**west virginia** department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

November 23, 2016

CERTIFIED MAIL
91 7199 9991 7035 6692 9586

J. Gene Williams
Optima Belle LLC
901 W. DuPont Avenue
Belle, WV 25015

Re: Optima Belle, LLC
Belle
Permit No. R13-0882L
Plant ID No. 039-00663

Dear Mr. Williams:

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 R13-0882K 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*

# Permit to Update

## R13-0882L

*In accordance with the West Virginia Air Pollution Control Law (W. Va. Code §§22-5-1 et seq.), and Regulations promulgated thereunder, the following permittee is authorized to Construct, Subject to the Terms and Conditions of this Permit, the Source described below.*

*Issued to:*

**Optima Belle LLC**
**Belle Plant, Belle, WV**
**039-00663**

*William F. Durham*
*Director*

*Issued: November 21, 2016 • Effective: November 21, 2016*

Permit Number: R13-0882L
Permittee: Optima Belle LLC
Facility Name: Belle Plant
Facility ID No.: 039-00663
Mailing Address: 901 W, DuPont Avenue, Belle, WV 25015

---

*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.*

---

This permit will supercede and replace Permit R13-0882K.

| | |
|---|---|
| Facility Location: | Belle, Kanawha County, West Virginia |
| Mailing Address: | 901 W. DuPont Avenue, Belle, WV 25015 |
| Facility Description: | Chemical Production Facility |
| NAICS Code: | 325199 |
| UTM Coordinates: | 4,232.60 km Easting • 451.90 km Northing • Zone 17 |
| Permit Type: | Class II Adminstrative Update |
| Description of Change: | This is a Class II Adminstrative Update to add an operating scenario for the Caofin, SR-1000, and T2960 processes to this Permit. |

*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 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.*

## Table of Contents

**1.0. Emission Units ..... 4**

**2.0. General Conditions ..... 7**
2.1. Definitions ..... 7
2.2. Acronyms ..... 7
2.3. Authority ..... 7
2.4. Term and Renewal ..... 8
2.5. Duty to Comply ..... 8
2.6. Duty to Provide Information ..... 8
2.7. Duty to Supplement and Correct Information ..... 8
2.8. Administrative Permit Update ..... 8
2.9. Permit Modification ..... 9
2.10 Major Permit Modification ..... 9
2.11. Inspection and Entry ..... 9
2.12. Emergency ..... 9
2.13. Need to Halt or Reduce Activity Not a Defense ..... 10
2.14. Suspension of Activities ..... 10
2.15. Property Rights ..... 10
2.16. Severability ..... 10
2.17. Transferability ..... 10
2.18. Notification Requirements ..... 10
2.19. Credible Evidence ..... 10

**3.0. Facility-Wide Requirements ..... 11**
3.1. Limitations and Standards ..... 11
3.2. Monitoring Requirements ..... 11
3.3. Testing Requirements ..... 12
3.4. Recordkeeping Requirements ..... 12
3.5. Reporting Requirements ..... 13

**4.0. Source-Specific Requirements ..... 14**
4.1. Limitations and Standards ..... 14
4.2. Monitoring Requirements ..... 26
4.3. Testing Requirements ..... 26
4.4. Recordkeeping Requirements ..... 27
4.5. Reporting Requirements ..... 28

**CERTIFICATION OF DATA ACCURACY ..... 29**

## 1.0. Emission Units

| Equipment | | Air Pollution Control Device | | Emission Point ID No. |
|---|---|---|---|---|
| Source ID | Source Description | ID | Device Type | |
| 103 | A Tank | 003<br>009<br>010 | Main Scrubber<br>Incinerator<br>Scrubber | 104.014 |
| 012 | -20°C Brine Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 210 | Product Drum Filter | 023 | Dust Collector<br>(required for drum packaging only) | 107.022 |
| 116 | Dryer Charge Hopper | 116 | Dust Collector | 107.020 |
| 115A | Reactor Charge Hopper | 115 | Dust Collector | 104.003B |
| 901 | Bulk Liquid Transfer | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 009 | Incinerator | 010 | Scrubber | 104.014 |
| 002 | Dryer | 004<br>009<br>010 | Dryer Condenser<br>Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |
| 003 | Main Scrubber | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 004 | Dryer Condenser | 009<br>010 | Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |
| 013 | -30°C Brine Tank | | | |
| 101 | Storage Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 104 | Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 108 | Waste Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 108L | Tank Loading | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 109 | Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 112 | Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |
| 114A | Reactor Solids Unloading | 114 | Dust Collector | 104.003A |
| 114B | Drum Unloading | n/a | Full Enclosure (Building) | Fugitive |
| 115 | Reactor 6 Charge Hopper | 115A | Dust Collector | 104.003B |
| 201 | Centrifuge | 009<br>010 | Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |

