

## SITE LEVEL TERMS AND CONDITIONS

# IV. SITE LEVEL TERMS AND CONDITIONS

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## 1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.e, the probable cause of such deviations, and any corrective actions or preventive measures taken.

## 2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

## 3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

#### 4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

## 5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

## 6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

## 7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment

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- 1) Comply with the recordkeeping requirements of condition IV.29.d and reporting requirements of condition IV.29.e below; and
- 2) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
- 3) The permittee shall calculate the total annual benzene quantity from facility waste according to the procedures outlined in 40 CFR Part 61, Subpart FF, §61.355(b) and (c).
- d. The permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions. In addition the permittee shall maintain the following records: [§61.356(b)(1)]
  - 1) For each waste stream not controlled for benzene emissions, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
- e. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Department a report that updates the information listed in the following paragraphs whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. [§61.357(b); §61.357(a)(3)(i) (vi)]
  - 1) Whether or not the water content of the waste stream is greater than 10 percent;
  - 2) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
  - 3) Annual waste quantity for the waste stream;
  - 4) Range of benzene concentrations for the waste stream;
  - 5) Annual average flow-weighted benzene concentration for the waste stream; and
  - 6) Annual benzene quantity for the waste stream.

# **30.** Leak Detection and Repair (§2105.06, Plan Approval Order and Agreement Upon Consent Number 230, dated December 13, 1996)

- a. The permittee shall conduct a Leak Detection and Repair (LDAR) program at the facility at all times when facility operations may result in fugitive emissions of VOCs. Such LDAR program shall consist of the following: [RACT Order #230, 1.8; 25 Pa Code §129.99]
  - 1) Components applicable to the LDAR program shall be all accessible valves, pumps, and safety pressure relief valves in light oil service.
  - 2) The subject components shall be monitored visually and with a VOC analyzer, and shall be tagged or labeled using Neville's component identification system.
  - 3) Initially, each non difficult/unsafe subject component shall be monitored on a monthly basis. Any component for which a leak is not detected for two successive months shall be monitored on a quarterly basis. Any component for which a leak is not detected for two successive quarters shall then be monitored on an annual basis. Difficult/unsafe components shall be monitored annually.
  - 4) Visual leaks are determined if the component is visually leaking or dripping product from the component. Leaks determined using the analytical test method are an instrument reading exceeding 10,000 parts per million by volume.
  - 5) If a component is designated as leaking by either the visual or analytical method, the component



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will not be designated as a "leaker". Instead:

- a) A first attempt of repair of the component will be performed for the purposes of stopping or reducing leakage, using best available practices, until the component can achieve non-leaking status.
- b) Should this attempt fail, the component will be repaired or replaced and the monitoring will revert to the previous inspection schedule. Two successful monitoring events will allow the new or repaired component to again move up the progression of monthly, quarterly, and annual inspection frequency.
- 6) Recordkeeping of labeled or tagged monitoring components will be maintained, and include the type of component with available specifications, dates of monitoring, instrument readings, and location of the component.
- b. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of both §2105.06 of Article XXI and RACT Order #230. Such records shall provide sufficient data to clearly demonstrate that all requirements of both §2105.06 of Article XXI and RACT Order #230 are being met. [RACT Order #230, 1.9; 25 Pa Code §129.100]
- c. The facility shall retain all records required by both §2105.06 of Article XXI and RACT Order #230 for at least 2 years, and shall make the same available to the Department upon request. [RACT Order #230, 1.10; 25 Pa Code §129.100]

## 31. HAP LDAR Implementation (§2103.20.b.4)

- a. Upon issuance of this permit the permittee shall continue to implement a Hazardous Air Pollutant Leak Detection and Repair (HAP LDAR) program to monitor equipment in HAP service throughout the facility. Such HAP LDAR program shall consist of the following:
  - 1) The permittee shall maintain an electronic registry to identify all components in HAP service.
  - 2) Monitoring shall be conducted on a different set of one-third of all components every 12-month period, in accordance with condition IV.31.b below. All components shall be tested at least once every three (3) years.
  - 3) If, for each component type where the average percent leaking value is greater than or equal to 2%, the facility shall increase the monitoring frequency for that component type to once every 12-month period for all components of that type. This monitoring frequency shall be maintained until the leak rate for that component type is demonstrated to be less than 2% over a 24-month period, at which time the permittee may return to the monitoring schedule in condition IV.31.a.2) above.
  - 4) For each type of component, a leak is defined as follows:
    - a) valves: 500 ppm<sub>v</sub>
    - b) pump seals: 1,000 ppmv
    - e) pressure relief valves: 500 ppmv
    - d) agitator seals: 10,000 ppmv
    - e) flanges: 500 ppmv
    - f) screw connectors: 500 ppm<sub>v</sub>
    - g) manways: 500 ppmv
    - h) gauge hatches: 500 ppmv
    - i) instruments: 500 ppmv
    - j) open-ended lines: 500 ppmv
- b. Monitoring of all components shall be conducted in accordance with Method 21 of 40 CFR Part 60, Appendix A.



## C. Process P007: Unit 21

Pages 39 through 47 have been redacted.

| <b>Process Description:</b> | Catalytic Resin & Polyoil Neutralization                       |
|-----------------------------|--|
| Facility ID:                | Unit 21  |
| Raw Materials:              | ethylene-cracking products, resin-forming feedstock, additives |
| <b>Control Device:</b>      | packed bed scrubber (for BF3 removal)                          |

As identified above, Process P007 consists of the equipment listed under the heading "Catalytic Resin and Polyoil Neutralization" in Table II-1 in the Facility Description, Section II.

#### 1. **Restrictions**:

- a. The permittee shall not operate or allow to be operated Unit 21 unless the Aqueous Treaters are equipped with conservation vents. Each conservation vent shall have a set point above the maximum vapor pressure of the material being processed. [§2103.12.a.2.B]
- b. Total throughput through Unit 21 shall not exceed 89,400,000 pounds of poly oil in any 12-month period, and the number of product changes shall not exceed 52 in any 12-month period. [§2103.12.a.2.B]
- e. Emissions from the Unit 21 Holding Towers and Final Holding Tank shall not exceed the emission limitations in Table V-C-1 below: [§2103.12.a.2.B]

|                                  | Unit 21 Holding Towers & Tank     |                   |  |
|----------------------------------|-----------------------------------|-------------------|--|
| Pollutant                        | Short-term                        | Long-term         |  |
|                                  | (lb/product change <sup>1</sup> ) | <del>(tpy-)</del> |  |
| Volatile Organic Compounds (VOC) | <del>21.09</del>                  | <del>0.55</del>   |  |
| Hazardous Air Pollutants (HAP)   | <del>10.55</del>                  | <del>0.28</del>   |  |

#### **TABLE V-C-1: Unit 21 Holding Tower and Holding Tank Emission Limitations**

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.

