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**west virginia department of environmental protection**

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Division of Air Quality  
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Charleston, WV 25304  
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Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

September 21, 2015

CERTIFIED MAIL  
91 7199 9991 7032 6242 2572

Robert J. Fehrenbacher  
Chemours  
P.O. Box 1217  
Washington, WV 26181-1217

Re: The Chemours Company FC, LLC  
Washington Works  
Permit No. R13-2654D  
Plant ID No. 107-00182

Dear Mr. Fehrenbacher:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R13-2654D is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

The source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit application to reflect the changes permitted herein.

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.

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.

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1208 or michael.egnor@wv.gov.

Sincerely,



Mike Egnor  
Engineer

Enclosures

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

*Division of Air Quality*

Randy C. Huffman  
Cabinet Secretary

# Class I Administrative Update Permit



**R13-2654D**

*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:*

**The Chemours Company FC, LLC**  
Washington Works  
107-00182

A blue ink signature of William F. Durham, written over a horizontal line.

*William F. Durham*  
Director

*Issued: September 17, 2015 • Effective: September 17, 2015*

This permit will supersede and replace Permit R13-2654C.

Facility Location: Washington, Wood County, West Virginia  
Mailing Address: P.O. Box 1217, Washington, WV 26181-1217  
Facility Description: Wastewater Treatment Plant  
SIC Codes: 2821: Chemicals and Allied Products – Plastics Materials and Resins  
UTM Coordinates: 442.310 km Easting • 4,346.800 km Northing • Zone 17  
Permit Type: Class I Administrative Update  
Description of Change: Transfer of equipment and requirements from R13-2692A to this Permit in order to retire R13-2692A, as well as the change in requirements due to all of the equipment in R13-2692A no longer being used for commercial production. There will be a reduction in permitted emissions as a result of this modification.

*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.*

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*The source is subject to 45 C.S.R. 30. The permittee has the duty to update the facility's Title V (45 C.S.R. 30) permit application to reflect the changes permitted herein.*

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1.0. Emission Units

Emission Source		Pollution Control Device	Year Installed	Emission Point ID
ID	Description			
P201	WWTP Tank	None	1973	480
P202	WWTP Tank	None	1973	480
P205	WWTP Mix Tank	None	1973	480
P206	WWTP Aeration Tank	None	1973	480
P207	WWTP Aeration Tank	None	1973	480
P208	WWTP Aeration Tank	None	1988	480
P209	WWTP De-aeration Tank	None	1980	480
P210	WWTP Clarifier Tank	None	1973	480
P211	WWTP Clarifier Tank	None	1973	480
P212	WWTP Clarifier Tank	None	1980	480
P214	WWTP Sump	None	1976	480
P215	WWTP Sump	None	1973	480
P218	WWTP Dewatering Pit	None	1996	480
R022S-002	Extruder	None	1975	R022E-F025
R022S-003	Vacuum System	None	1985	R022E-F157
R022S-005	Vacuum System	None	1985	R022E-F160
R022S-007	Extruder	None	1975	R022E-F030
R022S-008	Extruder	None	1990	R022E-F123
R022S-009	Vacuum System	None	1990	R022E-F155
R022S-011	Extruder	None	1985	R022E-F121
R022S-012	Vacuum System	None	1985	R022E-F168
R022S-047	Local Vent	None	1985	R022E-F132
R022S-B05	Hood	None	1950	R022E F51
R022S-B06	Hood	None	1950	R022E F52
R022S-B17	Hood	None	1950	R022E F63
R022S-B19	Hood	None	1950	R022E F65
R022S-B20	Hood	None	1950	R022E F66
R022S-B28	Hood	None	1950	R022E F74
R022S-B36	Hood	None	1985	R022E F115
R022S-B38	Hood	None	1985	R022E F117
R022S-B40	Hood	None	1985	R022E F118

