

# ALLNEX USA INC.

252 Heilman Avenue  
Belmont, WV 26134  
(304) 665-1600

September 19, 2017

WVDEP - Division of Air Quality  
DAQ Permitting Section  
601 57th Street SE  
Charleston, WV 25304

Subject: Allnex USA Inc. – Willow Island Plant (DAQ Plant ID# 073-00030)  
Application for Administrative Update to Permit R13-2473K

Dear Madam or Sir:

Allnex USA Inc. (Allnex) is requesting that the Division of Air Quality (DAQ) grant a Class I Administrative Update to Permit R13-2473K for proposed minor changes at our Willow Island Plant, located in Pleasants County.

Please find enclosed the Rule 13 Permit Application for Administrative Update, with certification by our Responsible Official. The application package consists of one hard copy and two compact discs, per the DAQ website's guidance. This application does not contain confidential business information.

Should you require any additional information, please contact me at 304-665-1644, or via e-mail (Dave.Lieving@allnex.com).

Sincerely,



David Lieving  
Sr. Operations Engineer, Willow Island Plant  
Allnex USA Inc.

Enclosures


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#### Appendix 1 – Proposed Draft Revisions to R13-2473K

 <p>WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION <b>DIVISION OF AIR QUALITY</b> 601 57<sup>th</sup> Street, SE Charleston, WV 25304 (304) 926-0475 <a href="http://www.wvdep.org/daq">www.wvdep.org/daq</a></p>	<p><b>APPLICATION FOR NSR PERMIT</b></p> <p><b>AND</b></p> <p><b>TITLE V PERMIT REVISION</b></p> <p><b>(OPTIONAL)</b></p>
<p>PLEASE CHECK ALL THAT APPLY TO <b>NSR (45CSR13)</b> (IF KNOWN):</p> <p><input type="checkbox"/> CONSTRUCTION    <input type="checkbox"/> MODIFICATION    <input type="checkbox"/> RELOCATION</p> <p><input checked="" type="checkbox"/> CLASS I ADMINISTRATIVE UPDATE    <input type="checkbox"/> TEMPORARY</p> <p><input type="checkbox"/> CLASS II ADMINISTRATIVE UPDATE    <input type="checkbox"/> AFTER-THE-FACT</p>	<p>PLEASE CHECK TYPE OF <b>45CSR30 (TITLE V)</b> REVISION (IF ANY):</p> <p><input type="checkbox"/> ADMINISTRATIVE AMENDMENT    <input checked="" type="checkbox"/> MINOR MODIFICATION</p> <p><input type="checkbox"/> SIGNIFICANT MODIFICATION</p> <p>IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS <b>ATTACHMENT S</b> TO THIS APPLICATION</p>
<p><b>FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.</b></p>	
<p><b>Section I. General</b></p>	
<p>1. Name of applicant (as registered with the WV Secretary of State's Office): Allnex USA Inc.</p>	<p>2. Federal Employer ID No. (FEIN): 37-1705164</p>
<p>3. Name of facility (if different from above): Willow Island Plant</p>	<p>4. The applicant is the: <input type="checkbox"/> OWNER    <input type="checkbox"/> OPERATOR    <input checked="" type="checkbox"/> BOTH</p>
<p>5A. Applicant's mailing address: Allnex USA Inc. 252 Heilman Avenue Belmont, WV 26134</p>	<p>5B. Facility's present physical address: Allnex USA Inc. 252 Heilman Avenue Belmont, WV 26134</p>
<p>6. <b>West Virginia Business Registration.</b> Is the applicant a resident of the State of West Virginia?    <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO</p> <p>– If <b>YES</b>, provide a copy of the <b>Certificate of Incorporation/Organization/Limited Partnership</b> (one page) including any name change amendments or other Business Registration Certificate as <b>Attachment A</b>.</p> <p>– If <b>NO</b>, provide a copy of the <b>Certificate of Authority/Authority of L.L.C./Registration</b> (one page) including any name change amendments or other Business Certificate as <b>Attachment A</b>.</p>	
<p>7. If applicant is a subsidiary corporation, please provide the name of parent corporation:</p>	
<p>8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i>?    <input checked="" type="checkbox"/> YES    <input type="checkbox"/> NO</p> <p>– If <b>YES</b>, please explain: The applicant leases the site.</p> <p>– If <b>NO</b>, you are not eligible for a permit for this source.</p>	
<p>9. Type of plant or facility (stationary source) to be <b>constructed, modified, relocated, administratively updated</b> or <b>temporarily permitted</b> (e.g., coal preparation plant, primary crusher, etc.): Chemical manufacturing plant</p>	<p>10. North American Industry Classification System (NAICS) code for the facility: 325199</p>
<p>11A. DAQ Plant ID No. (for existing facilities only): 073-00030</p>	<p>11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R13-2473K</p>
<p><b>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</b></p>	

<p>12A.</p> <ul style="list-style-type: none"> <li>For <b>Modifications, Administrative Updates</b> or <b>Temporary permits</b> at an existing facility, please provide directions to the <i>present location</i> of the facility from the nearest state road;</li> <li>For <b>Construction</b> or <b>Relocation permits</b>, please provide directions to the <i>proposed new site location</i> from the nearest state road. Include a <b>MAP</b> as <b>Attachment B</b>.</li> </ul> <p>From Interstate 77, Exit 179, take State Route 2, north approximately 10 miles. Plant site on left (river side) of State Route 2, two miles south of Belmont, WV.</p>		
12.B. New site address (if applicable): NA	12C. Nearest city or town: Belmont	12D. County: Pleasants
12.E. UTM Northing (KM): 4,356.34	12F. UTM Easting (KM): 473.66	12G. UTM Zone: 17
<p>13. Briefly describe the proposed change(s) at the facility: Applicant proposes to remove equipment item Product Cooler (E039); make in-kind equipment replacements for existing equipment items Methanol Secondary Condenser (E540), MeC Condenser (E570) and Drum Filling Station (U001); add equipment item Reactant Tank Wagon (V200); make other minor corrections to permit Section 1.0. Emission Units; and minor updates to permit's Appendix A and Appendix B.</p>		
<p>14A. Provide the date of anticipated installation or change: Operations are on-going.</p> <ul style="list-style-type: none"> <li>If this is an <b>After-The-Fact</b> permit application, provide the date upon which the proposed change did happen:        /        /</li> </ul>		<p>14B. Date of anticipated Start-Up if a permit is granted: Operations are on-going.</p>
<p>14C. Provide a <b>Schedule</b> of the planned <b>Installation of/Change</b> to and <b>Start-Up</b> of each of the units proposed in this permit application as <b>Attachment C</b> (if more than one unit is involved).</p>		
<p>15. Provide maximum projected <b>Operating Schedule</b> of activity/activities outlined in this application: Hours Per Day 24      Days Per Week 7      Weeks Per Year 52</p>		
<p>16. Is demolition or physical renovation at an existing facility involved?    <input checked="" type="checkbox"/> <b>YES</b>      <input type="checkbox"/> <b>NO</b></p>		
<p>17. <b>Risk Management Plans.</b> If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see <a href="http://www.epa.gov/ceppo">www.epa.gov/ceppo</a>), submit your <b>Risk Management Plan (RMP)</b> to U. S. EPA Region III.</p>		
<p>18. <b>Regulatory Discussion.</b> List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (<i>if known</i>). Provide this information as <b>Attachment D</b>.</p>		
<p><b>Section II. Additional attachments and supporting documents.</b></p>		
<p>19. Include a check payable to WVDEP – Division of Air Quality with the appropriate <b>application fee</b> (per 45CSR22 and 45CSR13).</p>		
<p>20. Include a <b>Table of Contents</b> as the first page of your application package.</p>		
<p>21. Provide a <b>Plot Plan</b>, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as <b>Attachment E</b> (Refer to <b>Plot Plan Guidance</b>).</p> <ul style="list-style-type: none"> <li>Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).</li> </ul>		
<p>22. Provide a <b>Detailed Process Flow Diagram(s)</b> showing each proposed or modified emissions unit, emission point and control device as <b>Attachment F</b>.</p>		
<p>23. Provide a <b>Process Description</b> as <b>Attachment G</b>.</p> <ul style="list-style-type: none"> <li>Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).</li> </ul>		
<p><b>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</b></p>		