| Equipment | | Air Pollution Control Device | | Emission Point ID No. |
|---|---|---|---|---|
| Source ID | Source Description | ID | Device Type | |
| 202 | M/L Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014<br>104.014K* |
| 203 | Reactor #3 | 003<br>009<br>010 | Main Scrubber<br>Incinerator<br>Scrubber | 104.014 |
| 205 | Reactor #1 | 003<br>009<br>010 | Main Scrubber<br>Incinerator<br>Scrubber | 104.014 |
| 206 | Reactor #2 | 003<br>009<br>010 | Main Scrubber<br>Incinerator<br>Scrubber | 104.014 |
| 208 | Reactor #6 | 009<br>010 | Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |
| 209 | Reactor #8 | 009<br>010 | Incinerator<br>Scrubber | 104.014[1]<br>104.014K* |
| 219 | Reactor #5 | 003<br>009<br>010 | Main Scrubber<br>Incinerator<br>Scrubber | 104.014 |
| 226 | Product Storage Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 227 | Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 228 | Centrifuge Feed Tank | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 229 | Tanker Truck | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 230 | Double Cone Dryer | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 232C | Condenser | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 232 | Reactor | 009<br>010 | Incinerator<br>Scrubber | 104.014 |
| 233 | Reactor | 009 | Incinerator | 104.014 |
| 234 | DCD Super Sack/Drum Loading | 117 | Dust Collector | 107.03 |
| 235 | DCD Super Sack/Drum Unloading | 117 | Dust Collector | 107.03 |
| Fugitive | Two (2) Polish Filter (Change Outs) | N//A | N/A | Fugitive |
| Fugitive | One (1) Filter | N/A | N/A | Fugitive |

1 - During Glypure production, the emission source vents directly to atmosphere.
K * - This is a normal emission point for the emission units listed above. The "K*"has been added to indicate that this emission point is for the Krovar® Technical process. During the Krovar® Technical process, the sources vent directly to the atmosphere.

# 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

| | |
|---|---|
| CAAA | Clean Air Act Amendments |
| **CBI** | Confidential Business Information |
| **CEM** | Continuous Emission Monitor |
| **CES** | Certified Emission Statement |
| **C.F.R. *or* CFR** | Code of Federal Regulations |
| **CO** | Carbon Monoxide |
| **C.S.R. *or* CSR** | Codes of State Rules |
| **DAQ** | Division of Air Quality |
| **DEP** | Department of Environmental Protection |
| **dscm** | Dry Standard Cubic Meter |
| **FOIA** | Freedom of Information Act |
| **HAP** | Hazardous Air Pollutant |
| **HON** | Hazardous Organic NESHAP |
| **HP** | Horsepower |
| **lbs/hr** | Pounds per Hour |
| **LDAR** | Leak Detection and Repair |
| **M** | Thousand |
| **MACT** | Maximum Achievable Control Technology |
| **MDHI** | Maximum Design Heat Input |
| **MM** | Million |
| **MMBtu/hr *or* mmbtu/hr** | Million British Thermal Units per Hour |
| **MMCF/hr *or* mmcf/hr** | Million Cubic Feet per Hour |
| **NA** | Not Applicable |
| **NAAQS** | National Ambient Air Quality Standards |
| **NESHAPS** | National Emissions Standards for Hazardous Air Pollutants |
| **$NO_X$** | Nitrogen Oxides |
| **NSPS** | New Source Performance Standards |
| **PM** | Particulate Matter |
| **$PM_{2.5}$** | Particulate Matter less than 2.5 µm in diameter |
| **$PM_{10}$** | Particulate Matter less than 10µm in diameter |
| **Ppb** | Pounds per Batch |
| **Pph** | Pounds per Hour |
| **Ppm** | Parts per Million |
| **$Ppm_V$ or ppmv** | Parts per Million by Volume |
| **PSD** | Prevention of Significant Deterioration |
| **Psi** | Pounds per Square Inch |
| **SIC** | Standard Industrial Classification |
| **SIP** | State Implementation Plan |
| **$SO_2$** | Sulfur Dioxide |
| **TAP** | Toxic Air Pollutant |
| **TPY** | Tons per Year |
| **TRS** | Total Reduced Sulfur |
| **TSP** | Total Suspended Particulate |
| **USEPA** | United States Environmental Protection Agency |
| **UTM** | Universal Transverse Mercator |
| **VEE** | Visual Emissions Evaluation |
| **VOC** | Volatile Organic Compounds |
| **VOL** | 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 supercedes and replaces previously issued Permit R13-0882K. 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 Application R13-0882L, R13-0882K, R13,-0882J, R13–0882I, R13-0882H, R13-0882G, R13-0882F, R13-0882E, R13-0882D, R13-0882C, R13-0882B, R13-0882A, and R13-0882, 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, either in whole or in part, 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

