)	Rule 284(2)(i)
EUWA-10-2	8,400 gallon fixed roof storage tank that stores petroleum contact water	Rule 212(4)(d)	Rule 284(2)(i)
EUBUTANE	One or more skids that inject butane into gasoline tank recirculation loops	Rule 212(4)(i)	Rule 291
EUTKAA1-6	840 gallon fixed roof storage tank that stores additive	Rule 212(4)(d)	Rule 284(2)(i)
EUTKAA10-2	7,900 gallon capacity fixed roof storage tank that stores additive	Rule 212(4)(d)	Rule 284(2)(i)
EUTKAA8-1	7,700 gallon capacity fixed roof storage tank that stores additive	Rule 212(4)(d)	Rule 284(2)(i)
EUTKAA6-3	6,000 gallon capacity fixed roof storage tank that stores additive	Rule 212(4)(d)	Rule 284(2)(i)

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.

<p>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.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>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).</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>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.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>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.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Comments: EURACK-NORTH: Dismantled in 09/2014. The marked-up ROP included with this permit application requests the removal of this load rack and VRU. Additionally, this load rack has not been included in the PTE calculations being submitted with this application.</p>	
<p><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-</p>	

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 Yes, complete the following table. Yes No
 If No, 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 Yes, 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. Yes No

F3. Do any of the PTIs listed above identify **new emission units** that need to be incorporated into the ROP? If Yes, 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. Yes No

F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were not reported in MAERS for the most recent emissions reporting year? If Yes, identify the stack(s) that were not reported on the applicable MAERS form(s). Yes 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 Yes, describe the changes on an AI-001 Form. Yes No

Comments:

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 – <i>Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices</i>	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 checked="" type="checkbox"/> Rule 290 process with limited emissions	EUBUTANE – 87,000 gallon butane storage bullet and additional butane truck offloading skid to be added to existing butane blending system.	09/01/2024

Comments:
 An 87,000 gallon butane bullet will be added to the current butane blending system in September 2024. Additionally, a new butane offloading skid will be constructed for this project. The butane bullet will use the existing tank blending system and will not be capable of in-line blending at the truck load rack. Component fugitive PTE calculations have been included with this application showing that the project PTE is 35 lb/yr (2.92 lb/month) which is below the Rule 290 threshold of 500 lb/month.

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 checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input 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 Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H9. Does the source propose to add, change and/or delete **material limit** 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

H10. Does the source propose to add, change and/or delete **process/operational restriction** 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

H11. Does the source propose to add, change and/or delete **design/equipment parameter** 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

H12. Does the source propose to add, change and/or delete **testing/sampling** 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

H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** 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

H14. Does the source propose to add, change and/or delete **reporting** 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

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-01**



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: B9073	Section Number (if applicable):
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1. Additional Information ID AI-01
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Additional Information

2. Is This Information Confidential? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Part C: CAM Plan:

- SV-VRU-South, SV-VCU-PORT (RANE), and SV-VCU-PORT (ZINK) are subject to a CAM Plan
- An updated CAM Plan is being provided with this renewal submission to remove SV-VRU-NORTH. As previously stated, this VRU has been dismantled and is being removed from the permit.

Part H: Name/description changes:

- Edits are being requested to emission unit descriptions in the Emission Unit Summary Table. The changes consist mostly of tank capacities in the FGTANKFARM Emission Group. The updated capacities are not a result of projects or any physical changes to the tanks. The updated capacities reflect the most up to date information and alarm setpoints.

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

EFFECTIVE DATE: October 22, 2019

ISSUED TO

MPLX Terminals LLC - Niles Terminal

State Registration Number (SRN): B9073

LOCATED AT

2216 South Third Street, Niles, Berrien County, Michigan 49120

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B9073-2019

Expiration Date: October 22, 2024

Administratively Complete ROP Renewal Application Due Between April 22, 2023 and April 22, 2024

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-B9073-2019

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

Rex Lane, Kalamazoo District Supervisor

(Rev. 02/04/19)

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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.

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))**

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, MDEQ.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.

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total Hazardous Air Pollutants (HAPs)	24.9 tons	12 month rolling time period as determined at the end of each calendar month	Sourcewide	SC VI.1	R 336.1213(2)
2. Single HAP	9.9 tons	12 month rolling time period as determined at the end of each calendar month	Sourcewide	SC VI.1	R 336.1213(2)

II. MATERIAL LIMIT(S)

NA

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 calculate and record the stationary source-wide (North and South Terminals combined) emissions rates, in tons, for each single HAP and total combined HAPs for each calendar month and each 12-month rolling time period, as determined at the end of each calendar month. (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

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VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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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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
EURACK-SOUTH	Loading rack for South Terminal with carbon absorption system for primary control device and a portable combustor unit as the backup control device.	01-01-61/ 12-31-82/ 10-24-00	FGLOADRACKS FGMACT-BBBBBB
EURACK-NORTH	Loading rack for North Terminal with carbon absorption system for primary control device and a portable combustor unit as the backup control device.	01-01-71/ 12-31-82	FGLOADRACKS FGMACT-BBBBBB
EUVCU-PORT	Portable vapor combustor (either a RANE or John Zink) used as the backup control system for the loading racks.	06-01-91/ 06-01-00	FGLOADRACKS FGMACT-BBBBBB
EUTK20-13	17,677 barrel (742,434 gal) capacity above ground cone roof storage tank for fuel oil at North Terminal.	01-01-71/NA	FGTANKFARM
EUTK25-3	49,965 20,931 barrel (838,539 879,102 gal) capacity above ground storage tank, changed from an external to internal floating roof (geodome) in 2000 at South Terminal.	01-01-71/ 10-03-00	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK31-11	28,406 28,716 barrel (1,193,052 1,206,072 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK35-4	30,312 29,255 barrel (1,273,104 1,228,710 gal) capacity above ground cone roof storage tank for jet kerosene and fuel oil at South Terminal.	01-01-61/NA	FGTANKFARM
EUTK55-2	48,653 46,370 barrel (2,043,426 1,947,540 gal) capacity above ground fixed roof storage tank with internal floating roof at South Terminal.	01-01-61/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK55-5	48,540 47,124 barrel (2,038,680 1,979,208 gal) capacity above ground storage tank, changed from an external to internal floating roof (geodome) in 2003 at South Terminal.	01-01-61/ 08-01-03	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK55-6	51,176 45,640 barrel (2,149,392 1,916,880 gal) capacity above ground fixed roof storage tank with suspended internal floating roof at South Terminal.	01-01-71/ 11-11-13	FGTANKFARM FGFRTANKS FGMACT-BBBBBB

Commented [WWT1]: EURACK-NORTH has been decommissioned and does not need to be included in the permit

Commented [WWT2]: All tank volume updates are NOT due to physical changes. These volumes more accurately represent our internal documentation and may be due to alarm set point changes.

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUTK55-7	48,253,44,020 barrel (2,026,626,1,848,840 gal) capacity above ground fixed roof storage tank with internal floating roof at South Terminal.	01-01-66/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK64-9	54,824,56,146 barrel (2,302,608,2,358,132 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK67-12	61,188,59,270 barrel (2,569,896,2,489,340 gal) capacity above ground cone roof storage tank changed to an internal floating roof in 2016 at North Terminal.	01-01-71/ 09-01-16	FGTANKFARM FGMACT-BBBBBB
EUTK80-8	79,906,72,390 barrel (3,356,052,3,040,380 gal) capacity above ground cone roof storage tank at South Terminal.	01-01-77/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK100-10	93,826,88,858 barrel (3,940,692,3,732,036 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTKT-1	1,791,1,198 barrel (75,222,50,316 gal) capacity above ground fixed roof transmix tank with internal floating roof at South Terminal.	01-01-61/NA	FGTANKFARM FGFRTANKS

**EUTK80-8
EMISSION UNIT CONDITIONS**

DESCRIPTION

72,390-79,906 barrel (3,356,052-3,940,380-gal) capacity above ground cone roof storage tank at South Terminal.