24. Provide <b>Material Safety Data Sheets (MSDS)</b> for all materials processed, used or produced as <b>Attachment H</b> . – For chemical processes, provide a MSDS for each compound emitted to the air.
25. Fill out the <b>Emission Units Table</b> and provide it as <b>Attachment I</b> .
26. Fill out the <b>Emission Points Data Summary Sheet (Table 1 and Table 2)</b> and provide it as <b>Attachment J</b> .
27. Fill out the <b>Fugitive Emissions Data Summary Sheet</b> and provide it as <b>Attachment K</b> .
28. Check all applicable <b>Emissions Unit Data Sheets</b> listed below: <input type="checkbox"/> Bulk Liquid Transfer Operations <input type="checkbox"/> Haul Road Emissions <input type="checkbox"/> Quarry <input type="checkbox"/> Chemical Processes <input type="checkbox"/> Hot Mix Asphalt Plant <input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities <input type="checkbox"/> Concrete Batch Plant <input type="checkbox"/> Incinerator <input type="checkbox"/> Grey Iron and Steel Foundry <input type="checkbox"/> Indirect Heat Exchanger <input type="checkbox"/> Storage Tanks <input checked="" type="checkbox"/> General Emission Unit, specify: E540, E570, U001 and V200.
Fill out and provide the <b>Emissions Unit Data Sheet(s)</b> as <b>Attachment L</b> .
29. Check all applicable <b>Air Pollution Control Device Sheets</b> listed below: <input type="checkbox"/> Absorption Systems <input type="checkbox"/> Baghouse <input type="checkbox"/> Flare <input type="checkbox"/> Adsorption Systems <input type="checkbox"/> Condenser <input type="checkbox"/> Mechanical Collector <input type="checkbox"/> Afterburner <input type="checkbox"/> Electrostatic Precipitator <input type="checkbox"/> Wet Collecting System <input type="checkbox"/> Other Collectors, specify:
Fill out and provide the <b>Air Pollution Control Device Sheet(s)</b> as <b>Attachment M</b> .
30. Provide all <b>Supporting Emissions Calculations</b> as <b>Attachment N</b> , or attach the calculations directly to the forms listed in Items 28 through 31.
31. <b>Monitoring, Recordkeeping, Reporting and Testing Plans.</b> Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as <b>Attachment O</b> . ➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.
32. <b>Public Notice.</b> At the time that the application is submitted, place a <b>Class I Legal Advertisement</b> in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and <b>Example Legal Advertisement</b> for details). Please submit the <b>Affidavit of Publication</b> as <b>Attachment P</b> immediately upon receipt.
33. <b>Business Confidentiality Claims.</b> Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO ➤ If <b>YES</b> , identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's " <b>Precautionary Notice – Claims of Confidentiality</b> " guidance found in the <b>General Instructions</b> as <b>Attachment Q</b> .

### **Section III. Certification of Information**

34. <b>Authority/Delegation of Authority.</b> Only required when someone other than the responsible official signs the application. Check applicable <b>Authority Form</b> below: <input type="checkbox"/> Authority of Corporation or Other Business Entity <input type="checkbox"/> Authority of Partnership <input type="checkbox"/> Authority of Governmental Agency <input type="checkbox"/> Authority of Limited Partnership Submit completed and signed <b>Authority Form</b> as <b>Attachment R</b> . <b>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</b>
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**35A. Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

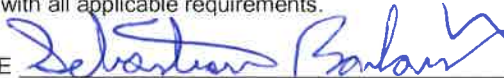
**Certification of Truth, Accuracy, and Completeness**

I, the undersigned  **Responsible Official** /  **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

**Compliance Certification**

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE



(Please use blue ink)

DATE:

09/19/17

(Please use blue ink)

35B. Printed name of signee: Sebastian Barbarito

35C. Title: Site Manager

35D. E-mail: Gus.Barbarito@allnex.com

36E. Phone: (304) 665-1641

36F. FAX: (304) 665-1621

36A. Printed name of contact person (if different from above): Dave Lieving

36B. Title: Sr. Operations Engineer

36C. E-mail: Dave.Lieving@allnex.com

36D. Phone: (304) 665-1644

36E. FAX: (304) 665-1621

**PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate    | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet            |
| <input type="checkbox"/> Attachment B: Map(s)                             | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s)          |
| <input type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s)            |
| <input type="checkbox"/> Attachment D: Regulatory Discussion              | <input type="checkbox"/> Attachment N: Supporting Emissions Calculations                |
| <input type="checkbox"/> Attachment E: Plot Plan                          | <input type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s)   | <input type="checkbox"/> Attachment P: Public Notice                                    |
| <input checked="" type="checkbox"/> Attachment G: Process Description     | <input type="checkbox"/> Attachment Q: Business Confidential Claims                     |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms                                  |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table    | <input checked="" type="checkbox"/> Attachment S: Title V Permit Revision Information   |
| <input type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee  |

*Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.*

**FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:**

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
- NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
- Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
- NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
- NSR permit writer should notify a Title V permit writer of draft permit,
- Public notice should reference both 45CSR13 and Title V permits,
- EPA has 45 day review period of a draft permit.

**All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.**

**Attachment A**  
**Business Certificate**

**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**ALLNEX USA INC.  
1 HEILMAN AVE  
WILLOW ISLAND, WV 26134-9732**

BUSINESS REGISTRATION ACCOUNT NUMBER: **2280-9647**

This certificate is issued on: **02/7/2014**

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

**This certificate is not transferrable and must be displayed at the location for which issued**

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.  
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.



## ATTACHMENT G – PROCESS DESCRIPTION

Allnex requests that DAQ make some minor updates to air permit R13-2473K for its existing Willow Island, WV Plant, designated by DAQ as facility ID# 073-00030.

Allnex proposes to make the following changes:

- Changes to Section 1.0. Emission Units:
  - Deletion of equipment item Product Cooler (E039).
  - Allnex plans to replace like-kind the following three existing equipment items:
    - The existing Methanol Secondary Condenser (E540) will be replaced with a like-kind condenser of the same capacity (149.2 ft<sup>2</sup>). The new condenser will continue to vent via flare H599 to vent point MEC-009 at the current allowable emission limit.
    - The existing MeC Condenser( E570) will be replaced with a like-kind cooler of the same capacity (1.0 MM BTU/hr). The new cooler will continue to have no direct vent to atmosphere.
    - The existing Drum Filling Station (U001) was replaced with like-kind equipment of similar capacity (50 gpm) in 2016. The new Drum Filling Station will continue to vent via vent point MEC-003 at the current allowable emission limit.
  - Addition of new equipment item Reactant Tank Wagon (V200). The tank wagon will emit via existing vent point UTM-002 at the current allowable emission limit for UTM-002.
  - Other minor corrections/updates to Section 1.0. Emission Units.
- Changes to Appendix A – Emission Limits: Move the emission limits for V100, V200 and V501 (emission point UTM-002) to the section of Appendix A under the header “Emission Limits when any Urethanes Manufacturing Unit Process is On-Line”. This was done to show that loading of the V100, V200 and V501 trailer/tank wagons could occur at any time during which any Urethanes Manufacturing Unit process is on-line. Note that no increase to the current R13-2473K allowable hourly or annual emissions will occur as a result of the requested changes in this administrative update application.
- Change to Appendix B – Control Devices Parametric Monitoring: Strike the text “& reignition” from the Flare H599 row, because the pilot light has a flameout detection system but does not have an automatic reignition system.