2. A year is defined as any consecutive 12-month period.

- d. The Unit 21 Holding Towers and Final Holding Tank shall not emit more than 21.09 lb per product change [§2103.12.a.2.B]
- e. Emissions from the Unit 21 Aqueous Treaters shall not exceed the emission limitations in Table V-C-2 below: [25 Pa Code §129.99]

|                                     | Unit 21 Aqueous Treaters              |  |  |                                   |
|-------------------------------------|---------------------------------------|--|--|-----------------------------------|
| Pollutant                           | Treater #4<br>(lb/batch) <sup>1</sup> | Treater #10<br>(lb/batch) <sup>1</sup> | Treater #11<br>(lb/batch) <sup>1</sup> | Long-term<br>(tpy) <sup>2,3</sup> |
| Volatile Organic Compounds<br>(VOC) | 22.13                                 | 10.26                                  | 12.99                                  | 6.23                              |
| Hazardous Air Pollutants<br>(HAP)   | <del>12.41</del>                      | <del>5.75</del>                        | <del>7.28</del>                        | <del>3.50</del>                   |

**TABLE V-C-2: Unit 21 Aqueous Treater Emission Limitations** 

1. Maximum emissions based on material charging.

2. A year is defined as any consecutive 12-month period.

3. Total for all three aqueous treaters.



f. The permittee shall not use boron trifluoride (BF<sub>3</sub>) as a eatalyst in Unit 21 unless all BF<sub>3</sub> emissions from the Holding Towers and Final Holding Tank are being controlled by a packed-bed scrubber. [§2103.12.a.2.B]

#### 2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

#### 3. Monitoring Requirements:

The permittee shall visually inspect the BF<sub>3</sub> serubber required under condition V.C.1.f at least once per shift for visible emissions. If visible emissions are detected, the permittee shall adjust the flow of water to the serubber accordingly. [§2103.12.i]

#### 4. **Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for the Unit 21 Holding Towers and Final Holding Tank: [RACT Order #230, 1.9; §2103.12.j]
  - 1) Number of product changes per month and the rolling 12-month total;
  - 2) Poly oil addition rate (lb/hr) and the rolling 12-month total;
  - 3) Number of solvent flushes per batch; and
  - 4) If the rolling 12-month total throughput of poly oil exceeds 80,500,000 lbs or if the rolling 12month total number of product changes exceeds 47, the calculated estimated emissions per month.
- b. The permittee shall keep and maintain the following data for the Unit 21 Aqueous Treaters: [RACT Order #230, 1.9; §2103.12.j; 25 PA Code §129.100]
  - 1) Number of batch fillings per treater per month and the rolling 12-month total;
  - 2) Amount of water used per treater per batch;
  - 3) Number of washings per treater per batch; and
  - 4) If the rolling 12-month total of batches exceeds any of the following, the calculated estimated emissions per month:
    - a) Treater #4, 221 batches;
    - b) Treater #10, 363 batches; or
    - c) Treater #11, 296 batches.
- c. The permittee shall keep and maintain records of any compositional analyses of poly oil processed in Unit 21. [RACT Order #230, 1.9; §2103.12.j; 25 PA Code §129.100]
- d. The permittee shall keep and maintain the following data for the packed-bed serubber: [§2103.12.j]
   1) The amount of BF<sub>3</sub> catalyst used in the reactor per batch; and
   2) A log of the monitoring required under condition V.C.3.
- e. All records shall be retained by the facility in accordance with General Condition III.14. These records shall be made available to the Department upon request for inspection and/or copying. [§2102.12.j.2; RACT Order #230, 1.10; 25 PA Code §129.100]



## 5. Reporting Requirements:

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15. The reports shall contain, at a minimum, the following: [§2103.12.k]
  - 1) Calendar dates covered in the reporting period;
  - 2) All batch information required to be recorded under conditions V.C.4.a and V.C.4.b above; and
  - 3) Packed-bed serubber information required to be recorded under condition V.C.4.d.1) above.
- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

## 6. Work Practice Standards:

- a. The permittee shall do the following for Unit 21 and all associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. Unit 21 and all associated equipment shall be: [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]
  - 1) Properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions; and
  - 2) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.



## D. Processes P008 & P009: Continuous Stills #3 and #4

| <b>Process Description:</b> | Continuous Stills   |
|-----------------------------|---|
| Facility ID:                | No. 3 Continuous Still (P008) & No. 4 Continuous Still (P009) |
| <b>Raw Materials:</b>       | polyoil, resin-forming feedstock, additives                   |
| <b>Control Device:</b>      | none  |

As identified above, Processes P008 & P009 consist of the equipment listed under the heading "Continuous Stills" in Table II-1 in the Facility Description, Section II.

#### 1. **Restrictions**:

- a. The number of product changes shall be limited to 365 in any 12-month period in each continuous still. [§2103.12.a.2.B]
- b. The No. 3 Continuous Stills shall not exceed the emissions limitations in Table V-D-1 below: [§2103.12.a.2.B; 25 PA Code §129.97(c)(2)]

| No. 3 Continuous Still         |   |
|--------------------------------|---|
| Short-term                     | Long-term   |
| (lb/prod. change) <sup>+</sup> | <del>(tpy)<sup>2</sup></del>                          |
| <del>14.00</del>               | <del>2.56</del>                                       |
| <del>1.66</del>                | <del>0.31</del>                                       |
|                                | Short-term<br>(Ib/prod. change) <sup>‡</sup><br>14.00 |

TABLE V-D-1: No. 3 Continuous Still Emission Limitations

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.

2. A year is defined as any consecutive 12-month period.

c. The No. 4 Continuous Stills shall not exceed the emissions limitations in Table V-D-2 below: [§2103.12.a.2.B; 25 PA Code §129.99]

|                                  | No. 4 Continuous Still                       |                                 |  |
|----------------------------------|--|---------------------------------|--|
| Pollutant                        | Short-term<br>(lb/prod. change) <sup>1</sup> | Long-term<br>(tpy) <sup>2</sup> |  |
| Volatile Organic Compounds (VOC) | 76.00  | 13.87                           |  |
| Hazardous Air Pollutants (HAP)   | <del>6.13</del>                              | <del>1.12</del>                 |  |

 TABLE V-D-2: No. 4 Continuous Still Emission Limitations

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.

2. A year is defined as any consecutive 12-month period.

#### 2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]



#### 3. Monitoring Requirements:

#### None, except as provided elsewhere.

#### 4. **Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following data for both the No. 3 and No. 4 Continuous Stills and associated equipment: [RACT Order #230, 1.9; §2103.12.j; 25 PA Code §129.100]
  - 1) Number of product changes per month and the rolling 12-month total;
  - 2) Total operating times;
  - 3) Type and amount of daily raw materials used;
  - 4) Type and amount of daily resins produced; and
  - 5) For each still, if the rolling 12-month total number of product changes exceeds 330, the calculated estimated emissions per month.
- b. All records shall be retained by the facility in accordance with General Condition III.14. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; RACT Order #230, 1.10; 25 PA Code §129.100]

## 5. Reporting Requirements:

a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15. The reports shall contain, at a minimum, the following: [§2103.12.k]
 1) Calendar dates covered in the reporting period; and

2) Total number of product changes and operating time per month.

b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

#### 6. Work Practice Standards:

- a. The permittee shall do the following for the No. 4 Continuous Stills and associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The No. 4 Continuous Stills and associated equipment shall be: [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]
  - 1) Properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions; and
  - 2) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.
- e. The permittee shall do the following for the No. 3 Continuous Stills and associated equipment: [§2105.03; 25 PA Code §129.97(e)(2)]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;



## E. Process P011: No. 2 Packaging Center

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Process Description:Flaking and PackagingFacility ID:No. 2 Packaging CenterRaw Materials:liquid hydrocarbon resins, flaked solid hydrocarbon resinsControl Device:pulse-jet fabric filter (Mikropul 48S-8-20)

As identified above, Process P011 consists of the equipment listed under the heading "Flaking and Packaging" in Table II-1 in the Facility Description, Section II.

