

**COMMONWEALTH OF VIRGINIA  
Department of Environmental Quality  
Blue Ridge Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**

Wolverine Advanced Materials – Cedar Run  
3175 State Street Blacksburg, Virginia  
Permit No. BRRO - 21240

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Wolverine Advanced Materials has applied for its renewal of a Title V Operating Permit for its Cedar Run Plant facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: \_\_\_\_\_ Date: \_\_\_\_\_  
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Regional Director: \_\_\_\_\_ Date: \_\_\_\_\_  
Robert J. Weld

## **FACILITY INFORMATION**

### **Permittee**

Wolverine Advanced Materials – Cedar Run Plant  
3175 State Street  
Blacksburg, VA 24060

### **Facility**

Wolverine Advanced Materials – Cedar Run  
3175 State Street  
Blacksburg, VA 24060

County-Plant Identification Number: 51- 121-00080

## **SOURCE DESCRIPTION**

NAICS Code: 339991 - Gasket, Packing, and Sealing Device Manufacturing  
SIC Code: 3053 - Gaskets; packing and sealing devices

Wolverine Advanced Materials – Cedar Run operates a metal coil coating facility in Blacksburg, Virginia. The Cedar Run plant has potential emissions of volatile organic compounds (VOCs) over the Title V major source threshold for criteria pollutants of 100 tons per year (tpy). The facility currently operates with a Title V permit that was issued on July 1, 2006 and is located in an attainment area for all pollutants. The facility also has two minor NSR permits: One issued on February 15, 2006 to modify and operate coating line #5 (CL5); and, a second permit last issued on February 16, 2006 to modify and operate coating line #6(CL6).

PSD does not apply to the Cedar Run facility. Under the PSD regulations, a major stationary source for PSD is defined as any source in one of the 28 named source categories with the potential to emit 100 tpy or more of any regulated pollutant, or any source not in one of the 28 names source categories with the potential to emit 250 tpy or more of any regulated pollutant. Metal coil surface coating is not included in the “List of 28” source categories and potential emissions of regulated pollutants do not exceed 250 tpy for the Cedar Run facility.

In addition to being a major source of VOCs, the Cedar Run plant also has potential emissions of hazardous air pollutants (HAPs) over 10 tpy for several individual HAPs and 25 tpy for combined HAPs. As such, the facility is a major source of HAPs and is subject to the requirements of 40 CFR Part 63, Subpart SSSS - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Coils.

The Cedar Run facility is comprised of two metal coil coating lines (CL5 and CL6). The lines are used to coat metal coils with organic coatings similar to solvent-based paints. The coatings are applied to the metal coils as liquid without spraying, and immediately dried and cured in a heated curing oven. The application stations and heated curing oven of CL5 are totally enclosed with VOC emissions exhausting to a catalytic oxidizer and a thermal incinerator to destroy VOC emissions. The application stations and heated curing oven of CL6 are totally enclosed with VOC emissions exhausting to two separate control devices, both a catalytic oxidizer and a thermal incinerator which serve to destroy VOC emissions. The catalytic oxidizer controls emissions from the primer area, the two rubber coating stations and their associated drying oven sections. The thermal incinerator is only used to control emissions from the adhesive station and its associated oven section. The coating lines (CL5 and CL6) are both connected to the coating line mixing room (CLMR), where the coatings are prepared. CLMR VOC emissions exhaust to either the CL5 or CL6 catalytic oxidizer, or the CL6 thermal incinerator. The majority of VOCs emitted from this facility come from the coating operations.

Both CL5 and CL6 are affected sources under 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories – Subpart SSSS - Metal Coil Surface Coating. Subpart SSSS applies to CL5 as an existing source. CL6 received a case-by case MACT determination contained within the January 23, 2001 NSR permit for CL6.