Emission Source		Pollution Control Device	Year Installed	Emission Point ID
ID	Description			
R022S200	HFP System Evac	None	1989	R022EPVJ
R022S204	FP SW O2 Analyzers	None	1978	R022ECPV
R022S205A	FP SW TFE Tank #1 Vent	None	2004	R022ECPV
R022S205B	FP SW TFE Tank #1 Evac	None	2004	R022EPVJ
R022S206A	FP SW TFE Tank #2 Vent	None	1994	R022ECPV
R022S206B	FP SW TFE Tank #2 Evac	None	1994	R022EPVJ
R022S207A	FP SW TFE Tank #3 Vent	None	1985	R022ECPV
R022S207B	FP SW TFE Tank #3 Evac	None	1985	R022EPVJ
R022S208A	FP SW Aq Feeds Vent	None	1980-2000	R022EEF9
R022S208B	SW Aq Feeds Evac	None	1980-2000	R022EPVJ
R022S209A	SW Nonaq Feeds Vent	None	1980-2000	R022EEF12
R022S209B	SW Nonaq Feeds Evac	None	1980-2000	R022EPVJ
R022S210A	Reactor #1 Vent	None	1969	R022EPK1
R022S210B	Reactor #1 Evac	None	1969	R022EPVJ
R022S211A	Reactor #2 Vent	None	1988	R022EPK2
R022S211B	Reactor #2 Evac	None	1988	R022EPVJ
R022S212A	Reactor #3 Vent	None	1994	R022EPK3
R022S212B	Reactor #3 Evac	None	1994	R022EPVJ
R022S213A	Reactor #4 Mixed Feed Vent	None	1974	R022ECPV
R022S213B	Reactor #4 Rxn Vent	None	1974	R022EEF7
R022S214A	Reactor #5 Vent	None	1985	R022EPK5
R022S214B	Reactor #5 Evac	None	1985	R022EPVJ
R022S215	#1 Oven	None	1992	R022EEF89
R022S232A	Mixer Vent	None	1985	R022EEF89
R022S232B	Mixer Evac	None	1985	R022EEVJ
R022S233A	Drying Ovens	None	1965-1995	R022EEF6
R022S233B	Drying Ovens	None	1964	R022EEF89
R022S234	Hydraulic Presses Hood	None	1964-1992	R022EEF6
R022S235	Mixer	None	1996	R022EEF6
R022S236	#2 Oven	None	1973	R022EEF6
R022S237	Fume Hood	None	1964	R022EEF11
R022S238	Melt Indexers/Oven	None	1964	R022EEF146

Emission Source		Pollution Control Device	Year Installed	Emission Point ID
ID	Description			
R022S239	Small Extruder	None	1974	R022EEF86
R022S240A	Large Extruder	None	1976	R022EEF87
R022S240B	Large Extruder	None	1976	R022EEF89
R022S240C	Feed Hopper	None	1976	R022EEF85
R022S242	Coolant System #1	None	1988	R022EEF16
R022S243	Coolant System #2	None	1996	R022EEF14
R022S244	Coolant System #3	None	1985	R022EEF7
R022S245	Drum Storage	None	1964	R022EEF176
R022S246	Coolant Storage	None	1964	R022EEF176
R022S247	Monomer Transfer Line	None	2002	R022ECPV
R029S230	Double Cone Fluorinator	R029C229	1985	R029EEF130
R029S231	Vibrating Bed Fluorinator	R029C229	1987	R029EEF130
22-S-109	Research Laboratory Hood	None	1970	22-E-109
22-S-202	Research Laboratory Hood	None	1970	22-E-202
22-S-208	Research Laboratory Hood	None	1970	22-S-208
22-S-209	Research Laboratory Hood	None	1970	22-S-209

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

**2.3. Authority**

This Construction 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 R13-2654B. 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;
- 2.4.2. The Secretary shall review and may renew, reissue or revise this Construction Permit for cause.