## 1. Restrictions:

- a. The permittee shall not operate the No. 2 Packaging Center unless the equipment is properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. Proper operation and maintenance shall include the use of covers on all kettles after the initial kettle charging and during process operations, and the use of enclosures on all solids handling transfer equipment. [IP #0060-I007a, V.A.1.a; RACT Order #230, 1.5; §2105.03; 25 PA Code §129.99]
- b. Emissions from the Resin Flaking Belt shall not exceed 0.338 lbs of VOC per ton of resin produced. [IP #0060-I007a, V.A.1.b; §2103.12.a.2.B; 25 PA Code §129.99]
- e. Emissions from the Resin Flaking Belt shall not exceed 0.008 lbs of HAP per ton of resin produced. [IP #0060-I007a, V.A.1.c; §2103.12.a.2.B]
- d. Fugitive emission from pumps, valves, compressors, and safety pressure relief valves in the No. 2 Packaging Center shall not exceed 1.49 tons/yr of VOCs. [IP #0060-I007a, V.A.1.e; §2103.12.a.2.B]
- e. The permittee shall not operate the crusher or bagging stations unless all emissions are directed to the No. 2 Packaging Center baghouse. [IP #0060-I007a, V.A.1.f; §2103.12.a.2.B]
- f. Emissions from the No. 2 Packaging Center shall not exceed the following at any time: [IP #0060-I007a, V.A.1.g; §2103.12.a.2.B; 25 PA Code §129.99]



|                                    | Process   | Short-term<br>(lb/hr) <sup>1</sup> | Long-term<br>(tpy) <sup>2</sup> |
|------------------------------------|---|------------------------------------|---------------------------------|
| Particulate<br>Matter <sup>4</sup> | Crusher, Large & Small Bagging<br>Stations, and Flaking (total emissions) | <del>0.38</del>                    | <del>1.67</del>                 |
| PM <sub>10</sub> <sup>(4)</sup>    | Crusher, Large & Small Bagging<br>Stations, and Flaking (total emissions) | <del>0.38</del>                    | <del>1.67</del>                 |
| PM <sub>2.5</sub> <sup>(4)</sup>   | Crusher, Large & Small Bagging<br>Stations, and Flaking (total emissions) | <del>0.38</del>                    | <del>1.67</del>                 |
| VOC <sup>(5)</sup>                 | Resin Drain Kettles <sup>3</sup>  | 0.51                               | 15.56                           |
| VUC                                | No. 2 Flaking Belt  | 1.86                               | 8.14                            |
| Resin Drain Kettles <sup>3</sup>   |   | <del>0.01</del>                    | <del>0.36</del>                 |
| HAP                                | No. 2 Flaking Belt  | <del>0.04</del>                    | <del>0.19</del>                 |

1. Based on a 3-hour average.

- 2. A year is defined as any 12 consecutive months.
- 3. Short-term emissions are for each kettle (lb/hr per kettle); long-term emissions are total. There are seven (7) total drain kettles.
- 4. All particulate matter emission limits are for filterable particulate.
- 5. Only the VOC emissions are subject to 25 PA Code §129.99

## 2. Testing Requirements:

- Emissions testing shall be performed at least once every five (5) years, in accordance with Site Level condition IV.13 ("Emissions Testing) and §2108.02. [IP #0060-I007a, V.A.2.a-b; §2103.12.h; 25 PA Code §129.100]
  - 1) Testing shall be performed at the outlet of the fume hood to demonstrate compliance with the flaking belt VOC and HAP emission limits in condition V.E.1.f above;
  - 2) Testing shall be conducted at maximum flaker production and shall consist of three (3) 1-hour test runs;
  - 3) The outlet gas flow rate and VOC and HAP emissions shall be continuously monitored and recorded during the emissions testing;
  - 4) EPA Test Method 25A shall be used to determine outlet concentrations and mass emission rates (lb/hr) of VOC;
  - 5) EPA Test Method 18 shall be used to determine outlet concentrations and mass emission rates (lb/hr) of total HAPs; or
  - 6) Any alternative test methods approved by the Department.
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

## **3.** Monitoring Requirements:

- a. The permittee shall provide instrumentation to measure baghouse pressure drop to within ½" w.e. of the actual pressure drop at all times. The instrumentation shall be maintained in good working condition at all times, and shall be located in an easily accessible location. [IP #0060-I007a, V.A.3.a; §2103.12.i]
- b. The permittee shall monitor and record the differential pressure drop across each baghouse

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compartment weekly for the No. 2 Packaging Center baghouse. [IP #0060-I007a, V.A.3.b; §2103.12.i]

- e. The permittee shall inspect the fabric filter for evidence of particulate matter leaks at least annually, and shall repair any leaks as necessary. Bags shall be inspected annually, while the fabric filter is not in operation, for tears, scuffs, abrasions, or holes. Bags shall be replaced as necessary. [IP #0060-I007a, V.A.3.e; §2103.12.i]
- d. The permittee shall perform an EPA Test Method 22 visual inspection of the No. 2 Packaging Center process equipment and control device once per week to ensure the equipment exhaust system, including material handling enclosures, is not compromised by damage, malfunction, or deterioration. Immediate repairs shall be made to correct obvious failures or deficiencies. [IP #0060-I007a, V.A.3.d; §2103.12.i]

## 4. **Record Keeping Requirements:**

- a. The permittee shall record the following information for the No. 2 Packaging Center to demonstrate compliance with the requirements of this permit. Such records shall provide sufficient data and calculations to clearly demonstrate that the applicable requirements are being met, and shall include but not be limited to the following: [IP #0060-I007a, V.A.4.a; §2103.12.j; 25 PA Code §129.100]
  - 1) Process operation time, raw material usage, and production records (daily, monthly, and 12-month);
  - 2) Date of kettle fillings and amount filled during the reporting period;
  - 3) Total amount of final product packaged at the bagging areas (monthly and 12-month);
  - 4) Total calculated VOC and HAP emissions from the resin drain kettles and the flaker belt, as well as the calculation methods and emission factors used to determine those emissions (monthly and 12-month rolling totals);
  - 5) Records of all emission unit and control equipment inspections, emission test reports, and any maintenance, inspection, calibration, and/or replacement of such equipment required by condition V.E.3.d above.
- b. All records shall be retained by the facility in accordance with General Condition III.14. These records shall be made available to the Department upon request for inspection and/or copying. [IP #0060-I007a, V.A.4.c; §2103.12.j.2; 25 PA Code §129.100]

## 5. Reporting Requirements:

- a. The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15. [IP #0060-I007a, V.A.5.a; §2103.12.k]
- b. The semiannual report shall include the following information at a minimum: [IP #0060-I007a, V.A.5.b; §2103.12.k]
  - 1) Calendar dates covered in the reporting period;
  - 2) Monthly data required by conditions V.E.4.a.1), 3), and 4) above; and
  - 3) Reasons for any non-compliance with the emission standards.
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [IP #0060-I007a, V.A.5.e; §2103.12.k]



## 6. Work Practice Standards:

- a. The permittee shall do the following for the No. 2 Packaging Center and associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations, good engineering control practices, and the applicable terms and conditions of this permit. [IP #0060-I007a, V.A.6; RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]



## F. Process P012: No. 3 Packaging Center

| <b>Process Description:</b> | Pastillating and Packaging                                 |
|-----------------------------|--|
| Facility ID:                | No. 3 Packaging Center                                     |
| <b>Raw Materials:</b>       | liquid hydrocarbon resins, flaked solid hydrocarbon resins |
| <b>Control Device:</b>      | pulse-jet fabric filter (Mikropul 48S-8-20)                |

As identified above, Process P012 consists of the equipment listed under the heading "Flaking and Packaging" in Table II-1 in the Facility Description, Section II.

