

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-07300030-2018**
Application Received: **September 25, 2017**
Plant Identification Number: **07300030**
Permittee: **Allnex USA Inc.**
Facility Name: **Willow Island**
Manufacturing Unit: **Urethanes**
Mailing Address: **252 Heilman Avenue, Belmont, WV 26134**

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| Physical Location: | Willow Island, Pleasants County, West Virginia |
| UTM Coordinates: | 473.66 km Easting • 4,356.34 km Northing • Zone 17 |
| Directions: | 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. |

Facility Description

Allnex USA Inc. Urethanes unit manufactures aliphatic isocyanates for use in industrial coatings, adhesives, textiles, and elastomers. The automotive industry is a major user of these products.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
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| Regulated Pollutants | Potential Emissions | 2017 Actual Emissions |
| Carbon Monoxide (CO) | 7.92 | 2.79 |
| Nitrogen Oxides (NO _x) | 10.55 | 4.17 |
| Particulate Matter (PM _{2.5}) | 0.91 | 0.60 |
| Particulate Matter (PM ₁₀) | 0.91 | 0.60 |
| Total Particulate Matter (TSP) | 0.91 | 0.60 |
| Sulfur Dioxide (SO ₂) | 0.11 | 0.02 |
| Volatile Organic Compounds (VOC) | 87.38 | 47.94 |

PM₁₀ is a component of TSP.

| Hazardous Air Pollutants | Potential Emissions | 2017 Actual Emissions |
|---------------------------------|----------------------------|------------------------------|
| Methanol | 59.05 | 32.67 |
| Dimethyl Formamide (DMF) | 3.22 | 1.53 |
| Total HAPs | 62.27 | 34.20 |

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit over 59 TPY of Methanol. Due to this facility's potential to emit over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Allnex USA Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

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| Federal and State: | 45CSR2 | Particulate matter and opacity limits for indirect heat exchangers. |
| | 45CSR6 | Open burning prohibited. |
| | 45CSR7 | Particulate matter and opacity limits for manufacturing sources. |
| | 45CSR10 | Sulfur dioxide limits. |
| | 45CSR11 | Standby plans for emergency episodes. |
| | 45CSR13 | Preconstruction permits for minor sources. |

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| WV Code § 22-5-4 (a) (14) 45CSR30 45CSR34 40 C.F.R. Part 61 Subpart M 40 C.F.R. 63 Subpart EEEE 40 C.F.R. 63 Subpart FFFF 40 C.F.R. 63 Subpart DDDDD 40 C.F.R. 68 40 C.F.R. Part 82, Subpart F | The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Emission Standards for Hazardous Air Pollutants Pursuant to 40 C.F.R. Part 63. Asbestos inspection and removal Organic liquids distribution (OLD) MACT. Miscellaneous Organic Chemical Manufacturing (MON) MACT. Boiler and Process Heater MACT Risk Management Plans Ozone depleting substances |
| State Only: | 45CSR4 No objectionable odors. |

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

| Permit or Consent Order Number | Date of Issuance | Permit Determinations or Amendments That Affect the Permit (<i>if any</i>) |
|--------------------------------|------------------|--|
| R13-2473M | June 25, 2018 | |

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This renewal Permit includes R30-07300030-2013 MM04. Since the most recent version of this permit, the following changes have been made as a result of the minor modification:

R13-2473M

1. In the Section 1.1 Emission Units Table, the year installed for Emission Unit V003 was changed to add that it was modified in 2018 (replaced transfer pumps). The design capacity has been corrected from 600,000 gallons to 660,000 gallons. The year installed for Emission Unit V510 has been changed from NA to 2018 Modified (replaced transfer pump).
2. R13-2473M has been added to Condition 3.1.11.
3. In Appendix A, Emission Point DIP-001 has been moved from "TMXDI" to "Urethanes". The emissions for this point have been increased from 0.1 to 0.2 pph. For "TMXDI", the VOC and THAP emission limits for MEC-006 have been increased from 0.2 to 0.6 pph each.