The New Source Performance Standard (NSPS) Subpart TT applies to each metal coil surface coating operating in which organic coatings are applied that commenced construction, modification or reconstruction after January 5, 1981. Subpart TT is applicable to both CL5 and CL6 but the requirements are duplicative in that they are equally or less stringent control and monitoring requirements than the MACT Subpart SSSS requirements. The EPA's Applicability Determination Index (ADI) contains a determination that allows facilities subject to the metal coil surface coating requirements of both 40 CFR 63, Subpart SSSS and 40 CFR 60 Subpart TT, to streamline requirements of Subpart TT<sup>1</sup>. The Cedar Run facility is following the MACT SSSS requirements. Neither NSPS TT nor MACT SSSS applies to the coating line mixing room (CLMR), storage tanks, or other miscellaneous fuel burning activities.

40 CFR Part 63 Subpart EEEE, National Emissions Standards for Hazardous Air Pollutants – Organic Liquids Distribution (OLD NESHAP) establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants emitted from

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1 - The EPA's Applicability Determination Index (ADI), Control #s M040025 and 0400019 (dated 5/17/04) states that EPA has concluded the MACT subpart SSSS control monitoring requirements and effluent gas temperature monitoring requirements may be streamlined with similar NSPS subpart TT monitoring requirements. The determination was made as a specific inquiry by the Wolverine – Blacksburg Plant. References cited in the ADI determinations: 40 CFR 60.462, 40 CFR 60.460, 40 CFR 63.5080, 40 CFR 63.5120(a) and 40 CFR 63.5160

organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations, operating limits, and work practice standards. The Cedar Run plant operates an organic liquid distribution operation that is classified as an existing affected source under the OLD NESHAP. Tank T1 (10,000 gallons) and T4 (5,000 gallons), both store organic liquids listed in Table 1 to Subpart EEEE. Tank T1 stores exclusively toluene. The annual average true vapor pressure of toluene, 3.8 kPa, is less than the threshold for control in Table 2 (27.6 kPa). Tank T4 stores MIBK which has a vapor pressure of 1.9 kPa, which again is less than the threshold for control in Table 2. Tanks T1 and T4 are not subject to control requirements under Subpart EEEE. However, Wolverine is required to comply with the notification, recordkeeping and reporting requirements outlined in §63.2343.

Organic liquids are brought onsite by way of a truck and transferred into one of four storage tanks by way of a transfer rack. Material is hard piped from the storage tanks to the mixing room for use in the process. Tanks used in the mixing room are all less than 5,000 gallon in size. Material is mixed in the mixing tanks for use on each line. Tanks T2 and T3 are 5,000 gallons and 3,000 gallons, respectively and neither tank contains a material identified as an organic liquid in Table 1. §63.2343 identifies affected units which are not subject to any requirements of Subpart EEEE other than the requirement specifically listed in paragraph (a) through (d) of §63.2343. Paragraph (a) states that, for any storage tank with a capacity of less than 5,000 gallons and for each transfer rack that only unloads organic liquids, documentation is required which verifies units identified as meeting provisions of §63.2343(a) and are therefore not required to be controlled. This documentation must be kept up to date and readily available for inspection and review. The documentation may consist of identification of the tanks and the transfer racks on a plant site plan or process and instrumentation diagram.

The facility has two small gas-fired boilers, unit 5 (CL5B) and unit 6 (CL6C). The boilers are used for heating water in the wash tanks and are both subject to the notification and work practice standards of 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The MACT has a compliance date of January 31, 2016. Compliance for the facility entails initial notification, and following work practice standards including conducting an energy assessment and equipment tune-ups, reporting and recordkeeping.

This permit is being renewed subsequent to the facility's most recent Title V permit application, submitted on September 23, 2008. The facility is currently operating under a Title V application shield, having received a Title V renewal application completeness determination, dated March 4, 2008.

**COMPLIANCE STATUS**

A full compliance evaluation of this facility, including a site inspection, was conducted on April 26, 2013. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

**EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION**

The emissions units at the facility are reflected in the Title V permit on Page 6.

**EMISSIONS INVENTORY**

A copy of the 2012 annual emission update is attached. Emissions are summarized in the following tables.

