

# Fact Sheet



## *For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on June 01, 2022.

Permit Number: **R30-03900618-2022**  
Application Received: **June 02, 2023**  
Plant Identification Number: **03-54-03900618**  
Permittee: **Univation Technologies, LLC**  
Facility Name: **South Charleston Catalyst Plant**  
Mailing Address: **P.O. Box 8361, South Charleston, WV 25303**

Permit Action Number: *MM01*      Revised: *January 23, 2024*

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|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Location: | South Charleston, Kanawha County, West Virginia                                                                                                                                                                               |
| UTM Coordinates:   | 438.3 km Easting • 4,245.5 km Northing • Zone 17                                                                                                                                                                              |
| Directions:        | From Charleston, travel I-64 West and take the Kanawha Turnpike Exit. Travel approximately 1/2 mile to West Virginia Regional Technology Park. Take the second left at the sign marked "Univation Technologies Building 706". |

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### **Facility Description**

The South Charleston Catalyst Plant produces organo metallic compounds that are shipped to other companies for use. Ancillary operations include small boilers to supply steam, analytical quality assurance and control laboratories, and container storage/shipping.

With this minor modification, Univation Technologies, LLC is seeking to reclassify the South Charleston Catalyst Plant to area source status under 40 C.F.R. Part 63 Subparts EEEE and FFFF.

SIC: 2869

## Emissions Summary

There are no changes in potential emissions as a result of this minor modification.

## Title V Program Applicability Basis

The Union Carbide Corporation's Technology Park Operations (039-00004) and Univation Technologies, LLC's South Charleston Catalyst Plant (039-00618) are considered a single source for Clean Air Act permitting purposes. With the proposed changes associated with this modification, these facilities maintain the potential to emit over 100 tons per year of VOCs. Due to these facilities' potential to emit over 100 tons per year of criteria pollutant, Univation Technologies, LLC 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.

The modification to this facility has been found to be subject to the following applicable rules:

|                    |         |                                |
|--------------------|---------|--------------------------------|
| Federal and State: | 45CSR13 | NSR Permit Requirements.       |
|                    | 45CSR30 | Operating Permit Requirements. |

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

The active permits/consent orders affected by this modification are as follows:

| Permit or<br>Consent Order Number | Date of<br>Issuance |
|-----------------------------------|---------------------|
| R13-2631C                         | October 17, 2023    |

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 minor modification incorporates the revisions made with the Modification Permit R13-2631C. Univation Technologies, LLC is seeking to reclassify the South Charleston Catalyst Plant to area source status under 40 C.F.R. Part 63 Subparts EEEE and FFFF. In accordance with 40 C.F.R. §§63.1(c)(6)(i)(A) and 63.9(j), the DAQ received notification of the change to area source status under Subpart FFFF on June 13, 2023 and under Subpart EEEE on December 04, 2023. The changes associated with this modification include the removal of requirements which reference OLD MACT and MON MACT standards and the inclusion of specific requirements which were added to the NSR permit.

The following changes have been made to the Title V operating permit for this modification:

1. Section 2.0. – General Conditions

- a. In Condition 2.1.3., the reference to 45CSR§30-2.12. has been replaced with 45CSR§30-2.39 which defines “Secretary”.
- b. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
- c. Section 2.17., which previously contained emergency requirements, has been removed from the permit and replaced with “Reserved” as the requirements for emergencies and affirmative defense were removed from 45CSR30.
- d. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.

2. Section 3.0. – Facility-Wide Requirements

- a. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.
- b. 45CSR§30-8 has been revised and no longer requires the submission of certified emissions statements. Condition 3.5.4. has been updated accordingly.
- c. The requirements of Conditions 3.5.7. and 3.5.8.a.1. have been removed from the operating permit, and the conditions have been marked as “Reserved” due to the removal of the sections of 45CSR30 that related to emergencies and affirmative defense.
- d. Due to revisions in 45CSR§30-5.1.c.3.C.2., “telefax” has been updated to “email” in Condition 3.5.8.a.2.
- e. In Condition 3.7.2.b., the permit shield determination for 40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM) has been revised. Previously, it was determined that the emission units of the OMU2 and OMU3 processes were exempt from the CAM rule per 40 C.F.R. §64.2(b)(1)(i). As the facility is no longer subject to 40 C.F.R. Part 63 Subpart FFFF, this exemption is no longer applicable.