Flexible Group ID: FGTANKFARM, FGFRTANKS, FGMACT-BBBBBB

POLLUTION CONTROL EQUIPMENT

Fixed cone roof

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. If the true vapor pressure of the petroleum liquid being stored is equal to or greater than 1.5 psia, but not greater than 11.1 psia, EUTK80-8 shall be equipped with an internal floating roof, a vapor recovery system or their equivalent. **(40 CFR 60.112(a)(1))**
2. If the true vapor pressure of the petroleum liquid being stored is greater than 11.1 psia, EUTK80-8 shall be equipped with a vapor recovery system or its equivalent. **(40 CFR 60.112(a)(2))**

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 a record of each petroleum liquid stored, the period stored, and the maximum true vapor pressure of that liquid during the respective storage period. **(40 CFR 60.113(a))**

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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See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. EUTK80-8 shall comply with all applicable provisions set forth in 40 CFR Part 60 Subparts A and K.
(R 336.1213(3))

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).

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
FGLOADRACKS	Loading racks at the North and South Terminals, and the portable combustor that is the backup control.	EURACK-SOUTH EURACK-NORTH EUVCU-PORT
FGTANKFARM	All tanks at the Facility that have applicable requirements.	EUTK20-13 EUTK25-3 EUTK31-11 EUTK35-4 EUTK55-2 EUTK55-5 EUTK55-6 EUTK55-7 EUTK64-9 EUTK67-12 EUTK80-8 EUTK100-10 EUTKT-1
FGFRTANKS	All tanks at the Facility that have a fixed roof and are subject to R 336.1604.	EUTK25-3 EUTK31-11 EUTK55-2 EUTK55-5 EUTK55-6 EUTK55-7 EUTK64-9 EUTK80-8 EUTK100-10 EUTKT-1
FGMACT-BBBBBB	All equipment that is subject to 40 CFR, Part 63, Subpart BBBBBB.	EURACK-SOUTH EURACK-NORTH EUVCU-PORT EUTK25-3 EUTK31-11 EUTK55-2 EUTK55-5 EUTK55-6 EUTK55-7 EUTK64-9 EUTK67-12 EUTK80-8 EUTK100-10

**FGLOADRACKS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Loading racks at the North and South Terminals, and the portable combustor that is the backup control.

Emission Unit: EURACK-SOUTH, ~~EURACK-NORTH~~, EUVCU-PORT

POLLUTION CONTROL EQUIPMENT

Primary vapor control system (VCS) - carbon adsorption. Secondary VCS - John Zink or RANE portable vapor combustor (EUVCU-PORT).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	35 mg*	per liter of organic compounds loaded, averaged over six hours during which at least 300,000 liters of gasoline are loaded.	EURACK-SOUTH With primary VCS in use	SC III.1.a through g, SC V.3, and SC VI.1	R 336.1213(2) 40 CFR 63.11088(a)
2. VOC	80 mg ^{2**}	per liter of organic compounds loaded, averaged over six hours during which at least 300,000 liters of gasoline are loaded.	EURACK-NORTH With primary VCS in use	SC III.1.a through g, SC V.2, and SC VI.1	R 336.1706(2) 40 CFR 63.11088(a)
3. VOC	35 mg ^{2*}	per liter of organic compounds loaded, averaged over six hours during which at least 300,000 liters of gasoline are loaded.	EURACK-SOUTH or EURACK-NORTH With secondary VCS	SC VI.5	R 336.1702(b) 40 CFR 63.11088(a)
4. Opacity	0% ²	6 minutes	EUVCU-PORT	SC VI.5	40CFR 64.6(c)(1)), 40 CFR Part 63 Subpart BBBBB

Commented [WWT3]: Limit no longer applicable - request for removal of EURACK-NORTH

* Equivalent to 0.3 pounds per 1,000 gallons of organic compounds loaded.

** Equivalent to 0.7 pounds per 1,000 gallons of organic compounds loaded.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. **CONTROL SYSTEM:**

- a. To ensure proper operation of the Primary VCS and compliance with R 336.1702(b), the average maximum vacuum level of each regeneration cycle shall be equal to or greater than 26 inches of Hg over a 6-hour period during active gasoline loading and the carbon beds shall be regenerated at least once every 15

minutes, except for periods of maintenance. (R 336.1213(2), 40 CFR 64.6(c)(3), 40 CFR 64.7(a), 40 CFR 64.7(c)(1))

- b. If proper regeneration of a carbon bed does not occur at least once every 15 minutes during active loading, except for periods of maintenance, and if the average maximum vacuum specified in condition III.1.a above is not achieved, the permittee shall immediately cease loading of gasoline at that rack until proper regeneration of the carbon bed is restored or until the Secondary VCS is brought on-line. (R 336.1213(2))
- c. The permittee shall not load gasoline at the loading racks unless either the Primary or Secondary VCSs are installed and operating properly.² (R 336.1702(a), R 336.1910, 40 CFR 63.11088(a))
- d. The permittee shall operate EUVCU-PORT as recommended by the manufacturer. (R 336.1213(2))
- e. The permittee shall only use propane or natural gas for maintaining a flame in EUVCU-PORT. (R 336.1213(2))
- f. The permittee shall maintain and operate the pressure monitoring system and associated equipment according to the manufacturer's recommendations. (40 CFR 64.7(b))
- g. As specified in R 336.1627(9), the Primary VCS shall be operated to prevent gauge pressure in the delivery vessel from exceeding 0.6 pounds per square inch and to prevent vacuum from exceeding - 0.2 pounds per square inch gauge. (R 336.1702(d))

2. GASOLINE TANK TRUCK LOADING/UNLOADING:

- a. As specified in R 336.1627, the permittee shall not operate the loading racks unless the following provisions are met: (R 336.1702(d))
 - i. As specified in R 336.1627(5), there shall be no visible liquid leaks from the gasoline tank truck or vapor collection system, except when the disconnection of dry breaks in liquid lines produces a few drops of liquid. (R 336.1702(d))
 - ii. As specified in R 336.1627(7), there shall be no gas detector reading greater than or equal to 100% of the lower explosive limit at a distance of one inch from the location of the potential leak in the vapor recovery unit. Leaks shall be detected by a combustible gas detector using the test procedures described in R 336.2005, as described in V.1. (R 336.1702(d), 40 CFR 64.6(c)(2))
 - iii. As specified in R 336.1627(8), there shall be no visible leaks, except from the disconnection of bottom loading dry breaks and from raising top loading vapor heads, where a few drops are permitted. (R 336.1702(d))
- b. The permittee shall act to ensure that the terminal loading rack and the tank truck vapor control systems are connected during loading of a gasoline tank truck at the affected facility. (R 336.1213(2))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. Carbon adsorption shall be the Primary VCS for the loading racks. (R 336.1702(b))
- 2. The permittee shall only use EUVCU-PORT to control emissions from the loading racks during maintenance or malfunction of the primary VCS. This includes maintenance or malfunction of the receiving tank for gasoline recovered by the primary VCS.² (R 336.1201(3))
- 3. The loading racks shall utilize submerged fill pipes for transferring liquids from stationary vessels into delivery vessels. (R 336.1706(1))
- 4. Each delivery vessel loaded with organic compounds having a true vapor pressure of more than 1.5 psia, other than crude oil or condensate oil, shall be equipped, maintained, or controlled with all of the following: (R 336.1706(3))
 - a. An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any organic compound can be loaded. (R 336.1706(3)(a))
 - b. A device to ensure that the vapor-tight collection line shall close upon disconnection so to prevent the release of organic vapor. (R 336.1706(3)(b))
 - c. A device to accomplish complete drainage before the loading device is disconnected or a device to prevent liquid drainage from the loading device when not in use. (R 336.1706(3)(c))
 - d. Pressure-vacuum relief valves that are vapor-tight and set to prevent the emission of displaced organic vapor during the loading of the delivery vessel, except under emergency conditions. (R 336.1706(3)(d))