2012 Actual Emissions

|               | Criteria Pollutant Emission in Tons/Year |      |                 |                  |                 |
|---------------|--|------|-----------------|------------------|-----------------|
|               | VOC                                      | CO   | SO <sub>2</sub> | PM <sub>10</sub> | NO <sub>x</sub> |
| Facility wide | 5.11                                     | 4.99 | 0.04            | 0.45             | 5.94            |

2012 Facility Hazardous Air Pollutant Emissions

| Pollutant       | Hazardous Air Pollutant Emission in Tons/Yr |
|-----------------|---|
| MIBK            | 6.52 E-01                                   |
| Toluene         | 2.52 E+00                                   |
| Plantwide Total | 3.35 E+00                                   |

**EMISSION UNIT APPLICABLE REQUIREMENTS – CL5 and CL6 Boilers**

**Limitations**

**Condition 1.** – Visible emissions from each boiler shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.

Natural gas combustion, performed within a properly maintained and operated boiler, is not expected to produce visible emissions. The monitoring, recordkeeping, and reporting of the MACT is included and is sufficient to assure proper operation and maintenance and compliance with the standards.

### **Boiler MACT Limitations**

**Conditions 2 through 6** - 40 CFR 63 Subpart DDDDD contains requirements for boilers at major sources of all sizes. CL5 boiler is a 4.5 MMBtu/hr natural gas fired boiler and CL6 boiler is a 4.7 MMBTU/hr natural gas fired boiler. Both boilers are used for heating water in the wash tanks. The MACT requires work practices standards by way of boiler tune-ups every 5 years. The facility must also have a one-time energy assessment performed by a qualified energy assessor. The compliance date is January 31, 2016.

### **Reporting and Recordkeeping**

**Conditions 7 and 8** - The MACT includes notification and reporting requirements. An initial notification is required as outlined in §63.7545. Reporting requirements include a Compliance Report that is to be submitted every 5 years to address the tune up requirement.

### **Streamlined Requirements**

None

### **EMISSION UNIT APPLICABLE REQUIREMENTS – Coating Line #5 (CL5)**

#### **Limitations**

Process equipment at Cedar Run facility includes coating line #5 (CL5), for which construction and operation was authorized in the NSR Permit dated April 11, 1995, which was last amended on February 15, 2006.

The limits for CL5 remain unchanged and are carried forward from the Feb. 15, 2006 NSR permit, and include: VOC throughput and emission limits and a visible emission limit on CL5. Hourly VOC limits are based upon the maximum hourly rated capacity of the coating lines and 98% VOC control efficiency. The annual VOC limit is based on plant hours of operation up to the VOC throughput limitation, with 98% control efficiency applied.

**Condition 9.** – The facility is required to control VOC emissions from CL5 by permanent total enclosure and a catalytic oxidizer/incinerator having a destruction efficiency of 98%.

**Condition 10.** – The facility has an annual throughput limit of VOCs for CL5.

**Condition 11.** – The allowable emission rates from CL5 are limited.

**Condition 12.** - There is a visible emission limitation of 5% opacity on CL5.

## Monitoring

**Condition 14.** – CL5 is required to be observed for the presence of visible emissions at least once per week.

The compliance demonstration for Subpart SSSS (MACT) is VOC destruction. The VOC destruction requirement from the NSR permit is 98%. Therefore, the NSR monitoring requirements are streamlined with the compliance requirements of the MACT. However, the capture and control requirements for VOC emissions are included in the CL5 section of the permit.

The monitoring, recordkeeping and reporting is based on Virginia's New and Modified Sources regulations (9 VAC 5-80-1100 et seq.), State Operating Permits regulations (9 VAC 5-80-800 et seq.) and the periodic monitoring regulations (9 VAC 5-80-110 E & K). Weekly monitoring of visible emissions is included in the permit instead of daily as the facility is required to monitor temperature continuously for MACT Subpart SSSS. Maintaining the appropriate temperature of the control devices would provide adequate combustion to indicate that there should not be any visible emissions. The monitoring (weekly visible emission observations) and recordkeeping (monthly and annual VOC throughput, emissions, stack test and visible emissions observations and maintenance records) that is included in this section (CL5), in conjunction with the monitoring and recordkeeping included in MACT SSSS section of the permit is considered sufficient to assure compliance with the limits in the permit.

The stack testing and visible emissions evaluation requirements are carried forward from the February 15, 2006 NSR permit into the Title V permit. No specific testing is required but the agency maintains the authority to require testing if necessary to determine compliance with an emission limit or standard.

