



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

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www.deq.virginia.gov

Molly Joseph Ward  
Secretary of Natural Resources

David K. Paylor  
Director

Jeffery Steers  
Regional Director

August 29, 2017

Mr. William T. Yates  
Plant Manager  
Honeywell International Inc. – Colonial Heights Site  
15801 Woods Edge Road  
Colonial Heights, VA 23834

Location: City of Colonial Heights  
Registration No.: 50831

Dear Mr. Yates:

Attached is a renewal Title V permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Honeywell International Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

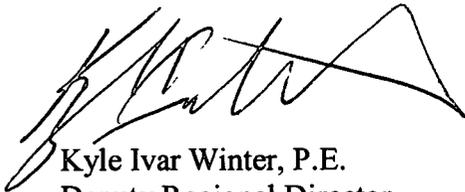
Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director  
Department of Environmental Quality  
P. O. Box 1105  
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5101.

Sincerely,



Kyle Ivar Winter, P.E.  
Deputy Regional Director

KIW/clm/50831-13

Attachment: Permit

cc: Director, OAPP (electronic file submission)  
Director, Office of Air Permits and Air Toxics (3AP10), U.S. EPA, Region III (electronic file submission)  
Manager/Inspector, Air Compliance (electronic file submission)



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### Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Honeywell International Inc.  
Facility Name: Colonial Heights Site  
Facility Location: 15801 Woods Edge Road  
Colonial Heights, Virginia  
Registration Number: 50831  
Permit Number: PRO50831

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 5 through 43)

August 29, 2017  
Effective Date

August 28, 2022  
Expiration Date

  
Kyle Ivar Winter, P.E. -- Deputy Regional Director

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## Facility Information

### Permittee

Honeywell International Inc.  
15801 Woods Edge Road  
Colonial Heights, Virginia 23834

### Responsible Official

William T. Yates  
Plant Manager

### Facility

Colonial Heights Site  
15801 Woods Edge Road  
Colonial Heights, Virginia 23834

### Contact Person

Michael Luck  
Manager, Health, Safety, Environment & Security

County-Plant Identification Number: 51-041-0114

### Facility Description:

NAICS Code 325222 (organic fibers, non-cellulosic) – The facility manufactures high performance polyolefin fibers (SPECTRA) used in the fabrication of body armor and other performance fiber applications.

Built in 1965, the facility historically served as a research and development center. A boiler was installed in the original facility in 1965 with a second one added in 1969. The plant's focus has shifted from research and development to production due to the high demand for its product. The polyolefin fiber is produced by mixing polyethylene, antioxidant, and walpit oil to form a polymer, which is extruded into fiber. Walpit oil (particulate and VOC) is emitted during the extrusion process, with emissions captured and controlled by oil mist eliminators. The walpit oil is then separated from the fiber using a non-HAP, non-VOC chlorinated solvent which is classified as an Ozone Depleting Substance (ODS Chlorinated Solvent), and then dried. ODS Chlorinated Solvent emissions from the separators and dryers are captured and routed to a carbon adsorption unit for emission control. Lines 2, 3, 4, 5 and 8 are routed to older carbon beds (with 90% efficiency) followed by a Halosorb unit (molecular sieve) for an overall control efficiency of 99% (calculated as a 24-hour rolling average). ODS Chlorinated Solvent emissions from Lines 12 and 13 are routed to carbon adsorption units with control efficiencies of at least 95% (calculated as a 24-hr rolling average).

Since the original Title V permit was issued, the emergency diesel fire pump engine included in the facility's State Operating Permit has become subject to the RICE MACT (40 CFR 63,

Subpart ZZZZ). A Cummins diesel emergency engine is also subject to the RICE MACT, and a propane-fired Generac generator is subject to NSPS Subpart JJJJ. The new MACT and NSPS requirements have been incorporated into this permit.

A CAM plan has been added to the Title V permit renewal for the oil mist eliminators controlling particulate matter from the polyolefin fiber production lines, with flow and differential pressure monitored continuously and corrective action taken if these values fall outside their specified ranges.