- e. Hatch openings that are kept closed and vapor-tight during the loading of the delivery vessel. **(R 336.1706(3)(e))**

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 test for vapor leaks in the vapor control system as described in R 336.1627(6) using the methods described in R 336.2005 at least once each calendar quarter. The results of each leak test shall be maintained on file. **(R 336.1213(3), 40 CFR 64.6(c)(1))**
- ~~2. If the permittee commences to load gasoline products again through EURACK-NORTH instead of just distillates, then the permittee shall conduct emissions testing on the Primary VCS at EURACK-NORTH for VOCs and control efficiency in accordance with 40 CFR Subpart XX using EPA Methods 2A, 21, and 25B within 6 months of that date. **(R 336.1213(3))**~~
 - ~~c. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R 336.1213(3))**~~
 - ~~d. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. **(R 336.12001(3))**~~
 - ~~e. The permittee shall submit a complete test report of the test results to the District Supervisor or the Technical Programs Unit within 60 days following the last date of the test. **(R 336.12001(4))**~~
3. The permittee shall conduct emissions testing on the Primary VCS at EURACK-SOUTH for VOCs and control efficiency in accordance with 40 CFR 60 Subpart XX using EPA Methods 2A, 21, and 25B. The test shall be performed once within the effective dates of the permit. **(R 336.1213(3))**
 - a. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R 336.1213(3))**
 - b. The permittee shall notify the District Supervisor or the Compliance Support Unit no less than 7 days prior to the anticipated test date. **(R 336.12001(3))**
 - c. The permittee shall submit a complete test report of the test results to the District Supervisor or the Compliance Support Unit within 60 days following the last date of the test. **(R 336.12001(4))**

VI. MONITORING/RECORDKEEPING

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

1. For each scheduled work day that the Primary VCS is in use the permittee shall monitor the carbon bed pressure using an electronic recording device (or equivalent data recording device approved by the District Supervisor) and record any deviations in static pressure or regeneration frequency. An excursion occurs when the maximum vacuum level of each regeneration cycle does not average a minimum of 26 inches of Hg over a 6-hour period during gasoline loading and/or unloading operations and the load rack is not immediately shutdown. **(R 336.1213(3), 40 CFR 64.6(c)(1))**
2. The permittee shall keep a record consisting of the date, time, and duration of each malfunction of each Primary VCS or scheduled maintenance of each Primary VCS (or the receiving tank for gasoline recovered from the primary VCS), which results in Primary VCS downtime. **(R 336.1213(3))**
3. The permittee shall maintain a written record of the dates and hours of operation of EUVCU-PORT and on which loading rack the unit is used.² **(R 336.1201(3))**
4. The permittee shall maintain a written record of all replacements, maintenance, repairs, and/or additions made to the VCSs. **(R 336.1213(3))**
5. The permittee shall use a thermocouple or other device to continuously monitor for the presence of a pilot flame at all times that the Secondary VCS is in use. An excursion shall be defined as the absence of the pilot flame during gasoline loading and/or unloading operations and the load rack is not immediately shutdown. **(40 CFR 64.6(c)(1), 40 CFR Part 63 Subpart BBBBBB)**
6. A copy of the inspection and maintenance plan for the Primary VCS shall be kept on-site and made available to the AQD staff upon request. **(R 336.1213(3))**

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7. Upon detecting an excursion or exceedance, the permittee shall restore operation of EU-RACK-SOUTH or EURACK-NORTH to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
8. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 64.7(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))**
4. The permittee shall submit any performance test reports, including any RATA Reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The report required in VII.2 above shall include:
 - a. Summary information on the number, duration, and cause (including unknown cause, if applicable) of exceedances and excursions and the corrective actions taken;
 - b. Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than for calibration checks);
 - c. A description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period, if applicable. If a QIP has been completed the report shall include documentation that the plan has been implemented and reduced the likelihood of similar levels of excursions or exceedances occurring. **(40 CFR 64.9)**
6. The permittee shall submit a QIP for EURACK-NORTH or EURACK-SOUTH if an excursion occurs six times in a 6 month reporting period. An excursion is when the maximum vacuum level of each regeneration cycle does not average a minimum of 26 inches of Hg over a 6-hour period during gasoline loading and/or unloading operations and the load rack is not immediately shutdown. The permittee shall submit a QIP for EUVCU-PORT if an excursion occurs four times in a 6 month reporting period which is if the flame is not present during gasoline loading and/or unloading and the load rack is not immediately shutdown. **(R 336.1213(3), 40 CFR 64.8(a))**

See Appendix 8

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:

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Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-VRU-SOUTH*	12	16.7	R 336.1702(a), R 336.1910
2. SV-VRU-NORTH*	6	13.8	R 336.1702(a), R 336.1910
3. SV-VCU-PORT (RANE)	72	13	R 336.1702(a), R 336.1910
4. SV-VCU-PORT (ZINK)	30	25	R 336.1702(a), R 336.1910

*Stacks SV-VRU-SOUTH and ~~SV-VRU-NORTH~~ vents horizontally.

IX. OTHER REQUIREMENT(S)

- The permittee shall, at all times, maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. **(40 CFR 64.7(b))**
- If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**
- The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR 64.7(c)(3))**
- The permittee shall comply with all applicable provisions of R 336.1627 and R 336.1706.² **(R 336.1201(3))**
- The permittee shall maintain written procedures for proper operation of the Primary and Secondary VCSs and the terminal loading racks. These written procedures shall be accessible at the terminal upon AQD request. **(R 336.1706(4))**
- The permittee shall certify that each gasoline tank truck utilized at the affected facility is equipped with vapor collection equipment that is compatible with the terminal's vapor control system and that each gasoline tank truck is certified as specified in R 336.1627(2). **(R 336.1213(2))**
- As specified in R 336.1627(10), the department may require the owner or operator of any vapor collection system subject to the provisions of subrule (6) of this rule to test the system in accordance with R 336.2005. The tests shall be conducted within 60 days following receipt of written notification from the department. Notification of the exact time and location of the test shall be given to the department, in writing, not less than 7 days before the actual test date. Documentation of the test that states the date and location of the test, test procedures, the type of equipment used, and the results of the test shall be submitted to the department within 60 days following the last date of the test. If the time or location of the test changes for any reason, then the owner or operator shall notify the department as soon as practicable. **(R 336.1702(d))**
- As specified in R 336.1627(11), the permittee shall certify that any delivery vessel or component of a vapor collection system that fails to meet any provisions of R 336.1627 shall not be operated until the necessary repairs have been made, the vessel or vapor recovery unit retested, and the test results have been submitted to the AQD. **(R 336.1702(d))**

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).

**FGTANKFARM
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

All tanks at the Facility that have applicable requirements.