2.18.1. The permittee shall notify the Secretary, in writing, within fifteen (15) calendar days of the commencement of the construction, modification, or relocation activities authorized by this permit.

2.18.2. The permittee shall notify the Secretary, in writing, at least fifteen (15) calendar days prior to 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§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 will be revised in accordance with 45CSR§30-6.4. or 45CSR§30-6.5 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§30-6.4. or 45CSR§30-6.5 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 57th Street
Charleston, WV 25304-2345
Phone: (304) 926-0475
Fax: (304) 926-0476

**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

## 4.1. Limitations and Standards

4.1.1. The Small Lots Manufacturing (SLM) unit shall operate two process lines recognized as "Front-end" and "Back-end". These process lines may be operated independently, integrated, or reconfigured as necessary for the specific products.

4.1.2. Production in the SLM operations shall be limited to the following processes and associated emission limits:

4.1.2.1. The Sclareol Purification process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.1.1. through 4.1.2.1.4. of this permit.

4.1.2.1.1. Dust collector (114) shall be employed by emission point 104.003A to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.1.2. Incinerator (009) shall be in operation and employed by emission point 114.014 during all periods of Sclareol Purification process operations.

4.1.2.1.3. Dust collector (023) shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.1.4. The emissions released in association with the Sclareol Purification process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.1.4. of this permit.

**Table 4.1.2.1.4.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003A | 114A | 114 | PM | 0.0033 | 0.6 |
| 104.014 | 002<br>108<br>112<br>201<br>201A<br>202<br>203<br>205<br>206<br>208<br>219<br>227 | 009 | VOC's | 0.0843 | 32 |
| 107.022 | 210 | 023<br>None | PM<br>VOC's | 0.0404<br>0.2269 | 7.28<br>40.84 |
| 208 | 208 | None | PM | 0.0008 | 1.6 |

4.1.2.2. The D5803 process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.2.1. through 4.1.2.2.3. of this permit.

4.1.2.2.1. Dust collector 115 shall be employed by emission point 104.003 to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.2.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of D5803 production.

4.1.2.2.3. The emissions released in association with the D5803 process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.2.3. of this permit.

**Table 4.1.2.2.3.**

| Emission Point ID | Sources | Air Pollution Control Device(s) Employed | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003B | 115A | 115 | PM | 0.010 | 21.9 |
| 104.014 | 002<br>004<br>104<br>108<br>112<br>201<br>202<br>208<br>209 | 004<br>009<br>010 | Methanol | 0.026 | 194 |
| 107.022 | 210 | 023 | PM | 0.010 | 15.8 |

4.1.2.2.4. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charge to the product drum packaging.

4.1.2.3. The sulfonamide drying process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.3.1. through 4.1.2.3.4. of this permit.

4.1.2.3.1. The sulfonamide drying process shall be limited to the following products:

a. A5546

b. V9367

c. E9260

4.1.2.3.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of the sulfonamide drying process.

4.1.2.3.3. The emissions released in association with the sulfonamide drying process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.3.3. of this permit.

**Table 4.1.2.3.3.**

| Emission Point ID | Sources | Air Pollution Control Device(s) Employed | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.014 | 002 | 004<br>009<br>010 | o-dichlorobenzene<br>Methylene Chloride | 0.017<br>0.008 | 12.5<br>3.0 |
| 107.022 | 210 | 023 | PM | 0.010 | 2.0 |

4.1.2.4. The U9069 process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.4.1. through 4.1.2.4.4. of this permit.

4.1.2.4.1. Dust collector 114 shall be employed by emission point 104.003A to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.4.2. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of U9069 process operations.