Please see Allnex’s suggested revisions to R13-2473K provided in Appendix 1 – Proposed Draft Revisions to R13-2473K.

<b>Attachment I</b> <b>Emission Units Table</b> (includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)						
Emission Unit ID <sup>1</sup>	Emission Point ID <sup>2</sup>	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type <sup>3</sup> and Date of Change	Control Device <sup>4</sup>
E540	MEC-009	Methanol Secondary Condenser	2017	149.2 ft <sup>2</sup>	Modification (like-kind replacement)	H599
E570	No direct vent	MeC Condenser	2017	1.00 MM BTU/hr	Modification (like-kind replacement)	None
U001	MEC-003	Drum Filling Station	2016	50 gpm	Modification (like-kind replacement)	None
V200	UTM-002	Reactant Tank Wagon	NA	5,000 gallons	New	None
E039	No direct vent	Product Cooler	1974	168,000 BTU/hr	Removal	None

<sup>1</sup> For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.  
<sup>2</sup> For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.  
<sup>3</sup> New, modification, removal  
<sup>4</sup> For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

**Attachment L**  
**EMISSIONS UNIT DATA SHEET**  
**GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): E540

<p>1. Name or type and model of proposed affected source:  Name: Methanol Secondary Condenser  Description: Carbon steel shell and tube heat exchanger for condensing methanol vapors.  Cooling water on shell side, process vapors on tube side.  Manufacturer: Sistersville Tank Works  Model number: N/A - Serial number 16-280</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p>   <p>N/A - Methanol Condenser.</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p>   <p>N/A - Methanol Condenser.</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p>     <p>N/A</p>

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): N/A			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	°F and	psia.	
(d) Percent excess air:			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
(g) Proposed maximum design heat input:			× 10 <sup>6</sup> BTU/hr.
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	42

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used: N/A – vents through H599 flare.			
@	ambient	°F and	ambient psia
a.	NO <sub>x</sub>	lb/hr	grains/ACF
b.	SO <sub>2</sub>	lb/hr	grains/ACF
c.	CO	lb/hr	grains/ACF
d.	PM <sub>10</sub>	lb/hr	grains/ACF
e.	Hydrocarbons	lb/hr	grains/ACF
f.	VOCs	lb/hr	grains/ACF
g.	Pb	lb/hr	grains/ACF
h.	Specify other(s)	lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing                  Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p><b>MONITORING</b>                   Per R13-2473K permit terms.</p>	<p><b>RECORDKEEPING</b>                   Per R13-2473K permit terms.</p>
<p><b>REPORTING</b>                   Per R13-2473K permit terms.</p>	<p><b>TESTING</b>                   Per R13-2473K permit terms.</p>
<p><b>MONITORING.</b> PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p><b>RECORDKEEPING.</b> PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p><b>REPORTING.</b> PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p><b>TESTING.</b> PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>None.</p>	

**Attachment L**  
**EMISSIONS UNIT DATA SHEET**  
**GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): E570

<p>1. Name or type and model of proposed affected source:</p> <p>Name: MeC Condenser  Description: Size 22-240 shell and tube heat exchanger with CS shell and 304SS tubes.  Manufacturer: Sistersville Tank Works  Model number: N/A – Serial# 6335</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p>   <p>N/A - MeC Condenser</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p>   <p>N/A - MeC Condenser</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p>   <p>N/A</p>

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): N/A			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	°F and	psia.	
(d) Percent excess air:			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
(g) Proposed maximum design heat input:			× 10 <sup>6</sup> BTU/hr.
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	42



8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used: N/A – no direct vent.			
@	ambient	°F and	ambient psia
a.	NO <sub>x</sub>	lb/hr	grains/ACF
b.	SO <sub>2</sub>	lb/hr	grains/ACF
c.	CO	lb/hr	grains/ACF
d.	PM <sub>10</sub>	lb/hr	grains/ACF
e.	Hydrocarbons	lb/hr	grains/ACF
f.	VOCs	lb/hr	grains/ACF
g.	Pb	lb/hr	grains/ACF
h.	Specify other(s)	lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing                  Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p><b>MONITORING</b>                   Per R13-2473K permit terms.</p>	<p><b>RECORDKEEPING</b>                   Per R13-2473K permit terms.</p>
<p><b>REPORTING</b>                   Per R13-2473K permit terms.</p>	<p><b>TESTING</b>                   Per R13-2473K permit terms.</p>
<p><b>MONITORING.</b> PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p><b>RECORDKEEPING.</b> PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p><b>REPORTING.</b> PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p><b>TESTING.</b> PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>None.</p>	

**Attachment L**  
**EMISSIONS UNIT DATA SHEET**  
**GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): U001

<p>1. Name or type and model of proposed affected source:</p> <p>Name: Drum Filling Station          Description: Drum filling station.          Manufacturer: PASE          Model number: PGM-4S55-A</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p>   <p>50 gpm</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p>   <p>50 gpm</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p>   <p>N/A</p>

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): N/A			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	°F and	psia.	
(d) Percent excess air:			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
(g) Proposed maximum design heat input:			× 10 <sup>6</sup> BTU/hr.
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	42

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:			
@	ambient	°F and	ambient psia
a.	NO <sub>x</sub>	lb/hr	grains/ACF
b.	SO <sub>2</sub>	lb/hr	grains/ACF
c.	CO	lb/hr	grains/ACF
d.	PM <sub>10</sub>	lb/hr	grains/ACF
e.	Hydrocarbons	lb/hr	grains/ACF
f.	VOCs	0.1 lb/hr	grains/ACF
g.	Pb	lb/hr	grains/ACF
h.	Specify other(s)		
	None	lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing                  Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p><b>MONITORING</b>                   Per R13-2473K permit terms.</p>	<p><b>RECORDKEEPING</b>                   Per R13-2473K permit terms.</p>
<p><b>REPORTING</b>                   Per R13-2473K permit terms.</p>	<p><b>TESTING</b>                   Per R13-2473K permit terms.</p>
<p><b>MONITORING.</b> PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p><b>RECORDKEEPING.</b> PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p><b>REPORTING.</b> PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p><b>TESTING.</b> PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>None.</p>	

**Attachment L**  
**EMISSIONS UNIT DATA SHEET**  
**GENERAL**

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*): V200

<p>1. Name or type and model of proposed affected source:</p> <p>Name: Reactant Tank Wagon  Description: Truck 5,000-gallon tanker trailer loading.  Manufacturer: NA  Model number: NA</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p>  <p>Reactant  50 gpm</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p>  <p>Reactant  50 gpm</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p>  <p>N/A</p>

\* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): N/A			
(a) Type and amount in appropriate units of fuel(s) to be burned:			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	°F and	psia.	
(d) Percent excess air:			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
(g) Proposed maximum design heat input:			× 10 <sup>6</sup> BTU/hr.
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	42