## Recordkeeping

The recordkeeping requirements are carried forward from the February 15, 2006 NSR permit into the Title V permit:

**Condition 15.** - The permit includes requirements for maintaining records to include the following: monthly and annual VOC throughput in tons for CL5; monthly and annual VOC emissions for CL5; results of all stack tests, visible emission evaluations and performance evaluations; MSDSs or CPDSs or other vendor information showing the VOC content, HAP content, water content, and solids content for each coating used; and scheduled, unscheduled and operator training records for CL5.

## Testing

**Conditions 16. and 17.** - The permit includes conditions to address stack testing and visible emissions evaluations from coil coating line #5, upon request of the agency.

### **Streamlined Requirements**

Condition 9 of the February 15, 2006 minor NSR permit has been streamlined from the permit. A revised condition using current boilerplate language was added to the Facility wide conditions of the Title V permit to address emissions testing at the appropriate locations.

Condition 11 of the February 15, 2006 minor NSR permit requires that the NSPS equipment described in the permit be operated in compliance with the requirements of 40 CFR 60, Subpart TT. This condition was streamlined from the permit. The emission standards and monitoring requirements of Subpart SSSS are acceptable to replace the NSPS requirements when using the HAP destruction efficiency provisions of the MACT. The requirements of Subpart SSSS have been included in the Title V permit therefore; this condition is no longer necessary.

Condition 12 – of the February 15, 2006 minor NSR permit requires that the MACT equipment described in the permit be operated in compliance with the requirements of 40 CFR 63, Subpart SSSS. This condition was streamlined from the permit. This condition is not included because this Title V permit addresses both regulations as discussed above.

Condition 13 – of the February 15, 2006 minor NSR permit states that if there is a conflict between 40 CFR Part 60 Subpart TT and 40 CFR Part 63, Subpart SSSS, that Subpart SSSS is the prevailing regulation. This condition was streamlined from the permit. The requirements of Subpart SSSS have been included in the Title V permit therefore; this condition is duplicative and no longer necessary.

### **EMISSION UNIT APPLICABLE REQUIREMENTS – Coating Line #6 (CL6)**

#### **Limitations**

Process equipment at the Cedar Run facility includes coating line #6 (CL6), for which construction and operation was authorized in the NSR Permit dated January 23, 2001, which was last amended on February 16, 2006.

The limits for CL6 remain unchanged and are carried forward from the Feb. 16, 2006 NSR permit, and include: VOC throughput and emission limits and a visible emission limit on CL6. Hourly VOC limits are based upon the maximum hourly rated capacity of the coating lines and 98% VOC control efficiency. The annual VOC limit is based on plant hours of operation up to the VOC throughput limitation, with 98% control efficiency applied.

**Condition 18.** – The facility is required to control VOC emissions from CL6A by permanent total enclosure and a catalytic oxidizer/incinerator having a destruction

efficiency of 98%. The facility is also required to control VOC emissions from CL6B by permanent total enclosure and thermal oxidizer/incinerator having a destruction efficiency of 98%

**Condition 19.** – The facility has an annual throughput limit of VOCs for CL6.

**Condition 20.** – The allowable emission rates from CL6 are limited.

**Condition 21.** - There is a visible emission limitation of 5% opacity on CL6.

### **Monitoring**

**Condition 23.** – CL6 is required to be observed for the presence of visible emissions at least once per week.

The compliance demonstration for Subpart SSSS (MACT) is VOC destruction. The VOC destruction requirement from the NSR permit is 98%. Therefore, the NSR monitoring requirements are streamlined with the compliance requirements of the MACT. However, the capture and control requirements for VOC emissions are included in the CL6 section of the permit.

The monitoring, recordkeeping and reporting is based on Virginia's New and Modified Sources regulations (9 VAC 5-80-1100 et seq.), State Operating Permits regulations (9 VAC 5-80-800 et seq.) and the periodic monitoring regulations (9 VAC 5-80-110 E & K). Weekly monitoring of visible emissions is included in the permit instead of daily as the facility is required to monitor temperature continuously for MACT Subpart SSSS. Maintaining the appropriate temperature of the control devices would provide adequate combustion to indicate that there should not be any visible emissions. The monitoring (weekly visible emission observations) and recordkeeping (monthly and annual VOC throughput, emissions, stack test and visible emissions observations and maintenance records) that is included in this section (CL5), in conjunction with the monitoring and recordkeeping included in MACT SSSS section of the permit is considered sufficient to assure compliance with the limits in the permit.