Emission Units: EUTK20-13, EUTK25-3, EUTK31-11, EUTK35-4, EUTK55-2, EUTK55-5, EUTK55-6, EUTK55-7, EUTK64-9, EUTK67-12, EUTK80-8, EUTK100-10, EUTKT-1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	53.11 tons ²	12 month rolling time period as determined at the end of each calendar month	FGTANKFARM	SC VI.2	R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Gasoline	580 million gallons ²	12 month rolling time period as determined at the end of each calendar month	FGTANKFARM	SC VI.4	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 calculate and record the total VOC emission rate, in tons emitted, from FGTANKFARM for each calendar month. (R 336.1213(3))
2. The permittee shall calculate and record the 12-month rolling average VOC emissions rate, in tons emitted, from FGTANKFARM, as determined at the end of each calendar month. (R 336.1213(3))

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3. The permittee shall monitor and record the total gasoline throughput, in gallons, for the stationary source (South Terminal and North Terminal combined) for each calendar month. **(R 336.1213(3))**
4. The permittee shall monitor and record the 12-month rolling time period gasoline throughput, in gallons, for the stationary source (South Terminal and North Terminal combined), as determined at the end of each calendar month.² **(R 336.1201(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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart BBBBBB, as they apply to FGTANKFARM.² **(40 CFR Part 63, Subpart BBBBBB)**

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).

**FGFRTANKS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

All tanks at the Facility that have a fixed roof and are subject to R 336.1604.

Emission Unit: EUTK25-3, EUTK31-11, EUTK55-2, EUTK55-5, EUTK55-6, EUTK55-7, EUTK64-9, EUTK80-8, EUTK100-10, EUTKT-1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not store any organic compound having a true vapor pressure of more than 1.5 psia, at actual storage conditions, in any storage tanks in FGFRTANKS unless the provisions of R 336.1604 are complied with.² **(R 336.1702(d))**
2. As specified in R 336.1604(1), when storing any organic compound having a true vapor pressure of more than 1.5 psia but less than 11 psia, at actual storage conditions, in any storage tank in FGFRTANKS one of the following conditions must be met:
 - a. As specified in R 336.1604(1)(a) each subject vessel shall be capable of maintaining working pressures sufficient to prevent organic vapor or gas loss to the atmosphere at all times, except under emergency conditions.

OR
 - b. As specified in R 336.1604(1)(b), each subject vessel shall be equipped and maintained with a floating cover or roof which rests upon, and is supported by, the liquid being contained and has a closure seal or seals to reduce the space between the cover or roof edge and the vessel wall. The seal or any seal fabric shall have no visible holes, tears, or other nonfunctional openings.

OR
 - c. As specified in R 336.1604(1)(c), each subject vessel shall be equipped and maintained with a vapor recovery system, or other control system approved by the AQD, which recovers not less than 90% by weight of the uncontrolled organic vapor that would otherwise be emitted into the atmosphere. **(R 336.1702(d))**
3. When storing any organic compound having a true vapor pressure of more than 1.5 psia but less than 11 psia, at actual storage conditions, all openings, except stub drains, shall be equipped with covers, lids, or seals that meet the following requirements:

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- a. As specified in R 336.1604(2)(a), the cover, lid, or seal is in the closed position at all times, except when in actual use. **(R 336.1702(d))**
- b. As specified in R 336.1604(2)(b), automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports. **(R 336.1702(d))**
- c. As specified in R 336.1604(2)(c), rim vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports. **(R 336.1702(d))**

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 a written record of the true vapor pressure, at actual storage conditions, of each fuel, dye, additive, or other substance stored in each vessel. **(R 336.1213(3))**
2. When storing any organic compound having a true vapor pressure of more than 1.5 psia, but less than 11 psia, at actual storage conditions, the permittee shall perform a semiannual routine inspection of each vessel to ensure compliance with R 336.1604(1) and R 336.1604(2) as required by R 336.1702(d). The permittee shall keep a record of the results of this semiannual inspection. **(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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. Pursuant to R 336.1702(d) the permittee shall comply with all applicable provisions of R 336.1604. **(R 336.1213(2))**

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).

FGBBBBBB
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

All equipment that is subject to 40 CFR, Part 63, Subpart BBBBBB.

Emission Units: EURACK-SOUTH, ~~EURACK-NORTH~~, EUVCU-PORT, EUTK25-3, EUTK31-11, EUTK55-2, EUTK55-5, EUTK55-6, EUTK55-7, EUTK64-9, EUTK67-12, EUTK80-8, EUTK100-10

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the procedures specified in 40 CFR 60.502(e)-(j). **(40 CFR 63.11088(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. No pressure-vacuum vent in the Primary VCS shall begin to open at a system pressure less than 4,500 pascals (18 inches of water). **(40 CFR 63.11088(a))**
2. Each gasoline storage tank shall meet the applicable emission limit and management practices specified in Table 1 of Subpart BBBBBB. **(40 CFR 63.11087(a))**

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 perform a monthly leak inspection of all equipment in gasoline services. For this inspection, detection methods incorporating sight, sound, and smell are acceptable: **(40 CFR 63.11089)**
 - a. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in Condition V.1.b. **(40 CFR 63.11089)**
 - b. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reasons why the repair was not feasible and the date each repair was completed. **(40 CFR 63.11089)**
2. For the monthly leak inspection required under Condition VI.1, a log book shall be used and shall be signed by the permittee at the completion of each inspection. A section of the log book shall contain a list, summary

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description, or diagram(s) showing the location of all equipment in gasoline service at the facility. Each detection of a leak or vapor leak shall be recorded in the log book. **(40 CFR 63.11089)**

3. The permittee shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the VCS, as specified in 40 CFR 63.11092(b). **(40 CFR 63.11092(b))**
4. The permittee shall keep records of the results of annual certification testing for each gasoline cargo tank loading at FGLOADRACKS, keeping the documentation specified in 40 CFR 63.11094(b), except as noted below: **(40 CFR 63.11094(b))**
 - a. As an alternative to keeping records at the terminal of each gasoline cargo tank test result, the permittee may either **(40 CFR 63.11094(c))**:
 - i. Make instantly available at the terminal an electronic copy of each record; or
 - ii. Have documentation demonstrating that the terminal operates an automation system that prevents gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading.
5. The permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.11094(g)(1))**
6. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with Condition IX.1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.11094(g)(2))**
7. The permittee shall comply with the applicable testing and monitoring requirements for each gasoline storage tank. **(40 CFR 63.11087(c))**
8. The permittee shall submit applicable notifications for each gasoline storage tank. **(40 CFR 63.11087(d))**
9. The permittee shall keep applicable records and submit applicable reports for each gasoline storage tank. **(40 CFR 63.11087(e))**
10. Each gasoline storage tank subject to, and in compliance with, the control requirements of 40 CFR Part 60, Subpart Kb, will be deemed in compliance with 40 CFR 63.11087. For each storage tank in compliance with the applicable control requirements of 40 CFR Part 60, Subpart Kb, this determination must be included in the Notification of Compliance Status report required under 40 CFR 63.11093(b), **(40 CFR 63.11087(f))**

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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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1. The permittee shall comply with all the applicable provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and BBBBBB (Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities). **(40 CFR 63 Subpart BBBBBB)**

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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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).

APPENDICES

Appendix 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
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2. Schedule of Compliance

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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. 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. 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. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. 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-B9073-2014. 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-B9073-2014 is being reissued as Source-Wide PTI No. MI-PTI-B9073-2019.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201500039/May 5, 2015	Clarification of stack orientations for SV-VRU-NORTH and SV-VRU-SOUTH. These stacks vent horizontally.	FGLOADRACKS
122-16	201600194/March 7, 2017	Incorporate PTI 122-16, which changes the service of Tank ID 67-12 from fuel oil to gasoline and plans to install a cable-suspended internal floating roof in tank EUTK67-12.	EUTK67-12 FGTANKFARM

Appendix 7. Emission Calculations

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

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the 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

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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.