**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 R13-2654, R13-2654B, R13-2654C, R13-2654D, 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 Permit 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 to this permit as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.  
[45CSR§14-6. or 45CSR§19-12.]

**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). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.  
[40CFR61.145(b) and 45CSR§34]
- 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 will 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 will 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.

[WV Code § 22-5-4(a)(15)]

### 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. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken.  
*[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 Enforcement and Permits Review  
(3AP12)  
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. **Emissions 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 – Laboratory Hoods 22-S-109, 22-S-202, 22-S-208, and 22-S-209**

##### **4.1. Limitations and Standards**

- 4.1.1. Except as provided by Sections 4.1.2 and 4.1.3 below, the laboratory hoods 22-S-109, 22-S-202, 22-S-208, and 22-S-209 shall be operated in accordance with the requirements and limitations found in 45CSR13A and 45CSR13B.
- 4.1.2. Emissions of Methylene chloride for the four laboratory hoods 22-S-109, 22-S-202, 22-S-208, 22-S-209 shall not exceed 0.01 lbs/hr or 0.03 TPY for all hoods combined.
- 4.1.3. The permitted facility shall comply with all applicable requirements of 45CSR27 – “To Prevent and Control the Emissions of Toxic Air Pollutants.” The facility shall limit total emissions of regulated pollutant from each specific emission point in Section 4.1.2 of this permit to the maximum hourly and annual limits set in Section 4.1.2. These requirements replace and supercede the methylene chloride limiting requirements pertaining to equipment covered by this permit found in the most current version of R13-3223. [45CSR27]

##### **4.2. Monitoring Requirements**

N/A

##### **4.3. Testing Requirements**

N/A

##### **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. To demonstrate compliance with emission limits in Section 4.1.2 of this permit, the permittee shall maintain records of the maximum hourly production rate of each day. These records shall be maintained according to the conditions specified in 40 CFR 63.10(b)(1). Such records shall be certified by a (Responsible Official) and made available to the Director or his duly authorized representative upon request.
- 4.4.3. To demonstrate compliance with the emission limits of Section 4.1.2 of this permit, the permittee shall maintain monthly records of the total annual production of each product. Annual production rates shall be based on a 12-month rolling total. These records shall be maintained according to the conditions specified in 40 CFR 63.10(b)(1).

- 4.4.4. To demonstrate compliance with the emission limits associated with the “Research Lab Hoods”, identified in Section 4.1.2 of this permit, the research facilities shall maintain a monthly record of the specific pollutant regulated and consumed by the hoods. This monthly consumption record will also be included in an annual consumption report for the Research Lab Hoods. This report shall document the amount of the chemicals regulated under 45 CSR 27 and processed through the Research Lab Hoods under the control of Research personnel. The affected sources shall include the following: 22-S-109, 22-S-202, 22-S-208, and 22-S-209.

**4.5. Reporting Requirements**

- 4.5.1. *[Reserved]*

**5.0. Source-Specific Requirements – Wastewater Treatment Plant**

**5.1. Limitations and Standards**

- 5.1.1. The maximum averaged flow rate at the inlet of the Wastewater Treatment Plant shall not exceed 2,000 gallons per minute, based on a 1-hour average.
- 5.1.2. Emissions released from the Wastewater Treatment Plant shall be limited to the pollutants and associated total combined emission rates as set forth in Table 5.1.2. of this permit.

**Table 5.1.2.**

Emission Point	Sources	Pollutant	Emission Rates	
			Hourly (pph)	Annual (tpy)
480	P201, P202, P205, P206, P207, P208, P209, P210, P211, P212, P214, P215, P218	VOC	162.97	625.58
		Formaldehyde	7.05	24.77
		Total HAPs	23.14	82.84

- 5.1.3. The emissions of Total HAPs identified in Table 5.1.2. of this permit, may consist of any one, or combination of those pollutants listed in Table 5.1.3.