Other changes in this Permit include:

1. Emission unit E542 has been corrected to E541 in Condition 4.1.9.f. Emission unit E540 has also been added to the list of affected sources in Condition 4.1.9.f.
2. In the previous Permit, Condition 4.1.23 referenced Table 3 – Condition 2. This requirement is for a heater less than 10MMBTU/hr. The Hot Oil Heater is 21.8 MMBTU/hr. The requirement has been revised to Condition 3 for a heater greater than 10 MMBTU/hr. Table 3 – Condition 4 requires a one-time energy assessment. This was previously referenced in the Permit as Condition 3 and has been corrected in the renewal. The Permittee completed this assessment on January 28, 2016.
3. Process heater (H530) is subject to 40CFR63, Subpart DDDDD. Condition 4.1.24 has been added to specify the requirements of the annual tune-ups that are required in Condition 4.1.23. Condition 4.4.12 has been added to specify the recordkeeping requirements of the compliance reports and other performance evaluations. Condition 4.5.2 has been added to specify the reporting requirements related to the annual tune-up.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

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| 45CSR17 | To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter. Per 45CSR§17-6.1, the Urethanes manufacturing unit is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7. |
| 40 C.F.R. 60, Subpart K | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978. There are no petroleum liquid storage tanks in the Urethanes manufacturing unit. |
| 40 C.F.R. 60, Subpart Ka | Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984.” There are no petroleum liquid storage tanks in the Urethanes manufacturing unit. |
| 40 CFR 60 Subpart Kb | Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tank size or vapor pressures of the stored chemicals are below the applicability thresholds of 40 C.F.R. part 60 Subpart Kb. |
| 40 C.F.R. 60 Subpart VV | Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. The Urethanes manufacturing unit does not produce as intermediates or final products any of the materials listed in 40 C.F.R. § 60.489. |
| 40 C.F.R. 60 Subpart DDD | Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry. The Urethanes manufacturing unit does not manufacture polypropylene, polyethylene, polystyrene, or polyethylene terephthalate for which this rule applies. |
| 40 C.F.R. 60 Subpart III | Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.617 as a product, co-product, by-product, or intermediate. |

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| 40 C.F.R. 60 Subpart NNN | Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.667 as a product, co-product, by-product, or intermediate. |
| 40 C.F.R. 60 Subpart RRR | Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. The Urethanes manufacturing unit does not produce any of the chemicals listed in 40 C.F.R. § 60.707 as a product, co-product, by-product, or intermediate. |
| 40 C.F.R. 63 Subpart F 40 C.F.R. 63 Subpart G 40 C.F.R. 63 Subpart H | National Emission standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (HON).” 40 C.F.R. 63, Subparts F, G, and H do not apply to manufacturing process units that do not meet the criteria in 40 C.F.R. §§ 63.100 (b) (1), (b) (2), and (b) (3). |
| 40 C.F.R. Part 63 Subpart DD | National Emission Standards for Hazardous Air Pollutants From Off-Site Waste and Recovery Operations. The Urethanes manufacturing unit does not receive off-site materials as specified in paragraph 40 C.F.R. § 63.680 (b) and the operations are not one of the waste management operations or recovery operations as specified in 40 C.F.R. §§ 63.680 (a) (2) (i) through (a) (2) (vi). |
| 40 C.F.R. Part 63 Subpart JJJ | National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins. The Urethanes manufacturing unit does not produce the materials listed in 40 C.F.R. § 63.1310. |
| 40 C.F.R. Part 63 Subpart PPPP | National Emission standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products. The Urethanes manufacturing unit does not produce an intermediate or final product that meets the definition of “surface coated” plastic part. |
| 40 C.F.R. Part 63 Subpart WWWW | National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production. The Urethanes manufacturing unit does not engage in reinforced plastics composites production as defined in 40 C.F.R. § 63.5785 and does not manufacture composite material as defined in 40 C.F.R. § 63.5935. |
| 40 C.F.R. Part 64 | The Urethanes Unit does not have any pollutant specific emissions units (PSEU) at this facility that satisfy all of the applicability criteria requirements of 40 CFR § 64.2 (a), i.e., that: 1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the “major” threshold limits to be classified as a major source; 2) are subject to an emission limitation or standard and; 3) have a control device to achieve compliance with such emission limitation or standard. Therefore, the Urethanes Unit is not subject to the Compliance Assurance Monitoring (CAM) rule. |

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: July 13, 2018
Ending Date: September 4, 2018

Point of Contact

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
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Charleston, WV 25304
Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478
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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.