

**Additional Special Terms and Conditions**

**General Information**

The purpose of this PTI modification is to remove various restrictions from emissions units K017, K018, K019 and K021. This is being done to correct mistakes in these original PTI's as well as maintain consistency among emissions units in the Company's Title V application. A synthetic minor permit was issued for emissions units K017, K018, and K019 in 1994 (PTI #03-7249). In order to maintain the federal enforceability established in this permit, conditions are included to restrict the potential-to-emit for these emissions units. These changes are as follows:

K017: Removal of gallon usage restrictions, elimination of lubricant (company no longer uses this material), increased VOC content restriction to the appropriate RACT limit, and increased total emissions from original permit (03-7249) by 2.2 TPY.

K018: Identical to K017 with the exception that the annual limit is not changed from the original permit (03-7249).

K019: Identical to K017 with the exception that the annual limit is not changed from the original permit (03-7249).

K021: Removal of gallon usage restrictions, increased VOC content restriction to the appropriate RACT limit. Annual limit is unchanged from previous permit (03-6112).

In place of gallon usage restrictions, comprehensive recordkeeping, reporting, and compliance determination requirements have been added to permit which are similar to all other terms and conditions contained in the Company's Title V permit.

**Applicable Emissions Limitations and/or Control Requirements**

1. The maximum annual VOC emissions from coating/cleanup material usage in emissions unit **K017** shall not exceed 27.73 TPY based upon a rolling, 12-month summation of the monthly VOC input rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC input levels specified in the following table.

Month(s)	Maximum Allowable Cumulative VOC Input
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Level (Coatings and Cleanup)	1
4.44	1-2
8.51	1-3
13.37	1-4
16.23	1-5
20.09	1-6
23.95	1-7
27.73	1-8
27.73	1-9
27.73	1-10
27.73	1-11
27.73	
1-12	27.73

- The maximum annual VOC emissions from coating/cleanup material usage in emissions unit **K018** shall not exceed 28.72 TPY based upon a rolling, 12-month summation of the monthly VOC input rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC input levels specified in the following table:

Month(s)	Maximum Allowable Cumulative VOC Input Level (Coatings)
1	4.04
1-2	7.71
1-3	11.17
1-4	14.63
1-5	18.09
1-6	21.55

1-7	25.01
1-8	28.47
1-9	28.72
1-10	28.72
1-11	28.72
1-12	28.72

3. The maximum annual VOC emissions from coating/cleanup material usage in emissions unit **K019** shall not exceed 35.92 TPY based upon a rolling, 12-month summation of the monthly VOC input rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the VOC input levels specified in the following table:

Month(s)	Maximum Allowable Cumulative VOC Input Level (Coatings)
1	4.44
1-2	8.51
1-3	12.37
1-4	16.23
1-5	20.09
1-6	23.95
1-7	27.81
1-8	31.67
1-9	35.53
1-10	35.92
1-11	35.92
1-12	35.92

4. After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual VOC emission limitations for emissions units K017, K018 and K019 shall be based upon a rolling, 12-month summation of the coating and cleanup material VOC input rates.

### **Operational Restrictions**

1. This permit allows for the use of the coating and cleanup materials specified by the permittee in the application for PTI number 03-11340. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the OC emission limitation specified in this permit was established in accordance with Ohio EPA's "Air Toxics Policy" and is based on the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for methyl isobutyl ketone and n-hexane based on the Screen3 model and a comparison of the predicted 1-hour maximum ground level concentration to the maximum allowable ground level concentration ("MAGLC"). The following summarizes the results of the modeling for n-hexane and methyl isobutyl ketone (MIBK):

#### **K017, K018, K019**

Pollutant: n-Hexane  
TLV (microgram/m<sup>3</sup>): 176,000  
Maximum Hourly Emission Rate (lbs/hr): 31.08 (\*)  
Predicted 1-Hour Max. Concentration (microgram/m<sup>3</sup>): 1654.0  
MAGLC (microgram/m<sup>3</sup>): 4190.0

#### **K021**

Pollutant: methyl isobutyl ketone  
TLV (microgram/m<sup>3</sup>): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 9.91 (\*)  
Predicted 1-Hour Max. Concentration (microgram/m<sup>3</sup>): 661.9  
MAGLC (microgram/m<sup>3</sup>): 4880.95

\* Note: These levels represent total emissions and not the incremental increases resulting from the modifications. Although the air toxics policy only requires the incremental increases be modeled, a demonstration of compliance with the air toxics policy at these levels is acceptable.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 03-11340 and the operating permit:

(a) any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental

Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

(b) any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;

(c) any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01;

(d) any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)];

3. The permittee shall use only use coatings which comply with the applicable emission limitations in OAC Rule 3745-21-09 (D)(2)(e) in emissions units K017, K018, K019 and OAC Rule 3745-21-09 (D)(2)(d) in K021 on an "as applied" basis.

### **Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information each month for emissions units K017, K018, K019, and K021:
  - (a) The name and identification number of each coating, as applied.
  - (b) The VOC content of each coating (excluding water and exempt solvents), as applied.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a Permit to Install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

2. In order to demonstrate compliance with the annual coating and cleanup material emission limits for emissions units K017, K018, and K019, based upon a rolling, 12-month summation of the VOC input rates, the permittee shall collect and record the following information each month for each emissions unit:

FOR INPUT RATES FROM COATING MATERIAL USAGE IN EACH  
EMISSIONS UNIT

- (a) The Company identification for each coating material employed.
- (b) The number of gallons of each coating material employed.
- (c) The VOC content of each coating material in lbs VOC/gallon as applied.
- (d) The VOC input rate for each coating material in tons/month [(b) x (c)/2000].
- (e) The total VOC input rate for all coating materials, in tons/month [summation of (d)].