8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:			
@	ambient	°F and	ambient psia
a.	NO <sub>x</sub>	lb/hr	grains/ACF
b.	SO <sub>2</sub>	lb/hr	grains/ACF
c.	CO	lb/hr	grains/ACF
d.	PM <sub>10</sub>	lb/hr	grains/ACF
e.	Hydrocarbons	lb/hr	grains/ACF
f.	VOCs	0.1 lb/hr	grains/ACF
g.	Pb	lb/hr	grains/ACF
h.	Specify other(s)		
	None	lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF
		lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing                  Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p><b>MONITORING</b>                   Per R13-2473K permit terms.</p>	<p><b>RECORDKEEPING</b>                   Per R13-2473K permit terms.</p>
<p><b>REPORTING</b>                   Per R13-2473K permit terms.</p>	<p><b>TESTING</b>                   Per R13-2473K permit terms.</p>
<p><b>MONITORING.</b> PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p><b>RECORDKEEPING.</b> PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p><b>REPORTING.</b> PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p><b>TESTING.</b> PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>None.</p>	

**Attachment S**  
**Title V Permit Revision Information**

<b>1. New Applicable Requirements Summary</b>	
Mark all applicable requirements associated with the changes involved with this permit revision:	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS (Subpart(s) _____)	<input checked="" type="checkbox"/> Section 112(d) MACT standards (Subpart(s) <u>FFFF</u> )
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) <sup>(1)</sup>
<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO <sub>x</sub> Budget Trading Program EGUs (45CSR26)
<sup>(1)</sup> If this box is checked, please include <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why <b>Compliance Assurance Monitoring</b> is not applicable:	

<b>2. Non Applicability Determinations</b>
List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination. None
<input type="checkbox"/> <b>Permit Shield Requested</b> <i>(not applicable to Minor Modifications)</i>
<i>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</i>

**3. Suggested Title V Draft Permit Language**

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision?  Yes  No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

**4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision**

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
<b>R13-2473K</b>	<b>9/23/2016</b>	

**5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision**

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
<b>None</b>		

**6. Change in Potential Emissions None**

Pollutant	Change in Potential Emissions (+ or -), TPY
CO	
NO <sub>x</sub>	
PM <sub>10</sub>	
SO <sub>2</sub>	
VOC	
CO <sub>2</sub> e	
Total HAP (Methanol)	

*All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.*

**7. Certification For Use Of Minor Modification Procedures (Required Only for Minor Modification Requests)**

*Note:* This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:

- i. Proposed changes do not violate any applicable requirement;
- ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;
- iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;
- v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;
- vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

**Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.**

(Signed):		Date:	09 / 19 / 17
	<i>(Please use blue ink)</i>		<i>(Please use blue ink)</i>
Named (typed):	<b>Sebastian Barbarito</b>	Title:	<b>Site Manager</b>

**Note: Please check if the following included (if applicable):**

- Compliance Assurance Monitoring Form(s)
- Suggested Title V Draft Permit Language

*All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.*

## Appendix 1

### Proposed Draft Revisions to R13-2473K

*West Virginia Department of Environmental Protection*  
Earl Ray Tomblin  
Governor

*Division of Air Quality*

Randy C. Huffman  
Cabinet Secretary

# Modification-Administrative UpdatePermit



**R13- ~~2473K~~2473L**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

*Issued to:*

**Allnex USA Inc.  
Willow Island  
073-00030**

---

*William F. Durham  
Director*

*Issued: ~~September 23, 2016~~Source-Proposed Draft*

Revision 3/29/05~~Revision 3/29/05~~

This permit will supercede and replace Permit R13-2473~~JK~~.

Facility Location: Willow Island, Pleasants County, West Virginia  
Mailing Address: #1 Heilman Ave, Willow Island, WV 26134  
Facility Description: Urethanes Manufacturing Unit  
SIC Codes: 2869 Chemicals and Allied Products – Industrial Organic Chemicals, Inc.  
2899 Chemicals and Allied Products – Chemical Preparations, NEC  
2843 Surface Active Agents, Finishing Agents, Sulfonated Oils, and Assistants  
UTM Coordinates: 473.6 km Easting • 4,356.1 km Northing • Zone 17  
Permit Type: Modification Administrative Update  
Description of Change: Proposed minor changes:

- ~~Reinstate an emission point MEC 001 for the existing Methanol Storage Tank (V516); Add emission limits for emission point MEC 001; Remove equipment item Product Cooler (E039);~~
- ~~Make in-kind equipment replacements for existing equipment items Circulated Methanol Coolers (E035A/B) and Refining Vacuum System (J010/J110) Methanol Secondary Condenser (E540), MeC Condenser (E570) and Drum Filling Station (U001);~~
- ~~Add equipment item Reactant Tank Wagon (V200);~~
- ~~Typo correction in R13-2473J section 4.4.6.e; Other minor corrections to Section 1.0. Emission Units;~~
- ~~Voluntarily revise data collection frequency from daily to at least once every 15 minutes for several existing control devices. Minor updates to Appendix A and Appendix B.~~

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.*

---

*The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.*



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**1.0. Emission Units**

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
C002 <sup>4</sup>	No direct vent	First Pass Column	1974	8,200 gallons	None
C020 <sup>4</sup>		Water Stripper	1987	1,800 gallons	None
C030 <sup>4</sup>		MeC Stripper	1974	9,000 gallons	None
C507 <sup>4</sup>		Trimer Removal Column	1989	596 gallons	None
E007 <sup>4</sup>		First Pass Overhead Condenser	1987	700,000 BTU/hr	None
E008 <sup>4</sup>		First Pass Spray Condenser <u>Cooler</u>	1987	28,000 BTU/hr	None
E013 <sup>4</sup>		Storage Tank Cooler	1999	50 Tons	None
E015 <sup>4</sup>		Cracking Column Overhead Condenser	2003	1.9 MMBTU/hr	None
E016 <sup>4</sup>		Catalyst Heater	1996	152,000 BTU/hr	None
E021A/B <sup>4</sup>		Circulated Liquid Coolers	1987	150,000 BTU/hr	None
E035 <sup>4</sup>		TMXDI Condenser	1987	269,000 BTU/hr	None
E036A/B <sup>4</sup>		Circulated Methanol Coolers	2016	200,000 BTU/hr	None
<del>E039<sup>4</sup></del>		<del>Product Cooler</del>	<del>1974</del>	<del>168,000 BTU/hr</del>	<del>None</del>
E051 <sup>4</sup>		Evaporator Condenser	1996	196 ft <sup>2</sup>	None
E107 <sup>4</sup>		Water Cooled Oil Cooler	<del>2010</del> 2009	4.77 MMBTU/hr	None
E525 <sup>4</sup>		Methanol Column Cooler	1987	971,000 BTU/hr	None
E528 <sup>4</sup>		MeC Letdown Condenser	1987	1.4 MMBTU/hr	None
E538 <sup>4</sup>		Methanol Column Feed Cooler	1987	4.5 MMBTU/hr	None
E541 <sup>4</sup>		Methanol Column Cooler	1975	1.34 MMBTU/hr	None
E570 <sup>4</sup>		MeC Condenser	<del>1987</del> 2017	1.0 MMBTU/hr	None
E580 <sup>4</sup>	Methanol Circulating Cooler	1987	275,000 BTU/hr	None	
H026 <sup>4</sup>	Chilled Oil Refrigeration System	1987	47 tons	None	
H027 <sup>4</sup>	Chilled Oil Refrigeration System	2011	160 tons	None	
H040 <sup>4</sup>	Wiped Film Evaporator	1996	53 ft <sup>2</sup>	None	
H055 <sup>4</sup>	Hot Oil Heater	1996	300 KW	None	
H550 <sup>4</sup>	No direct vent	MeC Evaporator	1987	1.0 MMBTU/hr	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
R010 <sup>4</sup>		Cracking Reactor and Column	1987	5,900 gallons	None
V001 <sup>4</sup>		Secondary MeC Stripper	1987	450 gallons	None
V161 <sup>4</sup>		Evaporator Bottoms Receiver	1996	<del>10085</del> gallons	None
V420 <sup>4</sup>		Cracking Column Secondary Condenser	1987	560 gallons	None
V513 <sup>4</sup>		Bottoms Neutralization Tank	1975	10,000 gallons	None
V516 <sup>4</sup>		Methanol Storage Tank (transfers from railcars or tank trucks)	1988	17,500 gallons	Vapor return line B001
V530 <sup>4</sup>		MeC Reactor	<del>1975</del> 2005	3,350 gallons	None
V540 <sup>4</sup>		Methanol Column Secondary Condenser	2010	350,000 BTU/hr	None
V552 <sup>4</sup>		Evaporator Bottoms Pot	1987	80 gallons	None
V003	DIP-001	Reactant Storage Tank	1974	<del>525,000</del> 660,000 gallons	None
V516	MEC-001	Methanol Storage Tank (transfers from process vessels)	Installed 1988 (process transfers change in 2016)	17,500 gallons	None
V508	MEC-002	Urea/Methanol Slurry Tank	1974	8,300 gallons	E522
V518		Methanol Feed Tank	1974	6,300 gallons	
M507	MEC-003	Urea Rotary Air Lock	1987	NA	None
U001		<del>TMXDI Product Drumming Drum Filling Station</del>	<del>1988</del> 2016	<del>28 drums/hr</del> 50 gpm	
V514	MEC-004	Bottoms Heavies Box	NA	350 gallons	None
V554	MEC-005	Evaporator Bottoms Receiver	1974	3,325 gallons	None
V500A-C	MEC-006	Recovered Methanol Rail Cars	NA	20,000 gallons	V582
V510		By-product Methanol Rail Car	NA	20,000 gallons	
V574		MeC Condenser Receiver	1987	140 gallons	
V599A-E		Crude MeC Rail Cars	NA	20,000 gallons	
V535	MEC-007	Intermediate Product Receiver	1975 Modified 7/14/1987	11,000 gallons	None
V578		Methanol Spray Condenser Receiver	1987	200 gallons	
V577	MEC-008	Methanol Spray Condenser	1987	800 gallons	P590A/B