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

CARBON ADSORBER VAPOR RECOVERY UNIT (VRU) FOR VOC CONTROL

MPLX TERMINALS LLC
NILES, MI

I. Background

Background information about the units covered in this CAM plan is provided below. This information is specific to the MPLX Terminals LLC – Niles, Michigan facility.

Emission Unit Description	South Liquid Petroleum Loading Rack	
Identification & Air Pollution Control Device ID	EURACK-SOUTH	
Applicable Regulation	MI-ROP-B9073-2019 Condition FG-LOADRACKS D.I.1; MI APC Rule 336.1213(2)	
Emission Limit (VOC)	35 mg/liter of organic compounds loaded	
Monitoring Requirements	Monitor vacuum profile during carbon bed regeneration cycle and provide leak detection and repair program.	
Control Technology	<u>Carbon adsorber.</u>	

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

II. Monitoring Approach

The key elements of the monitoring approach are as follows:

- Monitoring vacuum of the carbon beds can provide an early indication of potential problems with bed regeneration or vessel tightness.
- Absence of leaks indicates that proper vapor control is taking place and the equipment is functioning as intended.

	Indicator 1	Indicator 2
A. Indicator	Monitor vacuum level of carbon beds during regeneration cycle.	Quarterly leak detection and repair of vapor recovery unit.
B. Indicator Range	<p>An excursion occurs when the maximum vacuum level of each regeneration cycle does not average 26" Hg over a 6-hour period during gasoline loading operations and the load rack is not immediately shutdown.</p> <p>When an excursion occurs, gasoline loading / unloading at the loading rack will be shut down until proper regeneration of the carbon bed is restored or until the Secondary Vapor Control System is brought on-line.</p> <p>An excursion will trigger an investigation, corrective action, and a reporting requirement.</p>	<p>An excursion is defined as detection of a gas detector reading greater than or equal to 100% of the lower explosive limit at a distance of one inch from the location of the potential leak in the vapor recovery unit and the load rack is not immediately shutdown.</p> <p>When an excursion occurs, gasoline loading / unloading will be shut down at the loading rack until the repair is made or until the Secondary Vapor Control System is brought on-line.</p> <p>An excursion will trigger an investigation, corrective action, and a reporting requirement.</p>
C. QIP Threshold	If pressure readings occur outside the range 6 times in a 6 month reporting period.	None proposed

NOTE: An excursion from an indicator range is not necessarily a deviation under the Renewable Operating Permit. A deviation occurs only if the excursion results in a situation where a permit condition or limit was not continuously achieved. If an excursion occurs it will be reported as part of the semi-annual Renewable Operating Permit certification.

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

III. Performance Criteria

	Indicator 1	Indicator 2
A. Data Representativeness	The vacuum during the regeneration cycle is measured with a pressure transmitter in the vacuum pump suction line.	A handheld monitor is used to check for leaks in the vapor collection system during loading operations.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	Pressure transmitter is calibrated per manufacturer's specifications. An annual check is performed on the current for drift.	Follow procedures in R 336.2005.
D. Monitoring Frequency	Bed vacuums are continuously monitored when the vapor recovery unit is in-use.	Quarterly, when the vapor recovery unit is in-use.
E. Data Collection Procedures	A data acquisition system (DAS) records the pressure profile during each regeneration cycle.	Records of inspections, leaks found, leaks repaired.
F. Averaging period	6 hour average of the maximum vacuum achieved during each regeneration cycle	None

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

IV. JUSTIFICATION

A. Rationale for Selection of Performance Indicators

The carbon adsorber system was selected specifically for this installation based on the maximum expected loading and types of products loaded. The carbon beds and vacuum pump were sized appropriately. The vacuum achieved during regeneration is an indication of the performance of the VRU. If vacuum levels are too low, the carbon bed may not fully regenerate. Monitoring of the vacuum profile during regeneration, coupled with routine inspection activities, serves to verify that the VRU is operating properly and provides a reasonable assurance of compliance.

A quarterly leak inspection program is performed to help ensure that the vapors released during loading are captured and conveyed to the VRU for proper treatment. A handheld monitor is used to detect leaks in the vapor collection system following test procedures described in R 336.2005.

B. Rationale for Selection of Indicator Ranges

For the first indicator, the VRU system was designed and demonstrated by compliance tests to achieve the specified emissions limit when regenerated as specified.

The second indicator identifies leaks for necessary repairs. It is required by R 336.1627(7).

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

PORTABLE VAPOR COMBUSTOR UNIT (VCU) FOR VOC CONTROL

MPLX TERMINALS LLC
NILES, MI

I. Background

Background information about the vapor combustor units covered in this CAM plan is provided below. This information is specific to the MPLX Terminals LLC – Niles, Michigan facility.

Emission Unit Description	South Liquid Petroleum Loading Rack
Identification & Air Pollution Control Device	EUVCU-PORT
Applicable Regulation	MI-ROP-B9073-2019, Condition FG-LOADRACKS D.I.3 and D.I.4; MI APC Rule 336.1702(b) and R 336.1301(c).
Emission Limit (VOC)	35 mg/liter of organic compounds loaded
Opacity Limit	0%
Monitoring Requirements	Monitor flame presence and perform visible emission checks.
Control Technology	Portable Vapor Combustion Air-Assisted Flare

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

II. Monitoring Approach

The key elements of the monitoring approach are as follows:

- The presence of a pilot flame ensures that hydrocarbon vapors will ignite when in the presence of the pilot.
- Absence of visible emissions indicates that complete combustion is taking place.

	Indicator 1	Indicator 2
A. Indicator	Monitor the presence of a pilot flame at all times gasoline loading / unloading is occurring using a heat sensing device (such as an ultraviolet beam detector or thermocouple).	Visible emission check performed at least once each scheduled work day when in operation.
B. Indicator range	<p>An excursion occurs when a pilot flame is not detected during gasoline loading / unloading and the load rack is not immediately shutdown.</p> <p>When an excursion occurs gasoline loading / unloading at the load rack will be shut down until the vapor combustor unit is repaired or replaced, or the Primary Vapor Control System is brought on-line.</p> <p>An excursion will trigger an investigation, corrective action, and a reporting requirement.</p>	<p>An excursion occurs if visible emissions are observed for 5 cumulative minutes during two consecutive hours and gasoline loading / unloading at the load rack is not immediately shutdown.</p> <p>When an excursion occurs gasoline loading / unloading at the load rack will be shut down until the vapor combustor unit is repaired or replaced, or the Primary Vapor Control System is brought on-line.</p> <p>An excursion will trigger an investigation, corrective action, and a reporting requirement.</p>
C. QIP Threshold	None specified	If visible emissions are observed for 5 cumulative minutes during two consecutive hours, two days in a 1-month reporting period.

NOTE: An excursion from an indicator range is not necessarily a deviation under the Renewable Operating Permit. A deviation occurs only if the excursion results in a situation where a permit condition or limit was not continuously achieved. If an excursion occurs it will be reported as part of the semi-annual Renewable Operating Permit certification.