VOC, toluene, and 2,2,4-trimethylpentane emissions from the OMU2 and OMU3 emission units E325, E400, J01, K04, K05, K06, K08, K18, and K20 are controlled by the flare L15. The flare is subject to emission limits for these pollutants and has a control efficiency of 98% for each. Using the flare’s emission limits in Condition 4.1.1., the OMU2 and OMU3 emission units collectively have the following pre-control device emissions:

- i. The flare’s emission limit for VOCs is 0.19 tpy. Therefore, the pre-control device emissions of VOCs are collectively:

$$\frac{0.19 \text{ tpy}}{(1 - 0.98)} = 9.5 \text{ tpy}$$

- ii. The flare’s emission limit for toluene is 0.19 tpy. Therefore, the pre-control device emissions of toluene are collectively:

$$\frac{0.19 \text{ tpy}}{(1 - 0.98)} = 9.5 \text{ tpy}$$

- iii. The flare's emission limit for 2,2,4-trimethylpentane is 0.02 tpy. Therefore, the pre-control device emissions of 2,2,4-trimethylpentane are collectively:

$$\frac{0.02 \text{ tpy}}{(1 - 0.98)} = 1 \text{ tpy}$$

As the pre-control device emissions are below the Title V major source thresholds, the OMU2 and OMU3 processes are not subject to CAM per 40 C.F.R. §64.2(a)(3).

3. Section 4.0. – Source-Specific Requirements [Organo Metallic Compound Production Unit OMU2 and OMU3 Process]

- a. The footnote has been removed from Condition 4.1.1. in accordance with R13-2631C.
- b. Due to the reclassification of the facility to area source status under 40 C.F.R. Part 63 Subpart FFFF, the requirements of Subpart FFFF are no longer applicable per 40 C.F.R. §63.2435(a). Therefore, the following changes have been made to the operating permit:
- i. In accordance with R13-2631C, Condition 4.1.10. has been revised to remove the references to the MON requirements and to include an additional exception to the operation of the condenser E325. Additionally, 45CSR34 and 40 C.F.R. §63.993(a)(2) have been removed from the authority.
  - ii. In the previous operating permit, Conditions 4.1.17., 4.1.20., 4.2.8., 4.3.1., 4.3.2., 4.4.6., and 4.5.1. contained references to the requirements of 40 C.F.R. Part 63 Subpart FFFF. These requirements have been removed from the operating permit as follows:
    1. Conditions 4.1.17., 4.3.2., and 4.5.1. have been marked as “Reserved”.
    2. The requirements of Conditions 4.1.20., 4.2.8., 4.3.1., and 4.4.6. have been replaced with new specific requirements permitted under R13-2631C (See 3.b.iii. of this Fact Sheet).
  - iii. The table below lists the specific requirements which have been added to the operating permit in accordance with R13-2631C. These requirements were derived from the standards of 40 C.F.R. Part 63 Subparts A, F, H, SS, and FFFF and were previously included as Attachments 1 and 2 of the operating permit. Univation Technologies, LLC submitted the reclassification request prior to the compliance date (August 12, 2023) for the Subpart FFFF revisions made with 85 FR 49141.

| Title V Condition | R13-2631C Condition | Summary of Permit Condition                                                                          | Derivation                     |
|-------------------|---------------------|------------------------------------------------------------------------------------------------------|--------------------------------|
| 4.1.20.           | 4.1.20.             | Determine uncontrolled HAP emissions from each batch process vent.                                   | 40 C.F.R. §§63.2460(a) and (b) |
| 4.1.21.           | 4.1.21.             | Pressure relief devices shall be operated with an instrument reading below 500 ppm above background. | 40 C.F.R. §§63.165(a) and (b)  |
| 4.1.22.           | 4.1.22.             | Sampling connection system requirements.                                                             | 40 C.F.R. §63.166              |
| 4.1.23.           | 4.1.23.             | Open-ended valve or line requirements.                                                               | 40 C.F.R. §63.167              |