4.1.2.4.3. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.4.4. The emissions released in association with the U9069 process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.4.4. of this permit.

**Table 4.1.2.4.4.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003A | 114A | 114 | PM | 0.010 | 21.9 |
| 104.014 | 002<br>108<br>112<br>201<br>202<br>203<br>205<br>206<br>208<br>209<br>219<br>226 | 003<br>004<br>009<br>010 | Acetone | 0.07 | 312 |
| 107.022 | 210 | 023 | PM | 0.010 | 15.8 |

4.1.2.5. The Glycolic Acid process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.5.1. and 4.1.2.5.2. of this permit.

4.1.2.5.1. The Glycolic Acid process shall be limited to the production of various quality Glypure products.

4.1.2.5.2. The Glycolic Acid process shall be limited to raw materials having low vapor pressure and operated at a reduced temperature resulting in no emissions being released into the atmosphere.

4.1.2.6. The Fluridone Process (Steps 1&2 - Ketone 2 and Steps 3&4 Fluridone) shall be executed in the SLM in accordance to the requirements and limitations set forth in Section 4.1.2.6.1. and 4.1.2.6.10. of this permit.

4.1.2.6.1. Reactor (208) shall be cooled to a maximum of 50° C prior to being depressurized (during the Step 4 reaction only).

4.1.2.6.2. The depressurization of Reactor (208) shall be completed in a period no less than 25 minutes (during the Step 4 reaction only).

4.1.2.6.3. The boil-up of Reactor (208) shall be accomplished over a period no less than 235 minutes (during the Step 4 reaction only).

4.1.2.6.4. Incinerator (009) and Incinerator Scrubber (010) shall be in operation and employed by emission point 114.014 during all 4 batch step reactions of the Fluridone process operations.

4.1.2.6.5. The emissions released in association with the first two batch step reactions of the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.5. of this permit.

**Table 4.1.2.6.5.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.014 | 101<br>104<br>108<br>109<br>112<br>203<br>205<br>206<br>208<br>219<br>226<br>901 | 009<br>010 | Methanol | 0.013 | 0.35 |
| | | | Ethanol | 0.001 | 0.02 |
| | | | Toluene | 0.007 | 0.45 |
| | | | Acetic Acid | 0.010 | 0.54 |

4.1.2.6.6. The emissions released in association with the second two batch step reactions of the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.6. of this permit.

**Table 4.1.2.6.6.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.014 | 101<br>104<br>108<br>109<br>112<br>203<br>205<br>206<br>208<br>209<br>219<br>226<br>901 | 009<br>010 | Methanol | 0.019 | 0.12 |
| | | | Toluene | 0.083 | 4.21 |
| | | | DMA | 0.001 | 0.001 |
| | | | DMFDMA | 0.004 | 0.02 |

4.1.2.6.7. Main scrubber (003), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during periods of depressurization of reactor (208).

4.1.2.6.8. The emissions released in association with the depressurization of reactor (208) during the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.8. of this permit.

**Table 4.1.2.6.8.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.014 | 208 | 003<br>009<br>010 | DMA | 0.006 | 0.71 |
| | | | MMA | 0.002 | 0.17 |

4.1.2.6.9. Dryer condenser (004), incinerator (009), and incinerator scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of product drying in process dryer (002).

4.1.2.6.10. The emissions released in association with the product drying in dryer (002) during the Fluridone process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.6.10. of this permit.

**Table 4.1.2.6.10.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.014 | 002 | 004<br>009<br>010 | Toluene | 0.029 | 5.29 |

4.1.2.7. The Krovar® Technical process shall be executed on the "Back-end" of SLM in accordance to the requirements and limitations set forth in Section 4.1.2.7.1 through 4.1.2.7.3 of this permit.

4.1.2.7.1. Dust collector 115A shall be employed by emission point 104.003B to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.7.2. The Krovar® Technical process shall be limited to raw materials provided in Permit Application R13-0882G and having low vapor pressure resulting in no emissions being released into the atmosphere.

4.1.2.7.3. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.8. The Sodium Tetraphenyl Borate (STPB) process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.8.1. through 4.1.2.8.4. of this permit.