## 1. Restrictions:

- a. The permittee shall not operate the No. 3 Packaging Center unless the equipment is properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. Proper operation and maintenance shall include the use of covers on all kettles after the initial kettle charging and during process operations, and the use of enclosures on all solids handling transfer equipment. [RACT Order #230, 1.5; §2105.03; 25 PA Code §129.97(c)(2)]
- b. Emissions from the Resin Pastillating Belt shall not exceed 0.51 lbs of VOC per ton of resin produced. [§2103.12.a.2.B; 25 PA Code §129.99]
- e. Emissions from the Resin Pastillating Belt shall not exceed 0.02 lbs of HAP per ton of resin produced. [§2103.12.a.2.B]
- d. The permittee shall not operate the bagging stations unless all emissions are directed to the No. 3 Packaging Center baghouse. [2103.12.a.2.B]
- e. Emissions from the No. 3 Packaging Center shall not exceed the following at any time: [§2103.12.a.2.B; 25 PA Code §129.99]



|                                      | Process   | Short-term<br>(lb/hr) <sup>1</sup> | Long-term<br>(tpy) <sup>2</sup> |
|--------------------------------------|---|------------------------------------|---------------------------------|
| Particulate<br>Matter <sup>4</sup>   | Large & Small Bagging Stations, and<br>Pastillating (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| <b>PM</b> <sub>10</sub> <sup>4</sup> | Large & Small Bagging Stations, and<br>Pastillating (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| <b>PM<sub>2.5</sub></b> <sup>4</sup> | Large & Small Bagging Stations, and<br>Pastillating (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| VOC <sup>5</sup>                     | Resin Drain Kettles <sup>3</sup>                                      | 0.71                               | 21.78                           |
| VUC                                  | No. 3 Pastillating Belt   | 1.53                               | 6.69                            |
|                                      | Resin Drain Kettles <sup>3</sup>                                      | 0.03                               | <del>0.71</del>                 |
| HAP                                  | No. 3 Pastillating Belt   | <del>0.05</del>                    | <del>0.22</del>                 |
|                                      | Pouring <sup>4</sup>  | 0.03                               | <del>0.08</del>                 |

#### **TABLE V-F-1: No. 3 Packaging Center Emission Limitations**

1. Based on a 3-hour average.

2. A year is defined as any 12 consecutive months. There are seven (7) total drain kettles.

3. Short-term emissions are for each kettle (lb/hr per kettle); long-term emissions are total for all kettles.

4. All particulate matter emission limits are for filterable particulate.

5. Only the VOC emissions are subject to 25 PA Code §129.99

## 2. Testing Requirements:

- a. An emissions test shall be performed within 18 months after issuance of this permit in accordance with Site Level condition IV.13 ("Emissions Testing") and §2108.02. [§2103.12.h; 25 PA Code §129.100]
  - 1) Testing shall be performed at the outlet of the fume hood to demonstrate compliance with the pastillating belt VOC emission limits in condition V.F.1.e above;
  - Testing shall be conducted at maximum pastillating belt production and shall consist of three (3) 1-hour test runs;
  - 3) The outlet gas flow rate and VOC emissions shall be continuously monitored and recorded during the emissions testing;
  - 4) EPA Test Method 25A shall be used to determine outlet concentrations and mass emission rates (lb/hr) of VOC;
  - 5) Any alternative test methods approved by the Department.
- b. Emissions testing for VOC and HAP shall be performed within six (6) months after actual throughput of resin on the pastillating belt first exceeds 24,000,000 pounds in any rolling 12-month period and every five (5) years thereafter. [§2103.12.h]
  - 1) Emissions testing of VOC shall be in accordance with condition V.F.2.a above;
  - 2) EPA Test Method 18 shall be used to determine outlet concentrations and mass emission rates (lb/hr) of total HAPs.

f. VOC emissions from the Pouring process (product is either poured, pastillated, or loaded under Section V.J) shall not exceed 0.94 lb/hr or 1.96 tpy at any time. [§2103.12.a.2.B; 25 PA Code §129.97(e)(2)]



e. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

## 3. Monitoring Requirements:

- a. The permittee shall provide instrumentation to measure baghouse pressure drop to within ½" w.e. of the actual pressure drop at all times. The instrumentation shall be maintained in good working condition at all times, and shall be located in an easily accessible location. [§2103.12.i]
- b. The permittee shall monitor and record the differential pressure drop across each baghouse compartment weekly for the No. 3 Packaging Center baghouse. [§2103.12.i]
- e. The permittee shall inspect the fabric filter for evidence of particulate matter leaks at least annually, and shall repair any leaks as necessary. Bags shall be inspected annually, while the fabric filter is not in operation, for tears, seuffs, abrasions, or holes. Bags shall be replaced as necessary. [§2103.12.i]
- d. The permittee shall perform an EPA Test Method 22 visual inspection of the No. 3 Packaging Center process equipment and control device once per week to ensure the equipment exhaust system, including material handling enclosures, is not compromised by damage, malfunction, or deterioration. Immediate repairs shall be made to correct obvious failures or deficiencies. [§2103.12.i]

#### 4. **Record Keeping Requirements:**

- a. The permittee shall record the following information for the No. 3 Packaging Center to demonstrate compliance with the requirements of this permit. Such records shall provide sufficient data and calculations to clearly demonstrate that the applicable requirements are being met, and shall include but not be limited to the following: [§2103.12.j; 25 PA Code §129.100]
  - 1) Process operation time, raw material usage, and production records (daily, monthly, and 12-month);
  - 2) Date of kettle fillings, amount filled, and type of fill (resin or resin solution) for the reporting period;
  - 3) Total amount of throughput on the pastillating belt (daily, monthly, and 12-month);
  - 4) Total amount of final product packaged at the bagging areas (monthly and 12-month);
  - 5) Total amount of final product from the pouring station (monthly and 12-month);
  - 6) Total calculated VOC and HAP emissions from the resin drain kettles, pastillating belt, and pouring station, as well as the calculation methods and emission factors used to determine those emissions (monthly and 12-month rolling totals);
  - 7) Records of all emission unit and control equipment inspections, emission test reports, and any maintenance, inspection, calibration, and/or replacement of such equipment required by condition V.F.3.d above.

# b. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]

c. All records shall be retained by the facility in accordance with General Condition III.14. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]



## 5. Reporting Requirements:

- a. The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15. [§2103.12.k]
- b. The semiannual report shall include the following information: [§2103.12.k]
   1) Calendar dates covered in the reporting period; and
   2) Monthly and 12-month data required by conditions V.F.4.a.1), 4), 5), and 6) above.
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k]
- 6. Work Practice Standards:
  - a. The permittee shall do the following for the No. 3 Packaging Center (pouring station): [§2105.03; 25 PA Code §129.97(c)(2)]
    - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
    - 2) Keep records of any maintenance; and
    - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
  - b. The permittee shall do the following for the No. 3 Packaging Center (drain kettles, pastillating belt, and associated equipment): [§2105.03; 25 PA Code §129.99]
    - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
    - 2) Keep records of any maintenance; and
    - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
  - c. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations, good engineering control practices, and the applicable terms and conditions of this permit. [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]



## G. Process P013: No. 5 Packaging Center

| <b>Process Description:</b> | Flaking and Packaging                                      |
|-----------------------------|--|
| Facility ID:                | No. 5 Packaging Center                                     |
| <b>Raw Materials:</b>       | liquid hydrocarbon resins, flaked solid hydrocarbon resins |
| <b>Control Device:</b>      | pulse-jet fabric filter (Mikropul 48S-8-20)                |

As identified above, Process P013 consists of the equipment listed under the heading "Flaking and Packaging" in Table II-1 in the Facility Description, Section II.