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

III. Performance Criteria

	Indicator 1	Indicator 2
A. Data Representativeness	The heat sensing device sends a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off.	Non-Method 9 visual observation of vapor combustor unit exhaust
B. Verification of Operational Status	Self-test feature	N/A
C. QA/QC Practices and Criteria	When vapor combustor unit is in operation, maintenance of heat sensing device per manufacturer's specifications, and annual check of system shut down alarm.	N/A
D. Monitoring Frequency	Continuous flame detection during operation	Scheduled work days; 15-minute periods following positive observation until visible emissions are no longer observed if load rack is not shutdown.
E. Data Collection Procedure	Malfunction/response recorded manually upon occurrence	Manual record
Averaging Period	N/A	N/A – no opacity readings are collected for averaging.

NOTE: The phrase “scheduled work day”, as applied in this Plan, refers to each scheduled day of work, Monday through Friday, excluding holidays, when gasoline is being loaded at the loadrack.

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

IV. Justification

A. Rationale for Selection of Performance Indicators

The portable vapor combustor unit was custom-designed specifically for this installation based on the maximum expected loading and types of products loaded. The burner tips were sized appropriately. The presence of a pilot flame and absence of visible emissions are important variables in the performance of the flare. The pilot flame is monitored with a heat sensing device (such as an ultraviolet beam detector or thermocouple), which relays pilot failure to a control panel. Both factors are simple indicators that prove combustion has been achieved. Monitoring of the pilot flame and visible emissions during operations, serve to verify that the flare is operating properly and provide a reasonable assurance of compliance.

B. Rationale for Selection of Indicator Ranges

The selected indicator ranges are presence of pilot flame and presence of no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported.

VAPOR RECOVERY UNIT MAINTENANCE & INSPECTION PLAN

NILES LIGHT PRODUCT TERMINAL – MPLX TERMINALS LLC

1.0 INTRODUCTION

This Maintenance and Inspection Plan is developed pursuant to Rule 336.1213(3) of Michigan's Administrative Rules for Air Pollution Control. The purpose of this plan is to describe the standard operating procedures that will be used to inspect and maintain the primary Vapor Control Systems (VCS) at the Niles South Load Rack (EURACK- SOUTH). The primary VCS is a carbon adsorption system using a Vapor Recovery Unit (VRU).

The maintenance and inspection program includes the following elements:

- Description of the items or conditions that shall be inspected
- The frequency of inspection or maintenance
- Responsible position or group

2.0 MAINTENANCE AND INSPECTION PROGRAM

This program is designed to establish a maintenance and inspection schedule for key equipment and accessories associated with the VRUs not already covered through the Compliance Assurance Monitoring Plan (CAM) and Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities - Notice of Compliance Status (NOCS). Components of the VRUs that need to be inspected or maintained, the frequency of inspection or maintenance, and the group responsible, are listed in **Table 1**.

MPLX Terminals LLC will keep a record of equipment inspection and maintenance activities conducted in accordance with this plan. The records, which will be kept for five years, will include the following information:

- Date of inspection
- Inspector's name or initials
- Description of inspection or maintenance
- Comments and additional information, as necessary

Table 1 – Inspection & Maintenance Program

Items Inspected	Frequency of Inspection*	Responsibility	Recordkeeping
VRU	Weekly Inspection: 1. Check motors and pumps for unusual noises 2. Verify glycol level	Terminal Operations	Electronic documentation
VRU Motors and Pumps	Annual Preventative Maintenance: Service the motors and pumps.	M&VCS Specialist	Electronic documentation
Electrical Panel	Annual Preventative Maintenance: Check PLC components, tighten wiring, and check fuses.	M&VCS Specialist	Electronic documentation
Vacuum System	Annual Preventative Maintenance: Conduct a leak test on each carbon bed	M&VCS Specialist	Electronic documentation
Emergency Shutdown Faults	Annual Preventative Maintenance: Verify loading shutdown with fault conditions / testing.	M&VCS Specialist	Electronic documentation

***Note:** Inspections and Maintenance are not required if the VRU is not in service and/or gasoline truck loading is not occurring at the load rack.

TABLE 1
SUMMARY OF FACILITY-WIDE POTENTIAL TO EMIT
MPLX Terminals LLC
Niles Terminal

Emission Unit	Potential to Emit VOCs (Tons/Year)	Potential to Emit Total HAPs (Tons/Year)
Load Rack		
Gasoline, South VRU	84.7	4.41
Truck Leaks		
Gasoline	31.5	1.64
Storage Tanks		
Working/Breathing Losses	53.1	1.09
Miscellaneous		
Leaking Components	0.45	0.04
Total:	169.7	7.2

Notes:

1. The ROP currently limits gasoline throughput to 580 MM gal/yr; the south load rack VRU and backup VCU are each limited to 35 mg/L.

TABLE 2
FUGITIVE VOC EMISSIONS FROM THE LOADING RACK AND TANKER TRUCK LEAKS
MPLX Terminals LLC
Niles Terminal

	Units	Gasoline Loading Rack Limit	Truck Fugitive Leaks
		South Terminal	South Rack
Emission Limit	mg/L	35	13
Rack Throughput Limit	MM gal/yr	580	580
	MM L/yr	2,195	2,195
Emission Estimates	MM mg/yr	76,836	28,539
	g/yr	76,835,500	28,538,900
	lb/yr	169,390	62,916
	ton/yr	84.7	31.5

Notes:

- Throughput is not directly limited under FG-LOADRACKS. However, FGTANKFARM limits gasoline storage to 580 MMGal/yr.
- Emission limits stipulated under FG-LOADRACKS.

**TABLE 3
TANKS CALCULATED EMISSION RATES
MPLX Terminals LLC
Niles Terminal**

Emissions Group	Emission Source	Terminal	Permit Tank Number	Storage Tank Capacity (barrels)	Storage Material	Tank Emission Calculations										Total Gasoline Throughput (permit - 580 million gals/yr)	Total VOC Emissions (permit - 53.11 tons/yr)
						Total VOC & HAP Emission Calculations			Speciated HAP Emission Calculations								
						Throughput (gal/yr)	Calculated VOC Emissions (tons/yr)	Calculated Total HAP Emissions (tons/yr)	Benzene (lb/yr)	Ethyl Benzene (lb/yr)	Hexane (lb/yr)	Toluene (lb/yr)	Isooctane (lb/yr)	Xylenes (lb/yr)	Cumene (lb/yr)		
FGTANKFARM Emission Group	Fixed Roof Tank	North	EUTK20-13	17,677	No. 2 Fuel Oil	526,075.55	0.05	0.00	0.21	0.31	0.04	2.39	-	5.93	-	579,999,995.60	53.08
	Domed External Floating Roof Tank	South	EUTK25-3	20,931	Variable RVP Gasoline	26,977,753.70	3.04	0.06	23.79	2.71	21.12	30.31	28.54	12.57	0.67		
	Internal Floating Roof Tank	North	EUTK31-11	28,406	Variable RVP Gasoline	13,415,754.20	4.04	0.07	30.46	2.55	27.52	35.17	35.12	11.43	0.52		
	Fixed Roof Tank	South	EUTK35-4	30,312	Jet Kerosene & FO	526,075.55	0.08	0.01	0.33	0.48	0.07	3.77	-	9.35	-		
	Internal Floating Roof Tank	South	EUTK55-2	48,653	Variable RVP Gasoline	162,281,810.88	6.35	0.15	52.58	8.32	45.50	76.17	66.66	39.55	2.36		
	Domed External Floating Roof Tank	South	EUTK55-5	48,540	Variable RVP Gasoline	66,584,926.80	2.48	0.06	20.24	3.16	17.57	29.10	25.58	15.00	0.89		
	Internal Floating Roof Tank	South	EUTK55-6	51,176	Variable RVP Gasoline	43,840,324.08	6.92	0.13	52.61	4.73	47.35	62.03	61.16	21.40	1.02		
	Internal Floating Roof Tank	South	EUTK55-7	48,253	Variable RVP Gasoline	183,334,016.96	3.47	0.10	31.79	7.15	26.42	54.44	43.58	34.64	2.22		
	Internal Floating Roof Tank	North	EUTK64-9	54,824	Variable RVP Gasoline	2,811,687.77	7.11	0.12	53.39	3.74	48.53	58.83	60.45	16.32	0.63		
	Internal Floating Roof Tank	North	EUTK67-12	61,188	Variable RVP Gasoline	3,072,409.17	7.31	0.12	54.91	3.85	49.90	60.53	62.18	16.82	0.65		
	Fixed Roof Tank	South	EUTK80-8	79,906	No. 2 Fuel Oil	69,483,355.20	0.77	0.07	3.25	4.63	0.67	36.52	-	89.93	-		
	Internal Floating Roof Tank	North	EUTK100-10	93,826	Variable RVP Gasoline	77,295,274.56	10.16	0.18	77.70	6.91	69.93	91.37	90.23	31.23	1.47		
	Internal Floating Roof Tank	South	EUTKT-1	1,791	Transmix/Gasoline	386,037.49	1.30	0.02	9.71	0.70	8.82	10.79	11.03	3.09	0.12		
Insignificant Tanks	Horizontal Tank	South	EUTKAA1-7	13	Diesel Lubricity												
	Fixed Roof Tank	South	EUTKAA6-3	143	Diesel Lubricity												
	Fixed Roof Tank	South	EUTKAA8-1	184	Diesel Lubricity												
	Fixed Roof Tank	South	EUTKAA10-2	189	Gasoline Additive												
	Fixed Roof Tank	North	EUTKAA10-4	278	Gasoline Additive												
	Fixed Roof Tank	South	EUTKAA5-7	100	Diesel Die												
	Horizontal Tank/Underground	South	RB-4-1		No. 2 Fuel Oil												