The stack testing and visible emissions evaluation requirements are carried forward from the February 16, 2006 NSR permit into the Title V permit. No specific testing is required but the agency maintains the authority to require testing if necessary to determine compliance with an emission limit or standard.

### **Recordkeeping**

The recordkeeping requirements are carried forward from the February 16, 2006 NSR permit into

the Title V permit:

**Condition 24.** - The permit includes requirements for maintaining records to include the following: monthly and annual VOC throughput in tons for CL6; monthly and annual VOC emissions for CL6; results of all stack tests, visible emission evaluations and performance evaluations; MSDSs or CPDSs or other vendor information showing the VOC content, HAP content, water content, and solids content for each coating used; and scheduled, unscheduled and operator training records for CL6.

### **Testing**

**Conditions 25. and 26.** - The permit includes conditions to address stack testing and visible emissions evaluations from coil coating line #6, upon request of the agency.

### **Streamlined Requirements**

Condition 10 of the February 16, 2006 minor NSR permit has been streamlined from the permit. A revised condition using current boilerplate language was added to the Facility wide conditions of the Title V permit to address emissions testing at the appropriate locations.

Condition 12 of the February 16, 2006 minor NSR permit requires that the NSPS equipment described in the permit be operated in compliance with the requirements of 40 CFR 60, Subpart TT. This condition was streamlined from the permit. The monitoring requirements of Subpart SSSS are acceptable to replace the NSPS monitoring. The requirements of Subpart SSSS have been included in the Title V permit therefore; this condition is no longer necessary.

Condition 13 – of the February 16, 2006 minor NSR permit requires that the MACT equipment described in the permit be operated in compliance with the requirements of 40 CFR 63, Subpart SSSS. This condition was streamlined from the permit. This condition is not included because this Title V permit addresses both regulations as discussed above.

Condition 14 – of the February 16, 2006 minor NSR permit states that if there is a conflict between 40 CFR Part 60 Subpart TT and 40 CFR Part 63, Subpart SSSS, that Subpart SSSS is the prevailing regulation. This condition was streamlined from the permit. This condition is not included because this Title V permit addresses both regulations as discussed above.

### **EMISSION UNIT APPLICABLE REQUIREMENTS – Coating Line Mixing Room (CLMR)**

#### **Limitations**

The coating lines (CL5 and CL6) are both connected to the coating line mixing room (CLMR), where the coatings are prepared. CLMR VOC emissions exhaust to either the CL5 or CL6

catalytic oxidizer, or the CL6 thermal incinerator.

The limitations for the CLMR remain unchanged and are carried forward from both the Feb. 15, 2006 NSR permit and the February 16, 2006 NSR permit. The limitation includes a requirement that VOC emissions from the CLMR be controlled by either the catalytic oxidizer or the thermal incinerator.

**Condition 27.** – VOC emissions from the coating mix preparation equipment are controlled by a catalytic oxidizer/incinerator at all times the coating lines are in operation.

### **Monitoring/Recordkeeping**

The monitoring and recordkeeping requirements were added to the original Title V permit for the facility and are carried forward with this renewal:

**Condition 28.** - The permit requires that the capture ducting and or/hoods from the coating mix preparation area be visually inspected monthly.

**Condition 29.** - The permit includes requirements for maintaining records to include the following: a record of the monthly visual inspection of the capture ducting and/or hoods; and results of annual negative pressure or velocity tests.

To provide an ongoing indication of the facility's capture ducting and/or hood performance the permit requires that the permittee conduct monthly visual inspections of the equipment in the CLMR to identify corrective measures, if needed and to demonstrate compliance with proper operation and maintenance of the capture equipment. With respect to this capture equipment, the permittee is also required to maintain records of the visual inspections as well as records of the annual negative pressure velocity tests that are required.