#### 1. **Restrictions:**

- a. The permittee shall not operate the No. 5 Packaging Center unless the equipment is properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. Proper operation and maintenance shall include the use of covers on all kettles after the initial kettle charging and during process operations, and the use of enclosures on all solids handling transfer equipment. [IP #0060-I008, V.A.1.a; RACT Order #230, 1.5; §2105.03; 25 PA Code §129.99]
- b. Emissions from the Resin Flaking Belt shall not exceed 0.338 lbs of VOC per ton of resin produced. [IP #0060-I008, V.A.1.b; §2103.12.a.2.B; 25 PA Code §129.99]
- e. Emissions from the Resin Flaking Belt shall not exceed 0.008 lbs of HAP per ton of resin produced. [IP #0060-I008, V.A.1.c; §2103.12.a.2.B]
- d. The permittee shall not operate the crusher or bagging stations unless all emissions are directed to the No. 5 Packaging Center baghouse. [2103.12.a.2.B]
- e. Emissions from the No. 5 Packaging Center shall not exceed the following at any time: [IP #0060-I008, V.A.1.e; OP #4051008-000-66500; §2103.12.a.2.B; 25 PA Code §129.99]

|   | Process   | Short-term<br>(lb/hr) <sup>1</sup> | Long-term<br>(tpy) <sup>2</sup> |
|---|---|------------------------------------|---------------------------------|
| Particulate<br>Matter <sup>4</sup>      | Large & Small Bagging Stations, and Flaking (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| <b>PM</b> 10 <sup>(4)</sup>             | Large & Small Bagging Stations, and Flaking (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| <b>PM</b> <sub>2.5</sub> <sup>(4)</sup> | Large & Small Bagging Stations, and Flaking (total emissions) | <del>0.25</del>                    | <del>1.09</del>                 |
| VOC <sup>(5)</sup>                      | Resin Drain Kettles <sup>3</sup>                              | 1.07                               | 14.00                           |
| VUC                                     | No. 5 Flaking Belt  | 1.67                               | 7.33                            |
| HAD                                     | Resin Drain Kettles <sup>3</sup>                              | <del>0.04</del>                    | <del>0.46</del>                 |
| HAP                                     | No. 5 Flaking Belt  | <del>0.04</del>                    | <del>0.17</del>                 |

 TABLE V-G-1: No. 5 Packaging Center Emission Limitations

1. Based on a 3-hour average.

2. A year is defined as any 12 consecutive months.

- 3. Short-term emissions are for each kettle (lb/hr/kettle); long-term emissions are total. There are three (3) total drain kettles.
- 4. All particulate matter emission limits are for filterable particulate.
- 5. Only the VOC emissions are subject to 25 PA Code §129.99



## 2. Testing Requirements:

- Emissions testing shall be performed at least once every five (5) years, in accordance with Site Level condition IV.13 ("Emissions Testing") and §2108.02. [IP #0060-I008, V.A.2.a & b; §2103.12.h; 25 PA Code §129.100]
  - 1) Testing shall be performed at the outlet of the fume hood to demonstrate compliance with the flaking belt VOC and HAP emission limits in condition V.G.1.e above;
  - 2) Testing shall be conducted at maximum flaker production and shall consist of three (3) 1-hour test runs;
  - 3) The outlet gas flow rate and VOC and HAP emissions shall be continuously monitored and recorded during the emissions testing;
  - 4) Molten resin feed rate and finished resin produced shall be recorded for each test run;
  - 5) Type of resin produced shall be recorded for each test run;
  - 6) EPA Test Method 25A shall be used to determine outlet concentrations and mass emission rates (lb/hr) of VOC;
  - 7) EPA Test Method 18 shall be used to determine outlet concentrations and mass emission rates (lb/hr) of total HAPs; or
  - 8) Any alternative test methods approved by the Department.
- b. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

## 3. Monitoring Requirements:

- a. The permittee shall provide instrumentation to measure baghouse pressure drop to within ½" w.e. of the actual pressure drop at all times. The instrumentation shall be maintained in good working condition at all times, and shall be located in an easily accessible location. [§2103.12.i]
- b. The permittee shall monitor and record the differential pressure drop across each baghouse compartment weekly for the No. 5 Packaging Center baghouse. [§2103.12.i]
- e. The permittee shall inspect the fabric filter for evidence of particulate matter leaks at least annually, and shall repair any leaks as necessary. Bags shall be inspected annually, while the fabric filter is not in operation, for tears, seuffs, abrasions, or holes. Bags shall be replaced as necessary. [§2103.12.i]
- d. The permittee shall perform an EPA Test Method 22 visual inspection of the No. 5 Flaking Belt, exhaust hood, and associated duet work once per week to ensure the equipment is operating properly, and that the integrity of the system is not compromised by damage, malfunction or deterioration. Immediate repairs shall be made to correct obvious failures or deficiencies. [IP #0060-I008, V.A.3; §2103.12.i]

## 4. **Record Keeping Requirements:**

a. The permittee shall record the following information for the No. 5 Packaging Center to demonstrate compliance with the requirements of this permit. Such records shall provide sufficient data and calculations to clearly demonstrate that the applicable requirements are being met, and shall include but not be limited to the following: [IP #0060-I008, V.A.4.a; §2103.12.j]; 25 PA Code §129.100
1) Process operation time, raw material usage, and production records (daily, monthly, and 12-



month);

- 2) Date of kettle fillings and amount filled during the reporting period;
- 3) Total amount of final product packaged at the bagging areas (monthly and 12-month);
- 4) Total calculated VOC and HAP emissions from the resin drain kettles and the flaker belt, as well as the calculation methods and emission factors used to determine those emissions (monthly and 12-month rolling totals);
- 5) Records of all emission unit and control equipment inspections, emission test reports, and any maintenance, inspection, calibration, and/or replacement of such equipment required by condition V.G.3.d above.
- b. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]
- c. All records shall be retained by the facility in accordance with General Condition III.14. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; 25 PA Code §129.100]

## 5. Reporting Requirements:

- a. The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15. [IP #0060-I008, V.A.5.a; §2103.12.k]
- b. The semiannual report shall include the following information: [IP #0060-I008, V.A.5.b; §2103.12.k]
  - 1) Calendar dates covered in the reporting period; and
  - 2) Monthly and 12-month data required by conditions V.G.4.a.1), 3), and 4) above;
  - 3) Non-compliance information required by condition V.G.4.b above, and
  - 4) Reasons for any non-compliance with the emission standards.
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k]

## 6. Work Practice Standards:

- a. The permittee shall do the following for the No. 5 Packaging Center and associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations, good engineering control practices, and the applicable terms and conditions of this permit. [IP #0060-I008, V.A.6; RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]



## H. Process P014: Wastewater Collection, Conveyance, and Treatment

| Facility ID:          | Wastewater Collection System  |
|-----------------------|---|
| <b>Raw Materials:</b> | industrial process wastewaters, water treatment chemicals, biological treatment |
|                       | nutrients, storm waters   |
| Control Device(s):    | none  |

As identified above, Process P014 consists of equipment listed under the heading "Other Processes – Wastewater Collection, Conveyance, and Treatment" in Table II-1 in the Facility Description, Section II, as well as all catch basins and other water collection locations within the facility.