Notes

1. PTE includes two roof landings for each floating roof tank. This represents two seasonal RVP changes (Spring and Fall).
2. PTE includes four total tank cleanings.
3. Tank Calculated PTE is 53.08 tons/yr. However, MPLX is requesting to maintain the same limit of 53.11 tons/yr

**TABLE 4
FUGITIVE VOC EMISSIONS FROM LEAKING COMPONENTS
MPLX Terminals LLC
Niles Terminal**

Sources	Flanges/ Connectors	Penflex/ Dresser Couplings	Loading Arms	Meters	Pressure Relief/ Ball Valves	Pump Seals	Valves
	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
Liquid Sources:	2086	11	14	17	165	19	148
Vapor Sources:	14	0	0	0	7	0	4
TOTAL (Liquid)	2086	11	14	17	165	19	148
TOTAL (Vapor)	14	0	0	0	7	0	4
Liquid Emission Factor (lb/hr)	0.000017640	0.000287	0.000287	0.000287	0.000094800	0.001190500	0.000094800
Vapor Emission Factor (lb/hr)	0.000092590	0.000265	0.000265	0.000265	0.000028660	0.001190500	0.000028660
Operation (hr/yr)	8760	8760	8760	8760	8760	8760	8760
Emissions (lb/hr)	0.04	0.00	0.00	0.00	0.02	0.02	0.01
Emissions (lb/yr)	333.70	27.62	35.15	42.68	138.78	198.15	123.91
Emissions (ton/yr)	0.17	0.01	0.02	0.02	0.07	0.10	0.06

TOTAL FUGITIVE EMISSION LOSS (ton/yr): 0.45

Notes:

1. Representative fugitive leak table applied to MPLX terminals. Terminal-specific emissions may vary by minor amounts due to variations in actual component count.

TABLE 5
ESTIMATE OF POTENTIAL HAP EMISSIONS
MPLX Terminals LLC
Niles Terminal

		HAPs Estimate				
		VRU	Trucks	Leaking Components	Tanks (TankESP)	Total
VOC Emissions (ton/yr):		84.70	31.46	0.70	53.08	
Hazardous Air Pollutant	Average Vapor Wt%	HAP Emissions Estimate				
Benzene	0.9	0.76	0.28	0.01	0.21	1.05
Ethyl Benzene	0.1	0.08	0.03	0.00	0.02	0.12
Hexane	1.6	1.36	0.50	0.01	0.18	1.87
Toluene	1.3	1.10	0.41	0.01	0.28	1.52
Isooctane	0.8	0.68	0.25	0.01	0.24	0.93
Xylenes	0.5	0.42	0.16	0.00	0.15	0.58
Cumene	0.01	0.01	0.00	0.00	0.01	0.01
Total (ton/yr):		4.41	1.64	0.04	1.09	6.09
Total (lb/hr)		1.007	0.374	0.008	0.249	1.390

Terminal Fugitive Estimates

These templates should be used for what if potential calculations, new equipment, new component counts for permit applications, etc! Actual terminal fugitive emissions (based on *current* component counts) should be run in opsInfo, Report: **Terminal Fugitive Summary**. Contact your Environmental AP in Findlay for this actual report. (For an example of the Terminal Fugitive Summary report, see "Sources".)

Instructions for Template: 1) Save document to your computer. (Click File, SaveAs, enter document name). 2) Follow Instructions below. 3) In yellow shaded cells below, you may enter the required text *or* all text can be entered on the Terminal Fugitive calculation sheets if you prefer.

General Information

1	Location:	Niles	Enter facility name.
2	Time Period:	Potential	Enter "Potential" or time period of calculations
3	Name:	Will Wallace	Enter your name
4	Comments:	Butane Storage Vessel Project	Enter comments if necessary.
5	Select Sheet: Fugitives by Component, Fugitives by Asset.	<p>"Terminal Fugitives by Component" - Requires component counts to be entered into form.</p> <p>-Sources column: enter all sources (tanks, rack, etc.).</p> <p>-Quantity columns, enter appropriate quantities. <i>*Only enter data in the Yellow fields!</i></p> <p>-Vapor Sources = VCS, lines from load rack truck connection all the way to the VCS unit, etc.</p> <p>-Liquid Sources = anything that contains liquid product (lines between tanks, load racks, pumps, meters, etc.</p> <hr/> <p>"Terminal Fugitives by Asset" - Requires source quantities (how many tanks, etc.) to be entered into form; component counts are then calculated based on estimated counting methods built into OIS & opsInfo.</p> <p>-Asset Counts: enter quantities of assets (tanks, arms, bays, VRUs) in the column "Enter Count"</p>	
NOTE: This document is only for use when calculating potential emissions or changes to current terminal fugitive counts. This is not related to Tank Truck Fugitives			