### **Testing**

The permit requires that the facility test annually or upon request for negative pressure in all enclosed mixing equipment and face velocity for all hoods controlling the coating mix preparation equipment.

### **Streamlined Requirements**

None.

**EMISSION UNIT APPLICABLE REQUIREMENTS – Organic Liquids Distribution (OLD) MACT (40 CFR 63 Subpart EEEE) – Tanks T1 through T4 and Transfer Racks**  
Equipment at the Cedar Run facility included in this section includes solvent tanks T1 through T4 and transfer racks.

**Condition 32.** – Tanks T2, T3 and the transfer racks shall comply with the requirements of §63.2343(a). This section only requires that the facility maintain records onsite of these units.

**Condition 33.** – Tanks T1 and T4 shall comply with the requirements of §63.2343(b).

**Condition 34.** – Tanks T1 and T4 shall comply with the notification requirements of §63.2382.

**Condition 35.** – Tanks T1 and T4 shall comply with the reporting requirements of §63.2386.

**Condition 36.** – Tanks T1 and T4 shall comply with the recordkeeping requirements of §63.2390.

**Condition 37.** – Tanks T1 through T4 and the transfer racks must comply with the General Provisions in §§63.1 through 63.15 that are applicable as specified in §63.2398.

As stated in the Source Description section above, both Tanks T1 and T4 store organic liquids listed in Table 1 to Subpart EEEE. However, the vapor pressures of the materials stored in each tank is less than the threshold for control in Table 2 (27.6 kPa), so the tanks are not subject to control requirements under Subpart EEEE. However, Wolverine is required to comply with the notification, recordkeeping and reporting requirements outlined in §63.2343.

### **Streamlined Requirements**

None

### **EMISSION UNIT APPLICABLE REQUIREMENTS – Surface Coating of Metal Coil MACT, Subpart SSSS – CL5 and CL6**

#### **Limitations**

The coating lines (CL5 and CL6) are both subject to the requirements of 40 CFR Part 63, Subpart SSSS – National Emission Standards for Surface Coating of Metal Coil. The permit includes the requirements of Subpart SSSS.

Limitations of the MACT have been outlined in the permit and include:

**Condition 39.** – The MACT requires that each coil coating affected source limit organic HAP emissions by one of three options. Cedar Run has chosen to use a 98% VOC destruction efficiency using a permanent total enclosure and catalytic

oxidizers/incinerators and a thermal oxidizer (on CL6B) (see §63.5120(a)(1)). Because the minor NSR permits also stipulate permanent total enclosure followed by oxidation, 98% control is the only §63.5120(a) option included in the Title V permit.

**Condition 40.** – The permit addresses operating limits which are indentified in Table 1 of the MACT. The operating limits were established during performance testing.

**Conditions 41 and 42.** – The permit addresses general requirements the facility is required to meet including the General Provisions listed in Table 2 of the Subpart.

### **Monitoring**

The monitoring requirements of Subpart SSSS have been outlined in the permit and include the following:

**Condition 43.** - The permit includes a requirement that the catalytic oxidizer for CL5 be equipped with a device to monitor and record the gas temperature in accordance with Subpart SSSS. The facility is required to maintain a 3 hour average gas temperature of no less than 630 °F.

**Condition 44.** - The permit includes a requirement that the catalytic oxidizer for CL6A be equipped with a device to monitor and record the gas temperature in accordance with Subpart SSSS. The facility is required to maintain a 3 hour average gas temperature of no less than 655 °F.

**Condition 45.** - The permit includes a requirement that the thermal incinerator on coil coating line CL6B be equipped with a device to monitor and record the combustion chamber temperature in accordance with Subpart SSSS. The facility is required to maintain a 3 hour average gas temperature of no less than 1390 °F.

**Condition 46.** - The permit requires the facility to develop and implement a capture system monitoring plan.

**Condition 47.** - The permit requires the facility to develop and implement a coil coating line catalyst bed inspection schedule and maintenance plan.

**Condition 48.** - The permit requires the facility to conduct an annual test of the catalyst for catalyst activity level.