4.1.2.8.1. Dust collector (114) shall be employed by emission point 104.003A to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.8.2. Incinerator (009) and Scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of Sodium Tetraphenyl Borate process operations. During STPB production runs when the process is not operating the uncontrolled storage of toluene in A Tank shall be limited to a four (4) weeks per year. The 4 week timeframe shall include all time that toluene is in the tank to prepare for a production run, between production runs when not in operation, and after production is complete.

4.1.2.8.3. Dust collector (023) shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.8.4. The emissions released in association with the Sodium Tetraphenyl Borate process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.8.4. of this permit.

**Table 4.1.2.8.4.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003A | 114A | 114 | PM | 0.05 | 20 |
| 104.014 | 002<br>103<br>201<br>202<br>203<br>205<br>206<br>208<br>209<br>219<br>228 | 009<br>010 | VOC<br>Benzene<br>Chlorobenzene<br>Hexane<br>Methanol<br>Toluene* | 2.85<br>0.01<br>0.01<br>0.87<br>0.01<br>0.09 | 160<br>20<br>20<br>40<br>20<br>20 |
| 107.022 | 210 | 023 | PM | 0.06 | 20 |
| 219 | 219 | None | PM | 0.02 | 20 |
| Fugitives | Polish Filter Cleaning/Change out | None<br>None<br>None | VOC's<br>Toluene<br>Methanol | 0.51<br>0.04<br>0.04 | 20<br>20<br>20 |

* - Includes toluene tank uncontrolled emission during storage only.

4.1.2.9. The dried L-alanine methyl ester (LAME) process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.9.1. through 4.1.2.9.4. of this permit.

4.1.2.9.1. Dust collector (115) shall be employed by emission point 104.003B to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.9.2. Incinerator (009) and Scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of dried L-alanine methyl ester process operations. Scrubber (003) shall be in operation and employed for only Reactor 6 (208) during the reaction step. LAME production in either Condition 4.1.2.9 or 4.1.2.10 shall not exceed 10 batches per calendar year total.

4.1.2.9.3. Dust collector (023) shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.2.9.4. The emissions released in association with the dried L-alanine methyl ester process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.9.4. of this permit.

**Table 4.1.2.9.4.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003B | 115A | 115A | PM | 0.18 | 20 |
| 104.014 | 002<br>003<br>004<br>009<br>010<br>112<br>201<br>201A<br>202<br>205<br>208<br>208C<br>209<br>226<br>227<br>228<br>229 | 003*<br>009<br>010 | VOC<br>SO2<br>Acetonitrile<br>Hydrogen Chloride<br>Methanol<br>Methyl Tert-Butyl Ether | 0.01<br>19.13<br>0.01<br>0.11<br>0.01<br>0.01 | 60<br>200<br>20<br>20<br>20<br>20 |
| 107.022 | 210 | 023 | PM | 0.27 | 20 |
| Fugitives | Polish Filter Cleaning/Change out | None<br>None | VOC's<br>Methanol | 1.21<br>1.21 | 20<br>20 |

* - Only Source 208 (Reactor 6) feeds to the Main Scrubber, and only during its reactions step.

4.1.2.10. The undried L-alanine methyl ester (LAME) process shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.10.1. through 4.1.2.10.4. of this permit.

4.1.2.10.1. Dust collector (115) shall be employed by emission point 104.003B to minimize particulate emissions generated during periods in which solids are charged to the reactor.

4.1.2.10.2. Incinerator (009) and Scrubbers (003) and (010) shall be in operation and employed by emission point 114.014 during all periods of undried L-alanine methyl ester process operations. Reactor 5 (219) shall be used as a scrubber in operation and employed by Sources 208, 208C, and 202 only during their reaction/neutralization step. LAME production in either Condition 4.1.2.9 or 4.1.2.10 shall not exceed 10 batches per calendar year total.

4.1.2.10.3. The emissions released in association with the undried L-alanine methyl ester process shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.10.3. of this permit.

**Table 4.1.2.10.3.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 104.003B | 115A | 115 | PM | 0.18 | 20 |
| 104.014 | 003<br>009<br>010<br>108<br>112<br>201<br>202<br>205<br>208<br>208c<br>209<br>219<br>227<br>229 | 219*<br>003<br>009<br>010 | VOC<br>SO2<br>Acetonitrile<br>Hydrogen Chloride<br>Methanol<br>Methyl Tert-Butyl Ether | 1.25<br>1.91<br>0.01<br>0.01<br>0.01<br>1.23 | 60<br>20<br>20<br>20<br>20<br>20 |
| Fugitives | Polish Filter Cleaning/Change out | None<br>None | VOC's<br>Methanol | 1.21<br>1.21 | 20<br>20 |

* - Only Sources 208, 208C, and 202 feed to Reactor 5 (219) as a scrubber and only during their reaction/neutralization step.