| <b>Title V Condition</b> | <b>R13-2631C Condition</b> | <b>Summary of Permit Condition</b>                                                                                                                   | <b>Derivation</b>                                                         |
|--------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 4.1.24.                  | 4.1.24.                    | Maintain a plan for minimizing HAP emissions in maintenance wastewater.                                                                              | 40 C.F.R. §63.105                                                         |
| 4.1.25.                  | 4.1.25.                    | Maintain a plan for minimizing HAP emissions during startup, shutdown, and malfunction events of the Product Separation and Solvent Recovery System. | 40 C.F.R. §63.2540<br>40 C.F.R. §63.6(e)(3)                               |
| 4.2.8.                   | 4.2.8.                     | To demonstrate compliance with Condition 4.1.10., continuously monitor and record the condenser vent gas exit temperature.                           | 40 C.F.R. §63.2455(c)<br>40 C.F.R. §63.993(c)(2)                          |
| 4.2.9.                   | 4.2.9.                     | Use a thermocouple to continuously record condenser E325 vent gas exit temperature.                                                                  | 40 C.F.R. §63.2455(c)<br>40 C.F.R. §63.993(c)(2)                          |
| 4.3.1.                   | 4.3.1.                     | To minimize fugitive emissions from equipment leaks, conduct annual pressure testing of the process equipment.                                       | 40 C.F.R. §63.2480<br>40 C.F.R. §§63.178(b) and (d)                       |
| 4.4.6.                   | 4.4.7.                     | Maintain a schedule or log of operating scenarios.                                                                                                   | 40 C.F.R. §63.2525(c)                                                     |
| 4.4.7.                   | 4.4.8.                     | Recordkeeping requirements for batch process vents.                                                                                                  | 40 C.F.R. §63.2525(e)(4)                                                  |
| 4.4.8.                   | 4.4.9.                     | Record each time a safety device opens to the air to avoid unsafe conditions.                                                                        | 40 C.F.R. §63.2525(f)                                                     |
| 4.4.9.                   | 4.4.10.                    | Recordkeeping requirements for the condenser E325 vent gas exit operating temperature.                                                               | 40 C.F.R. §63.2450(k)<br>40 C.F.R. §63.998(b)(1) to (b)(3)                |
| 4.4.10.                  | 4.4.11.                    | Recordkeeping requirements for the condenser E325 exit vent gas temperature monitoring device.                                                       | 40 C.F.R. §63.2450(k)(1)<br>40 C.F.R. §63.2525(g)<br>40 C.F.R. §63.998(c) |
| 4.4.11.                  | 4.4.12.                    | Recordkeeping requirements for annual pressure tests of process equipment.                                                                           | 40 C.F.R. §63.2525(a)<br>40 C.F.R. §63.181(e)                             |

- iv. Attachments 1 and 2 of the operating permit contained monitoring, testing, recordkeeping, and reporting requirements from 40 C.F.R. Part 63 Subparts A, F, H, SS, and FFFF that were applicable to the OMU2 and OMU3 processes through the standards of Subpart FFFF. As the facility is no longer subject to Subpart FFFF, these attachments have been removed from the operating permit.
- c. Due to the reclassification of the facility to area source status under 40 C.F.R. Part 63 Subpart EEEE, the requirements of Subpart EEEE are no longer applicable per 40 C.F.R. §63.2334(a). Therefore, the

recordkeeping requirement of §63.2343(a) has been removed from Condition 4.4.7. The condition now contains a new recordkeeping requirement established in R13-2631C (See 3.b.iii. of this Fact Sheet).

### **Non-Applicability Determinations**

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

**40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)** – Per 40 C.F.R. §64.2(a)(3), Univation’s processes are not subject to the CAM rule because the OMU2 and OMU3 emission units that are controlled by the flare (L15) are not a major source of VOC, toluene, or 2,2,4-trimethylpentane emissions before controls (9.5 tpy of pre-controlled emissions of VOCs, 9.5 tpy pre-controlled emissions of toluene, and 1 tpy pre-controlled emissions of 2,2,4-trimethylpentane; 98% control efficiency for VOCs, toluene, and 2,2,4-trimethylpentane) and the Bag Dumping Station (K02) is not a major source of PM or PM<sub>10</sub> emissions before controls (3.7 tpy pre-controlled emissions; 80% control efficiency for PM and PM<sub>10</sub> as permitted under R13-2631).

### **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: Not Applicable

Ending Date: Not Applicable

### **Point of Contact**

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

Sarah Barron  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41915  
sarah.k.barron@wv.gov

### **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.