### **Compliance**

The following compliance requirements for MACT affected equipment are included in the Title V permit:

**Condition 49** – Emissions from CL5 and CL6 shall be controlled by a permanent total enclosure and a oxidizer with a minimum of 98% destruction efficiency as specified in Table 1 of §63.5170. In addition, the permit requires that the facility base ongoing compliance with the 98% reduction efficiency requirement using monitoring of parameters established during an initial performance test for VOC destruction efficiency and capture efficiency. Whenever the coil coating lines are in operation, the permittee must continuously monitor the operating parameters established during testing.

### **Reporting**

The following reporting and recordkeeping requirements for MACT affected equipment are included in the Title V permit and taken from §63.5180 (f) and (g):

**Condition 50.** – Start-up, shutdown and malfunction reports as specified in §63.10(d)(5) and semi-annual reports to meet the requirements of §63.5180(g)(1) and (2).

In addition, the Recordkeeping and Reporting requirements of the Title V General Conditions apply to the manufacturing facility.

### **Recordkeeping**

The following recordkeeping requirements for MACT affected equipment are included in the Title V permit:

**Condition 51.a.** – Temperature records of the CL5 catalytic oxidizer upstream of the catalyst bed.

**Condition 51.b.** – Temperature records of the CL6 catalytic oxidizer upstream of the catalyst bed.

**Condition 51.c.** - Temperature records of Line #6B thermal oxidizer near the combustion chamber exit.

**Condition 51.d.** - Monitoring records and records of manufacturer’s recommendations for catalyst bed replacement and records of actual catalyst bed replacement (catalytic incinerator CL5 and CL6).

**Condition 51.e.** - Monitoring system calibrations and calibration checks for both CL5 and CL6.

**Condition 51.f.** - Records specified in 40 CFR 63.5190(a) and (b).

The recordkeeping that is included in this section (Surface Coating of Metal Coil MACT), in conjunction with the limitations, monitoring and compliance outlined above is considered sufficient to assure compliance with the emission limits in the permit. The limitations, monitoring, compliance, recordkeeping and reporting are based on MACT SSSS (40 CFR 63.5080 et. Seq.)

**Streamlined Requirements**

Condition Nos. 5 and 6 of the February 15, 2006 minor NSR permit have been streamlined out of the permit because the applicable parts of the MACT SSSS have been included in the Title V permit. Subpart TT is less stringent than MACT SSSS as stated below

Condition Nos. 6 and 7 of the February 16, 2006 minor NSR permit have been streamlined out of the permit because the applicable parts of the MACT SSSS have been included in the Title V permit. Subpart TT is less stringent than MACT SSSS as stated below

The New Source Performance Standard (NSPS) Subpart TT applies to each metal coil surface coating operating in which organic coatings are applied that commenced construction, modification or reconstruction after January 5, 1981. Subpart TT is applicable to both CL5 and CL6 but the requirements are duplicative in that they are equally or less stringent control and monitoring requirements than the MACT Subpart SSSS requirements. The Cedar Run facility is following the MACT SSSS requirements. Neither NSPS TT nor MACT SSSS applies to the coating line mixing room (CLMR), storage tanks, or other miscellaneous fuel burning activities. The streamlined Subpart TT requirements are outlined in the Table below:

| <b>Description of requirement being streamlined</b>   | <b>Basis for “Streamlined out” requirement</b>    | <b>Description of Permit requirement</b>   | <b>Basis for Streamlining</b>   |
|---|---|--|---|
| 90% VOC control value requirement   | NSPS TT VOC Control Standard: 40 CFR 60.462(a)(3) | 98% VOC control required for CL5 and CL6   | MACT SSSS requirement more stringent than NSPS TT.                          |
| The requirement that temperature monitoring be conducted every 15 minutes in NSPS Subpart TT  | NSPS TT VOC Control Standard.                     | Monitor temperature continuously   | MACT SSSS continuous monitoring is more stringent than NSPS TT.             |
| The requirement that the catalyst inlet temperature and thermal oxidizer combustion temperature drop no more than 50°F from the temperature measured during the performance test. | NSPS TT VOC Control Standard.                     | Thermal oxidizer combustion temperature remain at least as high as T° measured during the initial performance test (1390 °F) in accordance with MACT SSSS. | MACT SSSS temperature operating requirement is more stringent than NSPS TT. |

### **Testing**

Cedar Run conducted performance tests to establish the removal destruction efficiency of the control devices and to verify that their capture systems had 100% capture efficiency. During the initial performance tests, operating limits for control device operating temperatures (reflected in permit conditions) were established and the pressure drop across each enclosure was verified.