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
C539	MEC-009	Methanol Column	1975	5,100 gallons	H599
E540	MEC-009	Methanol Secondary Condenser	<del>2010</del> 2017	149.2 ft <sup>2</sup>	H599
V584	MEC-010	Crude MeC Storage Tank	1975 Modified 3/15/87	18,000 gallons	V583
H530	MEC-011	Hot Oil Heater	1987	21.8 MMBTU/hr	None
V515	MEC-012	Flare Purge Tote	2008	300 gallons	None
U002	MEC-013	Drumming Station	2011	<del>12 Drums/hr</del> <u>90 gpm</u>	None
V085A	TMI-002	Fresh Methanol Tank Wagon	NA	5,000 gallons	None
V060A	TMI-003	Finished TMU Tank Wagon	NA	5,000 gallons	None
V060B	TMI-005	Finished TMU Tank Wagon	NA	5,000 gallons	None
V102	TMX-003	Caustic Storage Tank	1986	6,570 gallons	None
V107	TMX-004	Sulfuric Acid Storage Tank	1987	6,570 gallons	None
C120	UAM-001	Second Pass Column	1974	7,100 gallons	C102/E120
E024		Second Pass Overhead Condenser	1987	256 ft <sup>2</sup>	
J001/ <del>J010</del> <u>J101</u> <sup>2</sup>		Production Vacuum System	1987	500 cfm	
J010/J110 <sup>1</sup>		Refining Vacuum System	2016	742 cfm	
P001A/B		Catalyst Recovery Vacuum System	1996	400 cfm	
R001 <sup>2</sup>		Addition Reactor (during TMI to TMU production)	1987	11,900 gallons	
V009 <sup>1</sup>		First Pass Overhead Receiver	1987	550 gallons	
V004		Catalyst Feed Tank	1987	1,250 gallons	
V005		First Pass Spray Condenser	1987	510 gallons	
V010 <sup>5</sup>		Methanol Surge Tank	1974 Modified 10/2/87	10,700 gallons	
V012		Recovered Catalyst Storage Tank	1975 Modified 11/18/99	15,000 gallons	
V016 <sup>2</sup>		Crude TMXDU Surge Tank (during TMI to TMU production)	1974	19,000 gallons	
V019 <sup>1</sup>		TMI Surge Tank/Crude TMXDI Tank	1974 Modified 7/23/87	11,400 gallons	
V022		Circulating Liquid Tank	1987	535 gallons	
V026 <sup>3</sup>		Second Pass Column Overhead Receiver	1987	130 gallons	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
V032	UAM-001	Methanol Spray Condenser	1987	3,100 gallons	
V033 <sup>1</sup>		Recovered Methanol Tank	1987	1,977 gallons	
V036		TMXDI Product Receiver	1987	500 gallons	
V039 <sup>1</sup>		Crude TMI Storage Tank	1995	100,000 gallons	
V059 <sup>3</sup>		Supercrude TMI Storage Tank	1976 Modified 3/22/00	50,000 gallons	
V080A		Secondary Condensate Tank Wagon	NA	5,000 gallons	
V080B <sup>3</sup>		Recovered TMXDI Tank Wagon (during TMI Distillation)	NA	5,000 gallons	
V085 <sup>1</sup>		Fresh DMF Tank Wagon	NA	5,000 gallons	
V085B <sup>2</sup>		Heavy Polymer Tank Wagon	NA	5,000 gallons	
V110A <sup>3</sup>		Fourth Pass Bottoms Tank Wagon	NA	5,000 gallons	
V110B <sup>3</sup>		Fifth Pass Bottoms Tank Wagon	NA	5,000 gallons	
V110C <sup>3</sup>		Sixth Pass Overheads Tank Wagon	NA	5,000 gallons	
V112		Cracking Column Overheads Receiver	1987	300 gallons	
V116 <sup>1</sup>		First Pass Circulating Liquid Tank	1988	220 gallons	
V150		Methanol Receiver	1996	20 gallons	
V152		Distillate Receiver	1996	300 gallons	
V185 <sup>1</sup>		Spent DMF Tank Wagon	NA	5,000 gallons	
E022		UAM-002	Water Stripper Overheads Condenser	1987	
E032	MeC Stripper Overheads Receiver/Condenser		1974	1,300 gallons	
V555	UAM-002	DMF Waste Tank Wagon	2008	5,000 gallons	C102/E120/ P051A/B
V560		Recovered DMF Tank Wagon	2008	5,000 gallons	
R001	UAM-003	Addition Reactor (during TMXDI production)	1987	11,900 gallons	K360
V016		Crude TMXDU Surge Tank (during TMXDI production)	1974 Modified 7/23/87	19,000 gallons	
V024		Water Stripper Overhead Receiver	1987	130 gallons	
V160	USM-012	Standby Storage Tank (Inactive per R13-2473J, October 9, 2014)	1976 Modified 7/23/87	37,600 gallons	None
V006	UAM-004	TMXDU Purge Container	NA	400 gallons	None
V105	UAM-005	Sulfuric Acid Calibration Tank	1987	50 gallons	None
V038	UAM-006	Recovered MeC Storage Tank	1974 Modified 7/27/87	13,000 gallons	None
V007	UAM-007	Water Stripper TMXDI Overheads Tank	2008	5,000 gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
V550	UAM-007	Water Stripper DMF Overheads Tank Wagon	2008	5,000 gallons	None
V401	UAM-008	Water Stripper Overheads Storage Tank	1979	10,235 gallons	None
V080B	UCM-005	Recovered TMXDI Tank Wagon (during TMXDI production)	NA	5,000 gallons	None
V121A	UCM-007	Catalyst Decanting Tank Wagon	NA	5,000 gallons	None
V121B/C		Bottoms Tank Wagons	NA	5,000 gallons	None
V101	USM-003	TMXDI Storage Tank	1974	12,600 gallons	None
V201	USM-004	TMXDI Storage Tank	1974	10,000 gallons	None
V301	USM-005	TMXDI Storage Tank	1974	12,600 gallons	None
V020	USM-006	TMI Storage Tank	1975	4,000 gallons	None
V002	USM-007	Cooling Oil Storage Tank	1987	6,600 gallons	None
V320	USM-008	Chilled Oil Surge Tank	1974 Modified 7/23/87	17,000 gallons	None
V132	USM-010	Hot Oil Storage/Expansion Tank	1974	18,000 gallons	None
V031	USM-011	Catalyst Storage Tank	1987	6,750 gallons	None
V100	UTM-002	TMXDI Trailer Loading	NA	5,000 gallons	None
V130		Finished TMI Tank Wagon	NA	5,000 gallons	
<u>V200</u>		<u>Reactant Tank Wagon</u>	<u>NA</u>	<u>5,000 gallons</u>	
V501		Crude MeC Tank Wagon	NA	5,000 gallons	
V545		Heavies Tank Wagon	NA	5,000 gallons	