Emissions - Terminal Fugitive VOC Estimate

4/16/2024

LOCATION: Niles
 COMMENTS: Butane Storage Vessel Project

TIME PERIOD: Potential
 BY: Will Wallace

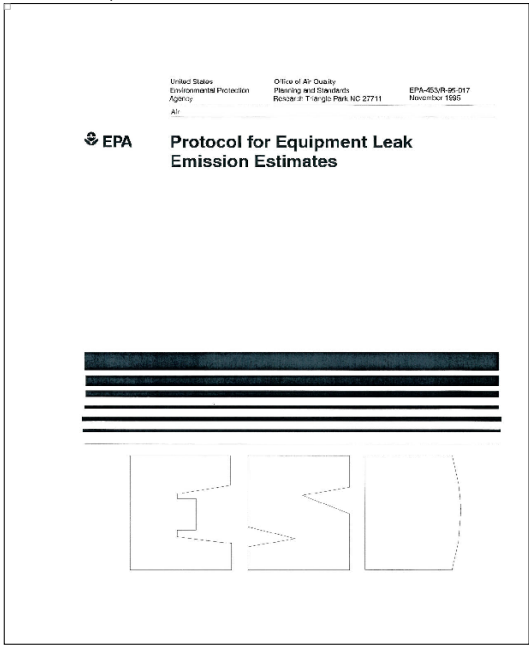
Sources	Fittings		Pump Seals	Valves	Others	Open-Ended Lines
	Connectors	Flanges				
	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
Liquid Sources:						
Butane Bullet and associated piping	4	34	2	10		
Vapor Sources:						
TOTAL (Liquid)	4	34	2	10	0	0
TOTAL (vapor)	0	0	0	0	0	0
Liquid Emission Factor (lb/hr)	0.000017640	0.000017640	0.001190500	0.000094800	0.000286600	0.006503640
Vapor Emission Factor (lb/hr)	0.000092590	0.000092590	0.001190500	0.000028660	0.000264550	0.006613870
Operation (hr/yr)	8,760	8,760	8,760	8,760	8,760	8,760
Emissions (lb/hr)	0.00	0.00	0.00	0.00	0.00	0.00
Emissions (lb/yr)	0.62	5.25	20.86	8.30	0.00	0.00
Emissions (ton/yr)	0.0003	0.0026	0.0104	0.0042	0.0000	0.0000
TOTAL FUGITIVE EMISSION LOSS (TON/YR)		0.0175				

Notes:

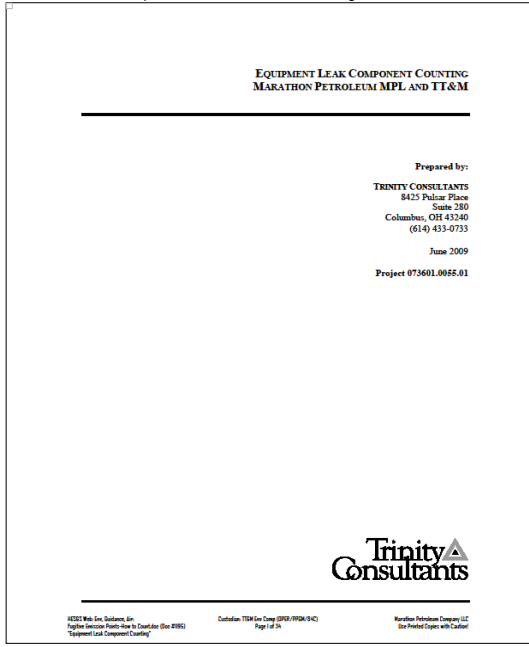
1. This survey is conservative. 200% of the estimate of the fitting counts was used.
2. Emission Factor Source: EPA Publication No. EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates, November 1995"

Terminal Fugitive Estimates
-- Sources --

Double click writup to view factors.



Double click to view component determinations and counting method



Terminal Fugitive Summary report from opsinfo:

Terminal Fugitive Summary									
Louisville, KY - Algonquin									
1995 EPA Counts (Estimated)									
Component Counts	Connectors Liquid / Gas	Flanges Liquid / Gas	Pump Seals Liquid / Gas	Valves Liquid / Gas	Others Liquid / Gas	Open-Ended Lines Liquid / Gas	Leak Rate Liquid / Gas	Hours in Period	VOC Lbs
<i>Note: 04/2018 Fugitive counts based on 18 tanks, 6 bays, 19 arms, and 3 VRLs.</i>									
Period: 01 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 02 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	672	364.14
Period: 03 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 04 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	720	422.30
Period: 05 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 06 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	720	422.30
Period: 07 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 08 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 09 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	720	422.30
Period: 10 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
Period: 11 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	720	422.30
Period: 12 / 2019	8,300 / 618	1,850 / 612	46 / 0	2,300 / 300	37 / 6	0 / 0	0.4625 / 0.1241	744	436.37
								8,760	5,137.95

NOTES FOR FACTORS & CALCULATIONS

1993 API Factors (Reference API 4588, Mar 1993, Pg 5-46, Tbl 5-10, Development of Fugitive Emission Factors and Emission Profiles for Petroleum Marketing Terminals.)

Pounds Per Hour Factors	Connectors	Couplings	Load Arms	Pressure Relief Valves	Pump Seals	Valves	Meters
Light Liquid Service	0.000015000	0.000250000	0.000870000	0.000250000	0.000930000	0.000150000	0.000250000
Gas Service	0.000067000	0.001400000	0.045000000	0.001400000	0.000930000	0.000100000	-

1995 EPA Factors (Reference EPA-453/R-95-017, Nov 1995, Pgs 2-14, Tbl 2-3, Protocol for Equipment Leak Emission Estimates.)

Pounds Per Hour Factors	Connectors	Flanges	Pump Seals	Valves	Others	Open-Ended Lines ^a
Light Liquid Service	0.000017640	0.000017640	0.001190500	0.000094800	0.000286600	0.006516400
Vapor Service	0.000092100	0.000092100	-	0.000023600	0.000036450	0.006613070

^a Emission factors for open-ended lines are taken from *Development of Fugitive Emission Factors and Emission Profiles for Petroleum Marketing Terminals*, American Petroleum Institute (API), 1993.

** The 1995 EPA factors were converted from Lb/hr to Tbl/hr using the conversion rate of 2.20462262. **

The 1995 Estimate counting method for component counts for each tank, arm, VRL, and bay at a facility was determined by Trinity Consultants (Component Counts from Select MPL and TT&M Facilities, June 2009, Table 4-4).

ASST	Enter Count	Emission lbs	Emission Tons
Tanks	11	1,452.01	0.73
Arms	13	1,178.83	0.59
Bays	3	19.12	0.01
VRUs	1	349.56	0.17
TOTALS	28	2,999.52	1.50

Number of Tanks					
11					
Valves	Flanges	Connectors	Pumps	Others	
825	550	2,750	22	11	
Emission Factors in lbs					
0.00009480	0.00001764	0.00001764	0.00119050	0.00028660	
Hours per Year					
8,760	8,760	8,760	8,760	8,760	
Emission lbs per Year					
685.11	84.97	424.87	229.43	27.62	
Emission Tons per Year					
0.34	0.04	0.21	0.11	0.01	

Number of Arms					
13					
Valves	Flanges	Connectors	Pumps	Others	
650	650	2,600	10	13	
Emission Factors in lbs					
0.00009480	0.00001764	0.00001764	0.00119050	0.00028660	
Hours per Year					
8,760	8,760	8,760	8,760	8,760	
Emission lbs per Year					
539.78	100.42	401.70	104.29	32.64	
Emission Tons per Year					
0.27	0.05	0.20	0.05	0.02	

Number of Bays					
3					
Valves	Flanges	Connectors	Pumps	Others	
-	9	6	-	3	
Emission Factors in lbs					
0.00002866	0.00009259	0.00009259	0.00014330	0.00026455	
Hours per Year					
8,760	8,760	8,760	8,760	8,760	
Emission lbs per Year					
0.00	7.30	4.87	0.00	6.95	
Emission Tons per Year					
0.00	0.00	0.00	0.00	0.00	

Number of VRUs					
1					
Valves	Flanges	Connectors	Pumps	Others	
100	200	200	-	-	
Emission Factors in lbs					
0.00002866	0.00009259	0.00009259	0.00014330	0.00026455	
Hours per Year					
8,760	8,760	8,760	8,760	8,760	
Emission lbs per Year					
25.11	162.22	162.22	0.00	0.00	
Emission Tons per Year					
0.01	0.08	0.08	0.00	0.00	