The tests were initially conducted as follows:

CL5 – May 20, 2005 – result: 99.66% destruction efficiency  
CL6A – June 19, 2013 – result: 98.9% destruction efficiency  
CL6B – April 8, 2004 – result: 98.5%

Additional testing requirements are not included in the Title V renewal permit. Annual catalyst activity testing is required and results of the catalyst activity tests are required to be submitted to DEQ for review. Catalyst activity tests are an indicator of proper functioning control equipment. The permit does include language in Conditions 14 and 20 that upon request by the DEQ, the permittee shall conduct performance tests for Volatile Organic Compounds from the coating preparation equipment and/or metal coil coating lines to demonstrate compliance with the emission limits and control efficiency requirements contained in this permit.

### **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

#### **Comments on General Conditions:**

##### **58. through 63. Permit Expiration**

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 2-09”.

##### **69. Failure/Malfunction Reporting**

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are

subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

#### **87. through 90. Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Conditions 85 through 88. For further explanation see the comments on General Condition F.

#### **94. Asbestos Requirements**

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

#### **STATE-ONLY REQUIREMENTS**

There are no “State Only” requirements contained in the underlying minor NSR permits or in the Title V permit.

#### **FUTURE APPLICABLE REQUIREMENTS**

There are no future applicable requirements anticipated for the facility at this time.

#### **INAPPLICABLE REQUIREMENTS**

The Cedar Run facility identified inapplicable requirements in Appendix B of the September 18, 2008 Title V application submitted.

#### **Compliance Assurance Monitoring (CAM)**

In accordance with the requirements of 40 CFR 64, Compliance Assurance Monitoring (CAM) review for CAM applicability has been completed. The three conditions that must be met for an emissions unit to be subject to CAM are:

1. Emits or has the potential to emit (in the absence of add-on controls) a regulated pollutant in an amount that exceeds its major source threshold,
2. is subject to an emission limitation for that pollutant(s), and
3. uses a control device to achieve compliance with one or more of these emission limitations.

A unit must meet all three conditions to be subject to CAM. The VOC (most of which are HAPs as listed above) emissions from the facility are subject to 40 CFR 63 Subpart SSSS, a MACT promulgated after November 15, 1990. Other than VOC and VOC HAP emissions, Cedar Run does not emit any other pollutants at levels that would trigger CAM review. Therefore, CAM does not apply to the coil coating gasket manufacturing emission units per 40 CFR 64.2(a)(3) and (b)(1)(i). CAM does not apply to any unit at the facility.

(GHG)Emissions: There are no applicable GHG permitting requirements.

**INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

| Emission Unit No. | Emission Unit Description | Citation         | Pollutant(s) Emitted (9 VAC 5-80-720 B) | Rated Capacity (9 VAC 5-80-720 C) |
|-------------------|---------------------------|------------------|---|-----------------------------------|
| RG                | Rubber Grinder            | 9 VAC 5-80-720 B | PM                                      |                                   |
| G1 & G2           | Oil Water Separators      | 9 VAC 5-80-720B  | VOC                                     |                                   |

<sup>1</sup>The citation criteria for insignificant activities are as follows:  
 9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application  
 9 VAC 5-80-720 B - Insignificant due to emission levels  
 9 VAC 5-80-720 C - Insignificant due to size or production rate

**CONFIDENTIAL INFORMATION**

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

**PUBLIC PARTICIPATION**

The draft permit will be placed on public notice in The Roanoke Times from May 5, 2014 to June 4, 2014. The public comment period ran from May 5, 2014 to June 4, 2014. One comment was received and addressed. The EPA review period ended on June 19, 2014. No comments were received.

**LIST OF APPENDICES**

- APPENDIX A:** Annual Emission Inventory Statement for 2012.
- APPENDIX B:** EPA ADI for NSPS TT / MACT SSSS streamlining
- APPENDIX C:** Facility Monitoring Plan