4.1.2.11. The refinement of Catofin, refinement of SR-1000, and production of T2960 shall be executed in accordance to the requirements and limitations set forth in Section 4.1.2.11.1. through 4.1.2.11.3. of this permit.

4.1.2.11.1. Dust collector (117) shall be employed by emission point 107.03 to minimize particulate emissions generated during periods in which either the DCD Super Sack Loading (234) or DCD Super Sack Unloading (235) are being operated..

4.1.2.11.2. Incinerator (009) and Scrubber (010) shall be in operation and employed by emission point 114.014 during all periods of refinement of Catofin, refinement of SR-1000, or production of T2960. Catofin refinement shall not exceed 182 batches per calendar year. SR-1000 refinement shall not exceed 60 batches per calendar year. T2960 production shall not exceed 100 batches per calendar year.

4.1.2.11.3. The emissions released in association with the Catofin, SR-1000, and T2960 processes shall be limited to the sources, emission points, and associated emissions as shown in Table 4.1.2.11.3. of this permit.

**Table 4.1.2.11.3.**

| Emission Point ID | Sources | Air Pollution Control Device(s) | Pollutants | Controlled Emissions | |
|---|---|---|---|---|---|
| | | | | Hourly (lb/hr) | Annual (lb/yr) |
| 107.03 | 234<br>235 | 117 | PM | 0.26 | 80 |
| 104.014 | 009<br>010<br>108<br>108L<br>230<br>232C<br>232<br>233 | 009<br>010 | VOC<br>p-Xylene<br>Toluene | 0.46<br>0.02<br>0.44 | 60<br>20<br>40 |

4.1.3. During periods of required operation, the incinerator (009) shall be operated in accordance to the requirements set forth in Section 4.1.3.1. through 4.1.3.3. of this permit.

4.1.3.1. The incinerator (009) shall operate at a temperature maintained between 1,800° F and 2,200° F.

4.1.3.2. The incinerator (009) shall operate with an air flow greater than 8 inches of water column per pressure switch setting. An interlock shall be installed and maintained for the purpose of shutting the process down in the event that air flow pressure falls to 8 inches of water column pressure or below.

4.1.3.3. Dust collector 023 shall be employed by emission point 107.022 when packaging to drums to minimize particulate emissions generated during periods in which solids are charged to the product drum packaging (210).

4.1.4. During periods of required operation, the incinerator scrubber (010) shall be operated in accordance to the requirements set forth in Section 4.1.4.1. and 4.1.4.2. of this permit.

4.1.4.1. The incinerator scrubber (010) shall operate with a scrubber solution pH level greater than 7.0.

4.1.4.2. The incinerator scrubber (010) shall operate with a scrubber solution flow rate greater than 25 gallons per minute.

4.1.5. During periods of required operation, the Main Scrubber (003) shall be operated in accordance to the requirements set forth in Section 4.1.5.1. and 4.1.5.2. of this permit.

4.1.5.1. The Main Scrubber (003) shall operate with a scrubber solution pH level greater than 7.0 when employed by all process operations except the Fluridone steps 3 & 4 process. During the operation of the Fluridone steps 3 & 4 process, the Main Scrubber (003) shall not have any minimum pH requirements.

4.1.5.2. The Main Scrubber (003) shall operate with a scrubber solution flow rate greater than 150 gallons per minute.

4.1.6. During periods of required operation, the Dryer Condenser (004) shall be operated with a condensate temperature maintained below 40° C.

4.1.7. The permitted facility shall comply with all applicable requirements of 45CSR21 – "Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds" provided, however, that compliance with any more stringent requirements under Section 4.1. of this permit shall also be demonstrated.

4.1.7.1. The permittee shall maintain the aggregated hourly and annual control efficiency of 90% or greater, on a site-wide basis, for all sources subject to 45CSR21 Section 40.a.1. Sources encompassed by this permit and subject to 45CSR21 Section 40.1.a. include, but are not limited to those identified in the following Table 4.1.7.1.