<sup>1</sup> - Can also vent through UAM-002 when TMI to TMU Process or TMI Distillation Process is operating.

<sup>2</sup> - Can also vent through UAM-002 when TMI to TMU Process is operating.

<sup>3</sup> - Can also vent through UAM-002 when TMI Distillation Process is operating.

<sup>4</sup> - Emission from these emission units vent to another emission unit and do not vent directly to the atmosphere.

<sup>5</sup> - Can also vent through UAM-002 when DMF Recovery Process is operating.

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2.5</sub></b>	Particulate Matter less than 2.5 μm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10μm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>Pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>Ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppmv or ppmv</b>	Parts per Million by Volume
<b>dscm</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>Psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **2.3. Authority**

This permit is issued in accordance with West Virginia air pollution control law W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

### **2.4. Term and Renewal**

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-2473J. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

### **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Applications R13-2473, R13-2473A, R13-2473B, R13-2473C, R13-2473D, R13-2473E, R13-2473F, R13-2473G, R13-2473H, R13-2473I, R13-2473J, R13-2473K, R13-2473L and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to; [45CSR§§13-5.11 and -10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

### **2.6. Duty to Provide Information**

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.



## **2.7. Duty to Supplement and Correct Information**

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

## **2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

## **2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

## **2.10 Major Permit Modification**

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

## **2.11. Inspection and Entry**

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

## **2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

### **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

### **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

### **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

**2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

**2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

**2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

**2.19. Credible Evidence**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

*[Reserved]*

#### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  1. The permit or rule evaluated, with the citation number and language;
  2. The result of the test for each permit or rule condition; and,
  3. A statement of compliance or noncompliance with each permit or rule condition.

**[WV Code § 22-5-4(a)(14-15) and 45CSR13]**

### 3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§4. *State Enforceable Only.*]

### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street  
Charleston, WV 25304-2345

**If to the US EPA:**

Associate Director  
Office of Air Enforcement and Compliance Assistance  
(3AP20)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

#### 3.5.4. Operating Fee

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made

immediately available for inspection by the Secretary or his/her duly authorized representative.

- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

## 4.0. Source-Specific Requirements

### 4.1. Limitations and Standards

- 4.1.1. Maximum allowable emissions to the atmosphere from the Urethanes Business Unit shall not exceed the limitations set forth in Appendix A, dependent upon the process(es) currently in operation in the Urethanes Business Unit.
- 4.1.2. If the permittee emits greater than 50 pounds per calendar year of any Hazardous Air Pollutants (HAPs) other than Methanol (CAS 67-56-1) and Dimethyl Formamide (CAS 68-12-2) from any emission point listed in Appendix A, the permittee shall provide written notification to the Director within thirty (30) days after such emissions. This written notification shall include the potential to emit (in pph and tpy) for each new HAP species from each of the emission points listed in Appendix A. The permittee shall not emit 2 pph or 5 tpy or more of any HAP or combination of HAPs in excess of the limits established in Section 4.1.1 without obtaining a modification of this permit.
- 4.1.3. Compliance with the emission limits set forth in section 4.1.1 shall be demonstrated by calculating emissions for every product/process in the Urethanes Business Unit using appropriate engineering calculations, process models, and actual process data. When these emissions are calculated, each emission point listed in Appendix A shall be included in the calculation and accounted for in the actual emissions record. The calculations shall be maintained current for all processes, process modifications and new variants. The Director of the Division of Air Quality may specify or may approve other valid methods for compliance determination when he/she deems it appropriate and necessary.
- 4.1.4. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.  
**[45CSR§13-5.11.]**
- 4.1.5. During all periods of normal operations, process vent air emissions from the emission sources and equipment listed in Section 1.0 shall be routed to and controlled by the associated control devices listed in Section 1.0 prior to venting emissions to the atmosphere. However, the control devices listed in Section 1.0 may be bypassed to perform maintenance and/or repair activities for periods up to 72 hours per calendar year per control device, with the bypass hours counted only when the listed emission group(s) in Appendix B are operating and venting to the respective control device during a bypass event.  
**[45CSR§13-5.11]**
- 4.1.6. Emissions to the atmosphere from the following emission sources subject to 45CSR§7 – “To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations” shall not exceed the emission limitations set forth in Sections 4.1.13 and 4.1.14, and shall not exceed opacity limitations listed in Sections 4.1.11 and 4.1.12.



**Table 4.1.6. 45CSR§7 Sources Emission Limits**

Product or Process Name	Emission Point ID	Source ID	Pollutant
TMXDI and Crude TMI Production	TMX-003	V102	PM <sub>10</sub> Opacity
TMXDI and Crude TMI Production	TMX-004	V107	H <sub>2</sub> SO <sub>4</sub> Opacity
TMXDI and Crude TMI Production	UAM-005	V105	H <sub>2</sub> SO <sub>4</sub> Opacity
Methyl Carbamates	MEC-003	M507	PM <sub>10</sub> Opacity

[Compliance with this streamlined condition shall insure compliance with 45CSR§§7-3.1, -3.2, -4.1, and -4.2]

- 4.1.7. The control devices listed in Appendix B shall be operated in accordance with the required monitoring parameters and inspected and maintained in accordance with the Inspection & Preventive Maintenance schedules listed in Appendix B. Missed readings for each control device monitoring parameter data element specified in Appendix B shall not exceed 5% of the total required readings in a rolling twelve (12) month period.
- 4.1.8. The permittee shall comply with all applicable requirements of 40 C.F.R. 63, Subpart EEEE – “National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)” (OLD MACT).
- 4.1.9. The permittee shall comply with all applicable requirements of 40 C.F.R. 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing”.
- 4.1.10. *[Reserved]*
- 4.1.11. The permittee shall not cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Section 4.1.12. Process source operations subject to the opacity limitation are indicated in Section 4.1.6.  
**[45CSR§7-3.1]**
- 4.1.12. The opacity provisions of Section 4.1.11 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.  
**[45CSR§7-3.2]**
- 4.1.13. The permittee shall not cause, suffer, allow or permit particulate matter to be vented into the open air from any type of source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under type ‘a’ source operation in Table 45-7A found at the end of 45CSR§7. Process source operations subject to the particulate weight limitation are indicated in Section 4.1.6.  
**[45CSR§7-4.1]**

- 4.1.14. Mineral acids shall not be released from any type source operation or duplicate source operation or from all pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 4.1.14. Process source operations subject to the mineral acid concentration limitation are indicated in Section 4.1.6.