FOR INPUT RATES FROM CLEANUP MATERIAL USAGE IN EACH  
EMISSIONS UNIT:

- (f) The Company identification of each cleanup material employed (\*)
- (g) The number of gallons of each cleanup material employed.
- (h) The VOC content of each cleanup material, in pounds/gallon.
- (i) The VOC input rate for each cleanup material, in tons/month [(g) x (h) / 2000].
- (j) The total VOC input rate for all cleanup material, in tons/month [summation of (i)].

THE COMBINED INPUT RATES FROM ALL COATING AND CLEANUP IN  
EACH EMISSIONS UNIT:

- (k) The total VOC input rate for all coatings and cleanup materials, in tons/month [(e) + (j)].
  - (l) Beginning after the first 12 calendar months of operation following the issuance of this permit, the total VOC input rate/rolling 12-month period [calculated as follows: input/rolling 12-month period = (k) from preceding 11 months + (k) for the current month]. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative VOC input rate for each calendar month.
4. The permittee shall collect and record monthly the following information for emissions unit K021 for the purpose of determining annual VOC emissions from

this emissions unit:

- (a) The name and identification of each cleanup material employed.
  - (b) The VOC content of each cleanup material, in pounds per gallon.
  - (c) The VOC content of each coating material, in pounds per gallon, as applied.
  - (d) The number of gallons of each cleanup material employed.
  - (e) The number of gallons (excluding water and exempt solvents) of each coating employed.
  - (f) The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per month.
  - (g) The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons per year, for the calendar year-to-date.
5. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. The permittee shall maintain all records in accordance with the requirements of 40 CFR Part 63, section 63.10(b)(1).

### **Reporting Requirements**

1. The actual annual VOC emissions data for emissions units K017, K018, K019 and K021 shall be reported pursuant to the fee emissions report required by OAC 3745-78-02(A).
2. The compliance status of the emissions units shall be reported pursuant to the annual certification required by OAC Rule 3745-77-07 (C)(5).
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings in emissions units K017, K018, K019, and K021. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

4. The permittee shall submit quarterly written reports for emissions units K017, K018, K019, and K021 of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### **Testing Requirements**

1. Compliance with the emission limitation(s) in the Applicable Emission Limitations and/or Control Requirements of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitations:

K017:            10.73 lbs VOC/hour from all coating materials  
                     1168 lbs VOC/month from all cleanup materials

K018:            9.62 lbs VOC/hour from all coating materials  
                     1168 lbs VOC/month from all cleanup materials

K019:            10.73 lbs VOC/hour from all coating materials  
                     1168 lbs VOC/month from all cleanup materials

K021:            9.91 lbs VOC/hour from all coating materials  
                     114.1 lbs VOC/month from all cleanup materials

Applicable Compliance Method:

These hourly VOC limits for coatings and monthly VOC limits for cleanup operations are based on each emission unit's potential to emit. Therefore, no daily recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limits.

- b. Emission Limitations:

K017: 27.73 TPY based on a rolling, 12-month summation of VOC input rates from all coating and cleanup materials

K018: 28.72 TPY based on a rolling, 12-month summation of VOC input rates from all coating and cleanup materials

K019: 35.92 TPY based on a rolling, 12-month summation of VOC input rates from all coating and cleanup materials

K021: 7.8 TPY from all coating materials  
0.05 TPY from all cleanup materials

Applicable Compliance Method:

The record keeping requirements in the Monitoring and/or Recordkeeping section of this permit shall be used to determine compliance with the above limits.

2. Emission Limitations:

K017, K018, K019: 3.7 lbs VOC/gallon excluding water and exempt solvents.  
K021: 5.5 lbs VOC/gallon excluding water and exempt solvents.

Applicable Compliance Method:

The record keeping requirements in the Monitoring and/or Recordkeeping section of this permit shall be used to determine compliance with the above limits.

Any determination of the VOC content\*, solids content, or density of a coating and/or cleanup material shall be based on the coating/cleanup material as applied, including the addition of any thinner or viscosity reducer to the coating/cleanup material. The permittee shall determine the composition of the coating/cleanup material by formulation data supplied by the manufacturer of the coating/cleanup material, or from data determined by an analysis of each coating/cleanup material, as received, by 40 CFR 60, Appendix A, Method 24. The Ohio EPA may require the permittee, if it uses the formulation data supplied by the manufacturer, to determine data used in the calculation of the VOC content of the coating/cleanup material by Reference Method 24 or an equivalent or alternative method.

\* "VOC content" means all organic compounds that are in a coating/cleanup material expressed as pounds of VOC per gallon.

3. Emission Limitation (all emissions units):

0.10 lb/hr particulate emissions, 0.44 ton/yr

Applicable Compliance Method:

To determine the actual worst case particulate rate (E), the following equation shall be used for the paint spraying operations:

E = particulate matter emissions rate (lbs/hr)

$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (60% considering 40 CFR 60.453)

CE = control efficiency of the control equipment (assumed to be 90%)

Annual emissions may be calculated based on multiplying E by the annual operating schedule for the emissions unit.

If required, the permittee shall demonstrate compliance with the above emissions limit pursuant to 40 CFR part 60 Appendix A, Method 5.

4. Emission Limitation (all emissions units):

20% opacity as a six minute average except as provided by rule.

Applicable Compliance Method:

OAC 3745-17-03(B)(1).

Note: No term or condition specifying a method for demonstrating compliance with any emission limitation or other requirement of this permit shall preclude the use by any person of any credible evidence to establish compliance with or a violation of this permit, the Clean Air Act, or any implementing regulations or rules promulgated thereunder.

**Miscellaneous Requirements**

The preceding requirements supersede all the requirements contained in the following Permits-to-Install: 03-7249 and 03-6112.