**Table 4.1.7.1. - §45-21-40.1.a Sources**

| Equipment ID Per R13-0882D | Equipment ID per Consent Order CO-R21-97-31 | Control Plan (RACT or RACM) |
|---|---|---|
| 003 | 003 | RACM |
| 014 | 014 | RACM |
| 101 | 101 | RACM |
| 103 | 103 | RACM |
| 104 | 104 | RACM |
| 110 | 110 | RACM |
| 201 | 201 | RACM |
| 203 | 203 | RACM |
| 205 | 204 | RACM |
| 206 | 206 | RACM |
| 208 | 208 | RACM |
| 209 | 209 | RACM |
| 219 | 301 | RACM |
| 226 | 302 | RACM |
| 901 | 304 | RACM |
| 305 | 305 | RACM |

Note: The sources listed above reference maintenance events and short duration activities.

4.1.7.2. The emission limits specified by Section 4.1.2. of this permit and the following requirements supercede and replace the equivalent requirements pertaining to the aforementioned sources contained in Consent Order CO-R21-97-31. All other provisions of Consent Order CO-R21-97-31 are intact and valid.

4.1.7.2.1. On or after May 1, 1996, construction or modification of any emission source having maximum theoretical emissions (MTE) of VOCs equaling or exceeding six pounds per hour (6 pph) shall require the prior approval by the Director of an emission control plan that meets the definition of reasonably available control technology (RACT) on a case-by-case basis for both fugitive and non-fugitive VOC emissions from such source. All RACT control plans for sources constructed or modified on or after May 1, 1996 shall be embodied in a permit in accordance with 45CSR13 or 45CSR30.

4.1.7.2.2. Physical changes to or changes in the method of operation of an existing emission source listed or required to be listed as part of the facility-wide control efficiency plan which do not result in an increase in it's potential to emit VOCs in a cumulative amount (with cumulative accounting commencing on December 3, 1997) of two pounds per hour (2 pph) or five tons per year (5 tpy) or more, shall not require submittal of a RACT plan, provided that the company can provide information upon request to demonstrate compliance with it's facility-wide VOC emission reduction requirement (RACM or AERP).

4.1.7.2.3. If a modification to an existing source with current maximum theoretical emissions below the threshold of six pounds per hour (6 pph) of VOCs, causes an increase in the MTE that results in the source exceeding the six pounds per hour (6 pph) level for the first time, but the increase is less than two pounds per hour (2 pph) or five tons per year (5 tpy), the permittee shall not be required to submit RACT plans.

4.1.7.2.4. Unless otherwise expressly exempted from Leak Detection and Repair (LDAR) requirements in this permit, the permittee shall implement and maintain LDAR programs for the reduction of fugitive VOC emissions in all manufacturing process units subject to C.S.R. §45-21-40 producing a product or products intermediate or final, in excess of 1000 megagrams (1100 tons) per year in accordance with the applicable methods and criteria of C.S.R. §45-21-37 or alternate procedures approved by the Director. Procedures approved by the Director include 40 CFR Part 60 Subpart VV, 40 CFR Part 61 Subpart V, 40 CFR Part 63 Subpart H, 40 CFR Part 63 Subpart TT, 40 CFR Part 63 Subpart UU, 40 CFR Part 65 Subpart F, and 40 CFR Part 265 Subpart CC. This requirement shall apply to all units irrespective of whether or not such units produce as intermediates or final products, substances on the lists contained with 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63.

4.1.7.2.5. Manufacturing process units may be exempted upon written request of the permittee to the Director. Exempted units are exempted from the frequency of testing as described in C.S.R. §45-21-37, however, LDAR testing of this unit or certification of emission using approved fugitive emission factors will be required every three years, or upon request by the Director or his duly authorized representative. Waiver or rescheduling of LDAR testing every three years may be granted by the Director if written request and justification are submitted by the permittee. Units exempted from LDAR monitoring as required by C.S.R. §45-21-37, are not exempted from testing which may be required under any other applicable State or Federal regulations, orders, or permits. The Director may periodically require verification by the permittee that maintenance and repair procedures associated with approved exemptions are continued and practiced.