#### 1. **Restrictions:**

- a. The permittee shall not operate or allow to be operated the Surge Tank (#5001), Batch Tanks (#2011-2013), and Sludge Holding Tank (#2010) unless each is covered with a fixed roof. [§2103.12.a.2.B]
- b. Emissions from the wastewater collection and conveyance system shall not exceed the following at any time: [§2103.12.a.2.B]

#### **TABLE V-H-1: Wastewater Conveyance System Emission Limitations**

| POLLUTANT                         | <del>Yearly Emissions</del><br><del>(tons/yr)<sup>1</sup></del> |
|-----------------------------------|---|
| Volatile Organic Compounds (VOCs) | <del>3.36</del>   |
| Hazardous Air Pollutants (HAPs)   | <del>1.08</del>   |

1. A year is defined as any consecutive 12-month period.

e. Emissions from the batch tanks, equalization tank, biological treatment system, and other vessels in the wastewater treatment system shall not exceed the following at any time: [§2103.12.a.2.B; IP #90-I-0058-P; 25 PA Code §129.97(c)(2)]

| TABLE V-H-2: Wastewater Treatment System Emission Limitations |                  |  |                            |
|---|------------------|--|----------------------------|
| POLLUTANT   | Batch Tanks      | <del>Equalization</del><br><del>Tank</del> | Acration Tanks             |
|   | <del>tpy1</del>  | <del>tpy1</del>                            | <del>tpy<sup>1</sup></del> |
| Volatile Organic<br>Compounds (VOCs)                          | <del>10.28</del> | <del>1.79</del>                            | <del>1.37</del>            |
| Hazardous Air<br>Pollutants (HAPs)                            | <del>1.52</del>  | <del>0.73</del>                            | <del>0.87</del>            |

## TABLE V-H-2: Wastewater Treatment System Emission Limitations

1. A year is defined as any consecutive 12-month period.

d. The permittee shall not operate or allow to be operated the Rotary Vacuum Filter unless Boiler #6 is in operation. The Rotary Vacuum Filter shall not be operated unless all emissions from the vacuum pump are vented to Boiler #6. [§2103.12.a.2.B; 25 PA Code §129.99]



## 2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

#### 3. Monitoring Requirements:

- a. The permittee shall take monthly Photo Ionization Detector (PID) readings (or equivalent monitoring device as approved by the Department) of each manhole/catch basin for the contaminated water system just below the manhole/catch basin opening for VOCs and HAPs. [§2103.12.i]
- b. The permittee may reduce the frequency of manhole/catch basin PID readings from monthly to quarterly if total emissions from the contaminated water conveyance system do not exceed the limits in condition V.H.1.b above for twelve (12) consecutive monthly readings. [§2103.12.i]
  - 1) The permittee may reduce the frequency from quarterly to semiannually if total emissions do not exceed the limits in condition V.H.1.b above for three (3) consecutive years.
  - 2) If emissions exceed the limits in condition V.H.1.b above, the permittee shall resume more frequent readings.
- e. The PID monitoring device shall be calibrated using isobutylene gas in order to generate readings that have the same "PID or Isobutylene Units" as the PID readings from the "Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) Emission Estimate for Wastewater Conveyance and Treatment" report (published by Malcolm Pirnie, Inc., January 2008). [§2103.12.i]
- d. The permittee shall measure the VOC and total HAP concentrations of the wastewater influent to the Equalization Tank on a quarterly basis. [§2103.12.i]
- 4. **Record Keeping Requirements:** 
  - a. The permittee shall keep rolling 12-month records of VOC and HAP emission calculations for the wastewater conveyance system based on the PID readings required by conditions V.H.3.a and V.H.3.b above and the emission factors determined in the January 2008 wastewater emissions estimate report referenced in condition V.H.3.e above, or other factors approved by the Department. [§2103.12.j]
  - b. The permittee shall keep records of the following for the wastewater treatment system: [§2103.12.j]

1) A table of all PID readings conducted.

- 2) Daily, monthly, and rolling 12-month wastewater flow volume treated.
- 3) Quarterly wastewater influent concentrations samples required under condition V.H.3.d above.
- e. If the recorded values of the quarterly wastewater concentrations in condition V.H.4.b.3) exceed the values in the January 2008 wastewater emissions estimate report referenced in condition V.H.3.e, the permittee shall re-evaluate the emissions estimate using TOXCHEM or other model program as approved by the Department. [§2103.12.j]



- d. The permittee shall record all instances of operation of the Rotary Vacuum Filter, including date, time, and duration of operation and total throughput of wastewater to the unit. [§2103.12.j; 25 PA Code §129.100]
- e. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]
- f. All records and supporting documentation shall be retained in accordance with General Condition III.14, and be made available to the Department for inspection and/or copying upon request. [§2103.12.j.2]

## 5. Reporting Requirements:

- a. The permittee shall submit semiannual reports to the Department in accordance with General Condition III.15. [§2103.12.k]
- b. The semiannual report shall include the following information: [§2103.12.k]
  - 1) Calendar dates covered in the reporting period.
  - 2) Estimated VOC and HAP emissions from the wastewater conveyance system required under condition V.H.4.a above.
  - 3) A summary of the PID readings required to be maintained under condition V.H.4.b.1) above.
  - 4) The monthly wastewater volume recorded under condition V.H.4.b.2) above.
  - 5) Estimated VOC and HAP emissions from the wastewater treatment system.
  - 6) All information for the Rotary Vacuum Filter required to be recorded by condition V.H.4.d above for the time period of the report.
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

## 6. Work Practice Standards:

- a. The permittee shall do the following for the Wastewater Collection, Conveyance, and Treatment system: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Wastewater Collection, Conveyance, and Treatment system shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]



## I. Process P015: Resin Rework Tanks

| Facility ID:Tanks N2 and N4 |                                 |
|-----------------------------|---------------------------------|
| Raw Materials:              | resins, rosins, distillate oils |
| Control Device(s):          | double-pipe surface condenser   |

#### 1. **Restrictions:**

- a. The permittee shall not operate or allow to be operated the resin rework tanks N2 and N4 unless all emissions are vented through a condenser. [RACT Order #230, §1.3; §2103.12.a.2.B; 25 PA Code §129.99]
- b. Emissions from the resin rework tanks at the exit of the condenser shall not exceed the emissions limitations in Table V-I-1 below: [§2103.12.a.B]

| POLLUTANT                         | Hourly Emissions<br>(lb/hr) <sup>‡</sup> | <del>Yearly Emissions</del><br><del>(tons/yr)<sup>2</sup></del> |
|-----------------------------------|--|---|
| Volatile Organic Compounds (VOCs) | <del>3.78</del>                          | <del>16.55</del>  |
| Hazardous Air Pollutants (HAPs)   | <del>0.08</del>                          | <del>0.32</del>   |

#### **TABLE V-I-1: Resin Rework Tank Emission Limitations**

1. Based on a 3-hour average.

2. A year is defined as any consecutive 12-month period.

c. The average monthly inlet coolant temperature on the condenser shall not exceed 90 °F. [RACT Order #230, §1.3.a; §2103.12.a.2.B; 25 PA Code §129.99]

## 2. Testing Requirements:

- a. The permittee shall perform a one-time test within 24-months of the issuance date of this permit in accordance with Site Level Condition IV.13 ("Emissions Testing") and Article XXI §2108.02. [§2102.12.h; §2108.02]
- b. Emissions testing shall be performed at the outlet of the condenser for VOC in accordance with EPA Reference Methods 25 and the Allegheny County Health Department Source Testing Manual, or any alternative test method as approved by the Department. Testing shall be performed during the period of maximum emissions from the process and shall consist of three (3) test runs, each performed over the entire vessel loading period. The following information shall be reported as part of the emissions test report: [§2103.12.h; §2108.02]
  - 1) VOC emissions (in lb/hr);
  - 2) Vessel loading duration;
  - 3) Coolant inlet temperature (continuous);
  - 4) Outlet vapor temperature (continuous); and
  - 5) Resin production rate (gallons/batch; lb/batch)
- e. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]