**Table 5.1.3.**

Chemical	CAS Number
Acrylic Acid	79107
Toluene	108883
Ethyl Acrylate	140885
Formaldehyde <sup>1</sup>	50000
Methanol	67561
Methyl Methacrylate	80626
n-Hexane	110543

<sup>1</sup> – Toxic air pollutants shall not exceed the specific emission limits set forth in Table 5.1.2. of this permit.

- 5.1.4. Emission sources and the associated emission points affected by Section 5.0 of this permit and subject to 45CSR21, shall be subject to the standards and requirements set forth in permit R13-3223, and any amendments thereto.
- 5.1.5. Emission sources and the associated emission points affected by Section 5.0 of this permit and subject to 45CSR27, shall be subject to the standards and requirements set forth in permit R13-3223, and any amendments thereto.
- 5.1.6. **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.]
- 5.1.7. **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.]

## 5.2. Monitoring Requirements

- 5.2.1. For the purpose of determining compliance with the flow rate limits set forth in Section 5.1.1. of this permit, the total flow rate (in gallons per minute) shall be monitored at the inlet to the Wastewater Treatment Plant.
- 5.2.2. For the purpose of determining compliance with the emission limits set forth in Table 5.1.2. of this permit, and Section 5.1.3. of this permit, the permittee shall conduct daily 24-hour composite sampling for the liquid feed to the Wastewater Treatment Plant. This sample shall be taken by an automated sampler system. In the event of failure of the composite sampling system, a substitute composite sample may be developed by taking four (4) equal volume samples over a period of not less than 12-hours to supply sufficient volume for the required analysis.

## 5.3. Testing Requirements

- 5.3.1. For the purpose of determining compliance with the concentration limits set forth in Section 5.1.4. of this permit, the permittee shall perform a daily on-site analysis of the composite sample required in Section 5.2.2. of this permit for formaldehyde concentration. The analysis shall be performed using a HACH DR 4000U Spectrophotometer analyzer or equivalent. In the event no on-site method of analysis is available, the permittee may utilize an outside laboratory for conducting such daily analyses.
- 5.3.2. Once per week, a 24-hour composite sample, described in Section 5.2.2. of this permit, will be sent to an outside laboratory to analyze the methanol concentrations.

## 5.4. Recordkeeping Requirements

- 5.4.1. **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.
- 5.4.2. **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.
- 5.4.3. **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.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
  - f. Steps taken to correct the malfunction.
  - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 5.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 5.2.1. of this permit, the permittee shall maintain records of the maximum flow rates recorded into the inlet of the Wastewater Treatment Plant. Such flow rates shall be based on a 1-hour rolling average.
- 5.4.5. For the purpose of demonstrating compliance with the emission limits set forth in Section 5.1.2. and 5.1.3. of this permit, records of the analytical testing described in Section 5.2.2. of this permit shall be maintained.
- a. The results of the analytical testing will be combined to produce a daily 30-day rolling average concentration for each tested species, including formaldehyde and methanol. The daily 30-day rolling average concentration will be used to calculate emissions from the sources identified in Table 5.4.5. of this permit.

**Table 5.4.5.**

Source ID	Description	Source ID	Description
P201	Equalization Tank	P207	Aeration Tank
P202	Diversion Tank	P208	Aeration Tank
		P209	Deaeration Tank
		P210	Clarifier Tank
P205	Mix Tank	P211	Clarifier Tank
P206	Aeration Tank	P212	Clarifier Tank

- b. Daily calculations will be performed by comparing the concentration ratio for the speciated material against the baseline case for the emissions calculated in WATER9. The daily rolling 30-day average-based emissions will be compared to a WATER9 calculation for emissions once per quarter for verification of the daily calculation. Daily emission calculations will be performed no more than 30 days from the date in which the sample was taken.
  - c. Missing data will be accounted for by using an average of the analytical data from the days on either side of the missing data. Missing data will not constitute a deviation as long as there are no more than three (3) days missing per 30-day period and the missing data is not consecutive readings.
- 5.4.6. For the purpose of calculating annual methanol emissions, records shall be maintained of the methanol concentrations obtained during off-site laboratory analysis. Missing methanol data will not constitute a deviation as long as there is no more than 1 weekly sample missing per 30-day period.