4.1.7.2.6. The permittee shall submit to the DAQ a plan for complete, facility-wide implementation of RACT requirements within one hundred eighty (180) days of notification by the Director of the Division of Air Quality that a violation of the National Ambient Air Quality Standards (NAAQS) for ozone (that were in effect on or before May 1, 1996) has occurred. Such plan shall include those sources and activities listed as part of the site-wide control efficiency requirement and may contain an update of existing RACT analyses. Full implementation of such plan shall be completed within two (2) years of approval of the RACT plan by the Director.

4.1.7.2.7. Unless granted a variance pursuant to 45CSR21 Section 9.3, or as approved by the Director as part of a required Start-up, Shutdown, and Malfunction (SSM) Plan mandated under 40CFR63.6(e) or another applicable section of 40CFR63, the owner or operator of the facility shall operate all emission control equipment listed as part of the facility-wide control efficiency plan at all times the facilities are in operation or VOC emissions are occurring from these sources or activities. In the event of a

malfunction, and a variance has not been granted, the production unit shall be shutdown or the activity discontinued as expeditiously as possible. The permittee shall comply with 45CSR21 Section 9.3 with respect to all periods of non-compliance with the emission limitations and emissions reduction requests set forth in the facility-wide control efficiency plan resulting from unavoidable malfunctions of equipment.

4.1.8. Compliance with all annual operating limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the quantified operating data at any given time during the previous twelve (12) consecutive calender months.

4.1.9. **Maintenance of Air Pollution Control Equipment.** The permittee shall install, operate, and maintain all pollution control equipment required by this permit in accordance with the manufacturer's specifications so as to provide the guaranteed minimum control efficiency, or with any more stringent control requirements as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
**[45CSR§13-5.11.]**

## 4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the maximum emission rates set forth by Section 4.1.2. of this permit, the permittee shall monitor the production rates of each product produced in the operating unit.

4.2.2. For the purpose of determining compliance with the operational requirements associated with the employment of the dust collectors set forth in Section 4.1.2. of this permit, the permittee shall conduct a visual inspection of the emissions released from each of the affected units. These inspections shall be performed at a minimum of at least once per calendar month during periods of routine operation.

4.2.3. For the purpose of determining compliance with the maximum emission limits set forth by Section 4.1.2. and the operating parameters set forth by Section 4.1.3. of this permit, the permittee shall provide continuous monitoring of the operating temperature and minimum air flow rate associated with the Incinerator (009) during periods of routine operation.

4.2.4. For the purpose of determining compliance with the maximum emission limits set forth by Section 4.1.2. and the operating parameters set forth by Section 4.1.4. of this permit, the permittee shall provide continuous monitoring of the pH and flow rate of the scrubber solution in the Incinerator Scrubber (010), during periods of routine operation.

4.2.5. For the purpose of determining compliance with the maximum emission limits set forth by Section 4.1.2. and the operating parameters set forth by Section 4.1.5. of this permit, the permittee shall provide continuous monitoring of the pH and flow rate of the scrubber solution in the Main Scrubber (003), during periods of routine operation.

4.2.6. For the purpose of determining compliance with the maximum emission limits set forth by Section 4.1.2. and the operating parameters set forth by Section 4.1.6. of this permit, the permittee shall provide continuous monitoring of the temperature of the condensate discharged from the Dryer Condenser (004) during periods of routine operation.

## 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 required by this permit, the permittee shall maintain accurate records of inspection and/or preventative maintenance schedules, the results of the inspection and/or preventative maintenance activities, and any corrective actions taken.

4.4.3. *Record of Malfunctions, Operational Shutdowns, and Other Events of Air Pollution Control Equipment.* The permittee shall maintain accurate records of all maintenance activities, malfunctions, and other operational shutdowns for designated pollution control equipment or process equipment employed for the purpose of emissions reduction required by this permit. For each such case, the following information, at a minimum, must 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 must 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.

4.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.2.1. of this permit, the permittee shall maintain monthly production records documenting the production rate of each of the permitted processes.

4.4.5. For the purpose of demonstrating compliance with the emission limits set forth in Section 4.1.2. of this permit, the permittee shall perform monthly emission estimates based on the records of production maintained in accordance to Section 4.4.4. of this permit. The maximum hourly emissions associated with each affected process shall be based on a monthly average. All annual emissions shall be based on a 12-month rolling total.

## 4.5. 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[1] (please use blue ink) _____ Responsible Official or Authorized Representative _____ Date

Name & Title (please print or type) _____ Name _____ Title

Telephone No. _____ Fax No. _____

---

[1] 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.