## **3. Monitoring Requirements:**

- a. The permittee shall install, operate, and maintain a condenser coolant inlet temperature instrument that continuously monitors the coolant inlet temperature to a standard accuracy of the greater of  $\pm 2.2 \degree C$  or  $\pm 0.75\%$  of the temperature measured. The permittee shall at all times properly maintain and calibrate the continuous temperature monitor and recorder in accordance with manufacturer's specifications and good engineering practices. [§2103.12.i]
- b. Monitoring data recorded during periods of monitoring system breakdowns, repairs, preventive maintenance, calibration checks, zero (low-level) and high-level adjustments, periods of non-operation of the process unit (or portion thereof) resulting in cessation of the emissions to which the monitoring applies, shall not be included in any average to determine compliance, except monitoring data is to be collected during periods of startup, shutdown and malfunction. [§2103.12.i]
- e. The permittee shall seek Department approval of any alternative monitoring systems. [§2103.12.i]

## 4. **Record Keeping Requirements:**

- a. The permittee shall maintain the following records for the condenser: [§2103.12.j; 25 PA Code §129.100]
  - 1) A record of condenser coolant inlet temperature values measured at least once every 15 minutes; or
  - 2) A record of block average values for 15-minute or shorter periods calculated from all measured coolant inlet temperature values during each period or from at least one measured data value per minute if measure more frequently than once per minute;
  - 3) Hours of operation;
  - 4) Records of operation, maintenance, inspection, calibration, and/or replacement of equipment; and
  - 5) Resin production data.
- b. The permittee shall record the following information any time the coolant inlet temperature monitor required by condition V.I.3.a above is offline while the Resin Rework Tanks are in operation: [§2103.12.j]
  - 1) Date and time the unit went offline;
  - 2) Duration of offline status; and
  - 3) Cause of offline status.
- e. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]
- d. All records and supporting documentation shall be retained in accordance with General Condition III.14, and be made available to the Department for inspection and/or copying upon request. [§2103.12.j.2; 25 PA Code §129.100]



## 5. Reporting Requirements:

- a. The permittee shall report the following information to the Department semiannually in accordance with General Condition III.15. The reports shall contain all required information for the time period of the report: [§2103.12.k]
  - 1) Calendar dates covered in the reporting period;
  - 2) Hours of operation; and
  - 3) Any instances of non-compliance
- b. The permittee shall report all information in condition V.I.4.b regarding the coolant inlet temperature monitor in the semiannual report. [§2103.12.k]
- e. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

## 6. Work Practice Standards:

- a. The permittee shall do the following for the Resin Rework Tanks and associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Resin Rework Tanks and condenser shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #230, 1.1, 1.3; §2105.03; 25 PA Code §129.99]



## J. Process P016: Final Product Loading

| Facility ID:                         | LX-830 Fuel Oil Barge Loading and Final Product Tankcar & Tank Wagon Loading |
|--------------------------------------|--|
| Raw Materials:<br>Control Device(s): | Petroleum hydrocarbon resins, distillate fuel oils, and distillate oils none |

#### 1. **Restrictions:**

a. Emissions from the Final Product Loading process from barge loading shall not exceed the emissions limits in Table V-J-1 below: [§2103.12.a.2.B]

| POLLUTANT                         | Barge Loading      |                  |
|-----------------------------------|--------------------|------------------|
| TOLLUTANT                         | lb/hr <sup>1</sup> | tpy <sup>2</sup> |
| Volatile Organic Compounds (VOCs) | <del>13.30</del>   | <del>0.79</del>  |
| Hazardous Air Pollutants          | <del>0.64</del>    | <del>0.04</del>  |

#### **TABLE V-J-1: Final Product Loading Emission Limitations**

1. Based on a 3-hour average.

2. A year is defined as any consecutive 12-month period.

b. Emissions from the Final Product Loading process from tankcar & tank wagon loading shall not exceed the emissions limits in Table V-J-2 below: [§2103.12.a.2.B; 25 Pa. Code §129.99]

| POLLUTANT                         | Tankcar & Tank Wagon Loading |                  |
|-----------------------------------|------------------------------|------------------|
| TOLLUTANI                         | lb/hr <sup>1</sup>           | tpy <sup>2</sup> |
| Volatile Organic Compounds (VOCs) | 22.52                        | 18.24            |
| Hazardous Air Pollutants          | <del>0.26</del>              | <del>0.21</del>  |
|                                   |                              |                  |

#### TABLE V-J-2: Final Product Loading Emission Limitations

1. Based on a 3-hour average.

2. A year is defined as any consecutive 12-month period.

- e. The rate of barge loading shall not exceed 850 gallons per minute, and total transfer of material transferred to barges shall not exceed 6.0 million gallons in any 12-month period. [§2103.12.a.2.B]
- d. The rate of tankear/tank wagon loading shall not exceed 250 gallons per minute, and total transfer of material transferred to tankears or tank wagons shall not exceed 24.3 million gallons in any 12-month period. [§2103.12.a.2.B]

## 2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

#### 3. Monitoring Requirements:

None, except as provided elsewhere.



## 4. **Record Keeping Requirements:**

- a. The permittee shall keep and maintain the following records for each batch of product loaded: [§2103.12.j; 25 PA Code §129.100]
  - 1) Date and time of loading operations;
  - 2) Type of loading (barge or tankcar);
  - 3) Amount of material transferred;
  - 4) Type of material transferred; and
  - 5) Temperature of material during loading of tankcars or tank wagons.
- b. The permittee shall record the calculated estimated emissions per month if the total amount of material loaded to barges exceeds 5.4 million gallons in any rolling 12-month period, or if the total amount of material loaded to tankcars or tank wagons exceeds 21.9 million gallons in any rolling 12-month period. [§2103.12.j]
- e. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]
- d. All records and supporting documentation shall be retained in accordance with General Condition III.14, and be made available to the Department for inspection and/or copying upon request. [§2103.12.j.2]

## 5. Reporting Requirements:

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15. The reports shall contain, at a minimum, the following: [§2103.12.k]
  - 1) Calendar dates covered in the reporting period; and
  - 2) All loading information required to be recorded under condition V.J.4.a above;
  - 3) In lieu of the actual temperatures recorded under condition V.J.4.a.5) above, the permittee may report the temperature of the material at the storage tank.
- b. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k.1]

## 6. Work Practice Standards:

- a. The permittee shall do the following for the Tankcar and Tank Wagon product loading systems and associated equipment: [§2105.03; 25 PA Code §129.99]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and
  - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The permittee shall do the following for the Barge Loading Operation and associated equipment: [\$2105.03]
  - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
  - 2) Keep records of any maintenance; and



3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.

- c. The Tankcar & Tank Wagon Loading processes shall be: [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]
  - 1) Properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions; and
  - 2) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.
- d. The Barge Loading processes shall be: [RACT Order #230, 1.1; §2105.03]
  - 1) Properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions; and
  - 2) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.