**Table 4.1.14. Mineral Acid Stack Gas Concentration Limitations**

Mineral Acid	Allowable Stack Gas Concentration (mg/dscm)
Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> )	35
Nitric Acid Mist and/or Vapor (HNO <sub>3</sub> )	70
Hydrochloric Acid Mist and/or Vapor (HCl)	210
Phosphoric Acid Mist and/or Vapor (H <sub>3</sub> PO <sub>4</sub> )	3

[45CSR§7-4.2]

- 4.1.15. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in Sections 4.1.13. and 4.1.14. may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the permittee and approved by the Director.

[45CSR§7-9.1]

- 4.1.16. Maintenance operations shall be exempt from the provisions of 45CSR7-4, and the emission limitations set forth in Sections 4.1.13. and 4.1.14., provided that, at all times the owner or operator conducts maintenance operations in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director, which may include, but not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§7-10.3]

- 4.1.17. The following equipment, listed in Table 4.1.17. in the Urethanes Manufacturing Unit is used on an as-needed basis and may not be operated for extended periods of time. This equipment is exempt from Section 2.14. but remains subject to Section 3.1.5. Written notification shall be provided to the Director in the event of permanent shutdown of this equipment.

**Table 4.1.17. Intermittent Use Equipment**

Equipment ID	Source Description

[45CSR§13-5.11]

## 4.2. Monitoring Requirements

- 4.2.1. The permittee shall perform monitoring of all equipment parameters listed in Appendix B per the minimum data collection frequency and per the data averaging period as indicated.
- 4.2.2. For the purpose of determining compliance with the opacity limits of 45CSR§§7-3.1 and -3.2, the permittee shall conduct visible emission checks or opacity monitoring and recordkeeping for all emission points and equipment subject to an opacity limit, including those emission sources listed in Table 4.1.6.

Monitoring shall be conducted initially at least once per month with a maximum of forty-five (45) days between consecutive readings. After three consecutive monthly readings in which no visible emissions are observed from any of the subject emission points, those emission points will be allowed to conduct visible emission checks or opacity monitoring once per calendar quarter. If visible emissions or opacity are observed during a quarterly monitoring from an emission point(s), then that emission point(s) with observed emissions or opacity shall be required to revert to monthly monitoring. Any emission point that has reverted to monthly monitoring shall be allowed to again conduct quarterly visible emission checks or opacity monitoring only after three consecutive monthly readings in which no visible emissions are observed from the subject emission point.

These checks shall be conducted by personnel trained in the practices and limitations of 40CFR60 Appendix A, Method 9 or Method 22, or 45CSR§7A, during periods of normal operation of emission sources that vent from the referenced emission points for a sufficient time interval to determine if there is a visible emission. For observations of visible emissions from any emission point(s) which follows a water scrubber, when condensed water vapor is present in the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible; the observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

If visible emissions are identified during the visible emission check, or at any other time regardless of operations, the permittee shall conduct an opacity reading using the procedures and requirements of 45CSR§7A within seventy-two (72) hours of the first signs of visible emissions. A 45CSR§7A evaluation shall not be required if the visible emission condition is corrected within seventy-two (72) hours after the visible emission and the sources are operating at normal conditions.

- 4.2.3. The permittee shall monitor and record monthly the following data pertaining to any control device bypass events per Section 4.1.5: Identification of the control device bypassed, the date and the duration of the bypass, the nature of the repair or maintenance conducted, and the quantity of regulated air pollutants emitted during the bypass time period.

## 4.3. Testing Requirements

*[Reserved]*

## 4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
  - a. The date, place as defined in this permit, and time of sampling or measurements;

- b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of the analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
  - b. Steps taken to minimize emissions during the event.
  - c. The duration of the event.
  - d. The estimated increase in emissions during the event.
  - e. For each such case associated with an equipment malfunction, the additional information shall also be recorded:
  - f. The cause of the malfunction.
  - g. Steps taken to correct the malfunction.
  - h. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.4.4. The emission/discharge estimation models and calculation methodologies developed in Section 4.1.3, as well as production records for each calendar month shall be maintained on site for a period of five (5) years. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.  
**[45CFR§13-5.11]**
- 4.4.5. The permittee shall maintain on site for a period of five (5) years a tabulation of actual emissions/discharges generated using those methods specified in Section 4.1.3, over the most recent continuous rolling twelve (12) calendar month period, showing emission/discharge totals for the regulated air pollutants listed in Sections 4.1.1 and 4.1.3. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.  
**[45CSR§13-5.11]**

- 4.4.6. Records of all monitoring data required by Section 4.2.1 shall be maintained on site as follows:
- a. All monitoring data required by Section 4.2.1, as specified in Appendix B, shall be maintained on site for a period of no less than five (5) years. Such records may include strip charts, electronic data system records, and hand-written data forms. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
  - b. For each out-of-range occurrence of a monitoring parameter value for the averaging period specified in Appendix B, records stating the starting date/time and duration of the control device's out-of-range alarm or reading, the cause of the out-of-range parameter, and any corrective actions taken, shall be maintained on site for a period of no less than five (5) years from the date of monitoring, sampling, or measurement. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
  - c. Missed readings for each scrubber monitoring parameter data element specified in Appendix B shall be recorded and compared to the maximum allowable missed readings limitation in Section 4.1.7. A rolling consecutive twelve (12) month tabulation of missing readings for each scrubber monitoring parameter element shall be maintained on site for a period of no less than five (5) years. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
  - d. In the event that an applicable rule or regulation (such as the MON MACT) requires monitoring more stringent than that required by Section 4.2.1, the more stringent provisions shall apply. Any such required monitoring data shall be maintained on site for a period of no less than five (5) years. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

**[45CSR§13-5.11]**

- 4.4.7. Per the monitoring required by Section 4.2.2, records shall be maintained documenting the date and time of each visible emission check, the name of the responsible observer, the results of the check, and, if necessary, all corrective actions taken. Should an opacity reading be required per 45CSR§7A, records shall be maintained per the procedures of 45CSR§7A-2.
- 4.4.8. Compliance with Sections 4.4.2 and 4.4.3 may be shown by keeping similar records required by the requirements of the Startup, Shutdown, and Malfunction Plan as contained in 40CFR63 Subpart A and as may be amended by specific MACT subpart requirements

**4.5. Reporting Requirements**

*[Reserved]*

**APPENDIX A (Emission Limits)**

Emission Point	Source	Pollutant	Emission Limit	
			pph	tpy
<b>Emission Limits when any Urethanes Manufacturing Unit Process is On-Line</b>				
USM-007	V002	VOC	1.0	0.1
USM-008	V320	VOC	0.1	0.1
USM-010	V132	VOC	0.1	0.3
<u>UTM-002</u>	<u>V100 or V200</u>	<u>VOC</u>	<u>0.1</u>	<u>0.1</u>
<u>UTM-002</u>	<u>V501</u>	<u>VOC</u> <u>THAP</u>	<u>0.2</u> <u>0.1</u>	<u>0.1</u> <u>0.1</u>
MEC-003	U001	VOC	0.1	0.1
MEC-011	H530	CO	1.8	7.9
		NO <sub>x</sub>	2.2	9.4
		PM	0.2	0.9
		SO <sub>2</sub>	0.1	0.1
		VOC	0.2	0.7
MEC-013	U002	VOC	0.7	0.1
		THAP	0.4	0.1
<b>Emission Limits when TMI to TMU Process is On-Line</b>				
TMI-002	V085A	VOC	0.1	0.10
		THAP	0.1	0.10
TMI-003	V060A	VOC	0.4	0.20
		THAP	0.3	0.15
TMI-005	V060B	VOC	0.4	0.20
		THAP	0.3	0.15
UAM-001 <i>or</i> UAM-002	C102	VOC	2.0	0.90
		THAP	1.8	0.75
<b>Emission Limits when Methanol Recovery Operation is On-Line</b>				
MEC-001	V516	VOC	0.64	0.1
		THAP	0.64	0.1
MEC-006	V582, V574, V500A-C	VOC	0.70	0.50
		THAP	0.70	0.50
MEC-007	V578, V535	VOC	0.39	0.30
		THAP	0.39	0.30
MEC-008	P590A/B	VOC	0.10	0.10
		THAP	0.10	0.10
UTM-002	V545	VOC	0.30	0.30
		THAP	0.30	0.20
<b>Emission Limits when DMF Recovery Operation is On-Line</b>				
UAM-002	V555, V560, P051A/B, J001/J101	VOC	0.1	0.1
		THAP	0.1	0.1