## **5.5. Reporting Requirements**

*[Reserved]*

**6.0 Source-Specific Requirements - Research and Development Activities**

**6.1. Limitations and Standards**

6.1.1. Sources identified in Table 6.1.1. of this permit shall be operated in accordance to the limits and requirements set forth in 45CSR13A and/or 45CSR13B. Operations shall be limited to research and development (R&D) and laboratory activities.

**Table 6.1.1.**

Source IDs		
R022S002	R022S012	R022SB20
R022S003	R022S047	R022SB28
R022S007	R022SB05	R022SB36
R022S008	R022SB06	R022SB38
R022S009	R022SB17	R022SB40
R022S011	R0SSSB19	R022S238
R022S204	R022S212A	R022S239
R022S205A	R022S212B	R022S200
R022S205B	R022S213A	R022S240A
R022S206A	R022S213B	R022S240B
R022S206B	R022S214A	R022S240C
R022S207A	R022S214B	R022S242
R022S207B	R022S215	R022S243
R022S208A	R022S232A	R022S244
R022S208B	R022S232B	R022S245
R022S209A	R022S233A	R022S246
R022S209B	R022S233B	R022S247
R022S210A	R022S234	R029S230
R022S210B	R022S235	R029S231
R022S211A	R022S236	
R022S211B	R022S237	

- 6.1.2. Toxic air pollutants released from the sources identified in Table 6.1.1. of this permit shall be limited to the total maximum combined emission rates as shown in Table 6.1.2. of this permit.

**Table 6.1.2.**

Pollutant	Emission Rates	
	Hourly (pound/hour)	Annual (pound/year)
Formaldehyde <sup>1</sup>	-	100
Methylene Chloride <sup>1</sup>	-	500

1 - Per 45CSR13A-4.1.b.3., emission limits of toxic air pollutants shall be based on 45CSR13-2.17.c and/or 2.17.d., which establishes limits based on 10% of the amounts set forth in Table-13A. Table-13A does not address potential hourly emission rates.

- 6.1.3. Emission sources and the associated emission points affected by Section 6.0 of this permit and subject to 45CSR21, shall be subject to the standards and requirements set forth in permit R13-3223, and any amendments thereto.
- 6.1.4. Emission sources and the associated emission points affected by Section 6.0 of this permit and subject to 45CSR27, shall be subject to the standards and requirements set forth in permit R13-3223, and any amendments thereto.
- 6.1.5. **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.]**

## 6.2. Monitoring Requirements

- 6.2.1. For the purpose of determining compliance with the emission limits set forth in Section 6.1.2. of this permit, the permittee shall monitor formaldehyde and methylene chloride emissions released from the R&D and laboratory operations.

## 6.3. Testing Requirements

*[Reserved]*

## 6.4. Recordkeeping Requirements

- 6.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:
- The date, place as defined in this permit and time of sampling or measurements;
  - The date(s) analyses were performed;
  - The company or entity that performed the analyses;
  - The analytical techniques or methods used;
  - The results of the analyses; and
  - The operating conditions existing at the time of sampling or measurement.

- 6.4.2. **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.
- 6.4.3. **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.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
  - f. Steps taken to correct the malfunction.
  - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 6.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 6.2.1. of this permit, the permittee shall maintain a record of annual emissions of formaldehyde and/or methylene chloride. Such annual records shall be based on a 12-month rolling total.

## 6.5. Reporting Requirements

*[Reserved]*

### CERTIFICATION OF DATA ACCURACY

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

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.