## C. Sources of Minor Significance

Pages 74 through 97 have been redacted.

| Facility ID | Source Description   | Reason for Determination of Minor<br>Significance                       |  |
|-------------|--|---|--|
| G001        | Hydrolaser Water Blasting/Cleaning                           | Maximum PTE is <1.0 tpy of particulate; no VOC or HAP is emitted        |  |
| G002        | Parts Washing  | Maximum PTE is <2.0 tpy of VOC; HAPs are negligible                     |  |
| G003        | R&D Laboratory Hoods   | Laboratory equipment used exclusively for chemical or physical analyses |  |
| G004        | 004 Tank Cleaning & Painting Maximum PTE is <3.75 tpy of VOC |   |  |
| F001        | Parking Lots & Roadways                                      | Maximum PTE is <3.4 tpy of particulate                                  |  |

#### 1. **Restrictions:**

- a. The permittee shall not exceed 2,500 gallons per year of cleaner in the Parts Washing process. [§2103.12.a.2.B; 25 PA Code §129.97(c)(2)]
- b. The permittee shall not use or allow to be used any halogen-containing cleaners in the Parts Washing process. [§2103.12.a.2.B; 25 PA Code §129.97(c)(2)]
- e. The permittee shall not exceed 2,000 gallons per year of coatings in the Tank Cleaning & Painting process. [§2103.12.a.2.B]
- d. The permittee shall use only coatings compliant with Article XXI, §2105.10 in the Tank Cleaning & Painting process. [§2103.12.a.2.B; §2105.10]
- e. For the parts washing process, the permittee shall keep and maintain records of the total amount and type of cleaner used. [§2103.12.j; 25 PA Code §129.97(c)(2)]
- f. For the Tank Cleaning & Painting process, the permittee shall keep and maintain records of the total amount and type of all thinners and coatings used. [§2103.12.j; §2105.10.c; 25 PA Code §129.100]



## VII. ALTERNATIVE OPERATING SCENARIOS

## A. Process P006/P007 (Alternative): Unit 20 and Unit 21

| <b>Process Description:</b> | Catalytic Resin & Polyoil Neutralization                       |
|-----------------------------|--|
| Facility ID:                | Unit 20 (P006) and Unit 21 (P007)                              |
| <b>Raw Materials:</b>       | ethylene-cracking products, resin-forming feedstock, additives |
| <b>Control Device:</b>      | packed bed scrubber (for BF <sub>3</sub> removal)              |

As identified above, Processes P006 and P007 consist of the equipment listed under the heading "Catalytic Resin and Polyoil Neutralization" in Table II-1 in the Facility Description, Section II. Under the alternative operating scenario, the #4 Aqueous Treater/Agitator is moved from Unit 21 and placed in operation after the Rinse Decanter in Unit 20. The #4 Aqueous Treater/Agitator is not heated in this alternative scenario.

#### 1. **Restrictions:**

- a. The permittee shall not operate or allow to be operated Unit 20 and Unit 21 under the alternative operating scenario unless all conditions from Section V.B.1 and V.C.1 are met. [§2103.12.a.2.B]
- b. Total throughput through Unit 20 shall not exceed 66,600,000 pounds of poly oil in any 12-month period, and the number of product changes shall not exceed 96 in any 12-month period. [§2103.12.a.2.B]
- c. Emissions from the Unit 20 process shall not exceed the emissions limitations in Table VII-A-1 below: [§2103.12.a.2.B]

| Dollutont                        | Unit 20 Total (for all process phases) |                  |
|----------------------------------|--|------------------|
| Pollutant                        | lb/product change <sup>1</sup>         | tpy <sup>2</sup> |
| Volatile Organic Compounds (VOC) | 75.28                                  | 3.76             |
| Hazardous Air Pollutants (HAP)   | <del>8.17</del>                        | <del>0.40</del>  |

 TABLE VII-A-1: Unit 20 Emissions Limitations

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.

2. A year is defined as any consecutive 12-month period.

- d. The Unit 20 process shall not emit more than 75.28 lb per product change. [25 Pa Code §129.99]
- e. Total throughput through Unit 21 shall not exceed 53,640,000 pounds of poly oil in any 12-month period, and the number of product changes shall not exceed 52 in any 12-month period. [§2103.12.a.2.B]
- f. Emissions from the Unit 21 Holding Towers and Final Holding Tank shall not exceed the emission limitations in Table VII-A-2 below: [§2103.12.a.2.B]

| TABLE VII-A-2. Unit 21 Holding Tower and Holding Tank Emission Emitations |   |                   |
|---|---|-------------------|
|   | Unit 21 Holding Towers & Tank                   |                   |
| Pollutant   | Short-term<br>(lb/product.chongo <sup>1</sup> ) | Long-term         |
|   | (10/product enange <sup>-</sup> )               | <del>(tpy-)</del> |
| Volatile Organic Compounds (VOC)  | <del>21.09</del>                                | <del>0.55</del>   |
| Hazardous Air Pollutants (HAP)  | <del>10.55</del>                                | <del>0.28</del>   |

**TABLE VII-A-2: Unit 21 Holding Tower and Holding Tank Emission Limitations** 

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.

2. A year is defined as any consecutive 12-month period.

- g. The Unit 21 Holding Towers and Final Holding Tank shall not emit more than 21.09 lb per product change. [25 Pa Code §129.99]
- h. Emissions from the Unit 21 Aqueous Treaters shall not exceed the emission limitations in Table VII-A-3 below: [§2103.12.a.2.B]

| Pollutant                        | Unit 21 Aqueous Treaters               |  |                                   |
|----------------------------------|--|--|-----------------------------------|
|                                  | Treater #10<br>(lb/batch) <sup>1</sup> | Treater #11<br>(lb/batch) <sup>1</sup> | Long-term<br>(tpy) <sup>2,3</sup> |
| Volatile Organic Compounds (VOC) | 10.26                                  | 12.99                                  | 3.78                              |
| Hazardous Air Pollutants (HAP)   | <del>5.75</del>                        | <del>7.28</del>                        | <del>2.12</del>                   |

#### **TABLE VII-A-3: Unit 21 Aqueous Treater Emission Limitations**

1. Maximum emissions based on material charging.

2. A year is defined as any consecutive 12-month period.

3. Total for both aqueous treaters.

## 2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition IV.13 entitled "Emissions Testing." [§2103.12.h.1]

## 3. Monitoring Requirements:

The permittee shall visually inspect the BF<sub>3</sub> scrubber required under conditions V.B.1.d and V.C.1.f at least once per shift for visible emissions. If visible emissions are detected, the permittee shall adjust the flow of water to the scrubber accordingly. [§2103.12.i]

## 4. Record Keeping Requirements:

- a. The permittee shall keep and maintain all records required under sections V.B.4, V.C.4.a, and V.C.4.d and indicate that the records were obtained while operating under the alternative operating scenario. [§2103.12.j]
- b. The permittee shall keep and maintain all records required under sections V.C.4.b, V.C.4.c, and V.C.4.e and indicate that the records were obtained while operating under the alternative operating scenario. [§2103.12.j; 25 PA Code §129.100]



## 5. Reporting Requirements:

The permittee shall submit reports to the Department in accordance with General Condition III.15. The reports shall contain all information required under sections V.B.5 and V.C.5 and indicate that the information pertains to operation under the alternative operating scenario. [§2103.12.k]

- 6. Work Practice Standards:
  - a. The permittee shall do the following for the Unit 20 and Unit 21 and all associated equipment: [§2105.03]
    - 1) Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
    - 2) Keep records of any maintenance; and
    - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
  - b. Unit 20 and Unit 21 and all associated equipment shall be properly operated and maintained at all times while operating under the alternative operating scenario according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #230, 1.1; §2105.03; 25 PA Code §129.99]

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