Emission Point	Source	Pollutant	Emission Limit	
			pph	tpy
UAM-003	V024	VOC	0.1	0.1
		THAP	0.1	0.1
UAM-007	V550	VOC	0.4	0.1
		THAP	0.4	0.1
UAM-001	V010	VOC	0.1	0.1
		THAP	0.1	0.1
<b>Emission Limits when TMI Distillation Process is On-Line</b>				
UAM-001 <i>or</i> UAM-002	P051A/B, C102/E120	VOC	0.3	0.20
		THAP	0.2	0.10
USM-006	V020	VOC	0.1	0.10
UTM-002	V130	VOC	0.1	0.10
<b>Emission Limits when TMXDI and Crude TMI Production Process is On-Line</b>				
DIP-001	V003	VOC	0.1	0.1
MEC-006	V510, V582	VOC	0.2	0.1
		THAP	0.2	0.1
MEC-010	V583	VOC	0.1	0.4
		THAP	0.1	0.2
TMX-003	V102	PM	0.1	0.1
UAM-001	C102/E120	VOC	1.75	5.6
		THAP	1.75	5.6
UAM-002	P051A/B	VOC	0.6	1.9
		THAP	0.2	0.65
UAM-003	K360	VOC	0.1	0.1
		THAP	0.1	0.1
UAM-004	V006	VOC	0.2	0.1
UAM-006	V038	VOC	0.3	0.8
		THAP	0.1	0.1
UAM-007	V007	VOC	0.6	2.0
		THAP	0.6	2.0
UAM-008	V401	VOC	0.1	0.1
		THAP	0.1	0.1
UCM-005	V080B	VOC	0.1	0.1
UCM-006	V070A/B	VOC	0.1	0.1
UCM-007	V121A-C	VOC	0.2	0.4
USM-003	V101	VOC	0.1	0.1
USM-004	V201	VOC	0.1	0.1
USM-005	V301	VOC	0.1	0.1
USM-011	V031	VOC	0.1	0.1

Emission Point	Source	Pollutant	Emission Limit	
			pph	tpy
<del>UTM-002</del>	<del>V100</del>	<del>VOC</del>	<del>0.1</del>	<del>0.1</del>
<b>Emission Limits when Methyl Carbamate Process is On-Line</b>				
MEC-001	V516	VOC THAP	4.7 4.6	0.1 0.1
MEC-002	E522, V508	VOC THAP	1.5 0.8	0.52 0.51
MEC-003	M507	PM	1.2	0.47
MEC-004	V514	VOC	0.1	0.01
MEC-005	V554	VOC	0.1	0.01
MEC-006	V599A-E, V574	VOC THAP	0.1 0.1	0.3 0.15
MEC-007	V578, V535	VOC THAP	1.8 1.76	2.2 2.1
MEC-008	P590A/B, V577	VOC THAP	0.6 0.6	2.00 2.00
MEC-009	H599, C539, E540	CO NO <sub>x</sub> PM SO <sub>2</sub> VOC THAP	0.1 0.4 0.1 0.1 7.2 6.1	0.02 1.15 0.01 0.01 25.12 21.30
MEC-010	V584	VOC THAP	0.1 0.1	0.10 0.10
MEC-012	V515	VOC THAP	0.2 0.2	0.7 0.7
<del>UTM-002</del>	<del>V501</del>	<del>VOC THAP</del>	<del>0.2 0.1</del>	<del>0.1 0.1</del>



APPENDIX B – Control Devices Parametric Monitoring

Control Device ID	Description	Applicable Regulations	Emission Group(s)*	Monitoring Parameter	Parameter Value	Data Collection Frequency	Data Averaging Period	Inspection/ Preventative Maintenance Frequency
B001	Vapor Return Line	40 C.F.R. 63, Subpart FFFF – HAP	Methyl Carbamate	NA	NA	NA	NA	Annual
C102	DMF Scrubber	NA	TMI to TMU, TMI Distillation, TMXDI, DMF Recovery	Inlet scrubber liquor flowrate	≥ 6.5 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual
C102	DMF Scrubber	NA	TMI to TMU, TMXDI	Methanol concentration of scrubber liquor <sup>3</sup>	≥ 20% by weight	Daily	Calendar daily	Annual
E120	Vent Condenser	NA	TMI to TMU, TMI Distillation, TMXDI, DMF Recovery	Outlet temperature	≤ 0 deg C	15 minutes <sup>1</sup>	Calendar daily	Annual
E522	Methanol Vent Condenser	NA	Methyl Carbamate	Refrigerated oil temperature at the condenser outlet	≤ -7 deg C	15 minutes <sup>1</sup>	Calendar daily	Annual
H599	Flare	45CSR6 –PM; 40 C.F.R. 63, Subpart FFFF – HAP	Methyl Carbamate	Pilot light flameout detection & reignition system	Pilot light flame verification	Continuous	Not Applicable	Annual
K360	Scrubber	NA	TMXDI, DMF Recovery	Inlet water (liquor) flowrate	≥ 2.6 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual
P051A/B	Graham Vacuum Pump	NA	TMXDI, DMF Recovery	Inlet water (liquor) flowrate	≥ 20.0 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual
P590A/B	Water Ring Vacuum Pump	NA	Methyl Carbamate, Methanol Recovery <sup>2</sup>	Inlet water (liquor) flowrate	≥ 3.0 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual
V032	Methanol Spray Condenser	NA	TMI to TMU	Recirculated methanol temperature	≤ -6 deg C	15 minutes <sup>1</sup>	Calendar daily	Annual
V032	Methanol Spray Condenser	NA	TMXDI	Recirculated methanol temperature	≤ -4 deg C	15 minutes <sup>1</sup>	Calendar daily	Annual
V577	Methanol Spray Condenser	NA	Methanol Recovery	Recirculated methanol temperature	≤ 6 deg C	15 minutes <sup>1</sup>	Calendar daily	Annual
V582	Scrubber	NA	Methanol Recovery, TMXDI	Inlet water (liquor) flowrate	≥ 2.6 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual
V583	Scrubber	NA	TMXDI	Inlet water (liquor) flowrate	≥ 2.6 gpm	15 minutes <sup>1</sup>	Calendar daily	Annual

\* The control device requirements apply when the listed emission groups (s) are operating and venting to the control device.

<sup>1</sup> Data logging required at least once every fifteen (15) minutes. However, the permittee may revert to daily data collection if the electronic data historian system is non-functional/being repaired.

<sup>2</sup> Only required when the water ring vacuum pump is needed to maintain vacuum service during the methanol recovery operation.

<sup>3</sup> If the parameter value is ≥ 20%, the DMF scrubbing fluid shall be recharged with fresh DMF.

### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> \_\_\_\_\_  
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title \_\_\_\_\_  
(please print or type) Name Title

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

- <sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
    - (ii) the delegation of authority to such representative is approved in advance by the Director;
  - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
  - d. The designated representative delegated with such authority and approved in advance by the Director.