**Emission Units**

Equipment to be operated at this facility consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
SG-1	7V-5	Babcock & Wilcox boiler Model #FMD 1205 Natural Gas fired	17.3 MMBtu/hr	---	NA	---	12/29/2015
SG-2	7V-5	Bigelow boiler Model #S5488 Natural Gas fired	22.3 MMBtu/hr	---	NA	---	12/29/2015
CP-99	7V-5	Cummins Diesel Engine (Fire Pump)	0.71 MMBtu/hr	---	NA	---	12/29/2015
GG-01		Generac Propane-Fired Emergency Engine	32 hp	---	NA	---	N/A---
GG-03		Cummins Propane-Fired Emergency Engine	32 hp	---	NA	---	N/A---
<b>Spectra Lines</b>							
Line 2	13V-15	Polyolefin Fiber Line	46.4 fiber units	Oil Mist Eliminator	OME F-5868	PM/VOC	12/29/2015
	13V-50	Polyolefin Fiber Line	46.4 fiber units	Carbon Adsorption Bed/Molecular Sieve	CB/HZ	ODS Solvent	12/29/2015
Line 3	13V-15	Polyolefin Fiber Line	61.8 fiber units	Oil Mist Eliminator	OME F-5868	PM/VOC	12/29/2015
	13V-50	Polyolefin Fiber Line	61.8 fiber units	Carbon Adsorption Bed/Molecular Sieve	CB/HZ	ODS Solvent	12/29/2015
Line 4	13V-15	Polyolefin Fiber Line	61.8 fiber units	Oil Mist Eliminator	OME F-5868	PM/VOC	12/29/2015
	13V-50	Polyolefin Fiber Line	61.8 fiber units	Carbon Adsorption Bed/Molecular Sieve	CB/HZ	ODS Solvent	12/29/2015
Line 5	13V-4	Polyolefin Fiber Process Line	30.9 fiber units	Oil Mist Eliminator	OME F-5868	PM/VOC	12/29/2015
	13V-50	Polyolefin Fiber Process Line	30.9 fiber units	Carbon Adsorption Bed/Molecular Sieve	CB/HZ	ODS Solvent	12/29/2015
Line 8	13V-4	Polyolefin Fiber Process Line	30.9 fiber units	Oil Mist Eliminator	OME F-5868, OME-5,8 (backup)	PM/VOC	12/29/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Line 8	13V-50	Polyolefin Fiber Process Line	30.9 fiber units	Carbon Adsorption Bed/Molecular Sieve	CB/HZ	ODS Solvent	12/29/2015
Line 12	23V-01	Polyolefin Fiber Process Line	6.6 fiber units	Oil Mist Eliminator	OME-12	PM/VOC	12/29/2015
Line 13	23V-02	Polyolefin Fiber Process Line	6.6 fiber units	Carbon Adsorption Bed	CB-4	ODS Solvent	12/29/2015
	23V-01	Polyolefin Fiber Process Line	6.67 fiber units	Oil Mist Eliminator	OME-13	PM/VOC	12/29/2015
	23V-02	Polyolefin Fiber Process Line	6.67 fiber units	Carbon Adsorption Bed	CB-5	ODS Solvent	12/29/2015
<b>Building 4 Pilot Plant Polymerization</b>							
Lindberg Oven	---	Spinning Equipment Burnoff Oven	---	---	---	---	12/29/2015
<b>Buildings 2, 3, 5, 6, and 8: Laboratory Facilities</b>							
		Laboratory Facilities	---	---	---	---	12/29/2015
<b>Cooling Towers</b>							
TW-3	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-5	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-6	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-8	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-9	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-10	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
TW-11	---	Non-contact evaporative tower used in tandem with the chillers/ODS equipment	---	---	---	---	12/29/2015
<b>Degreaser – Cold Solvent Cleaner</b>							
CSC	---	Cold Solvent Cleaner	30 gallons	---	---	---	12/29/2015

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Tanks</b>							
OWS	---	Oil Water Separator	1 gallon/hr 7500 gallons/yr	---	---	---	12/29/2015

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

**Fuel Burning Equipment Requirements - Boilers (SG-1 and SG-2)**

1. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations - The approved fuel for the Babcock & Wilcox Model #FMD 1205 (SG-1) and the Bigelow Model #S5488 Serial #HSB12149 (SG-2) boilers is natural gas. A change in the fuel may require a new or amended permit.  
(9 VAC 5-80-110 and Condition 15 of 12/29/15 Permit)**
2. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations - The Babcock & Wilcox Model #FMD 1205 (SG-1) shall consume no more than 146.3 million cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 17 of 12/29/15 Permit)**
3. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations - The Bigelow Model #S5488 Serial #HSB12149 (SG-2) shall consume no more than 189.2 million cubic feet of natural gas per year, calculated as the sum of each consecutive 12-month period. Compliance for the 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9 VAC 5-80-110 and Condition 18 of 12/29/15 Permit)**
4. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations - Emissions from the operation of the Babcock & Wilcox #FMD 1205 boiler (SG-1) shall not exceed the limits specified below:**

PM-10	0.1	lbs/hr	0.6	tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	1.7	lbs/hr	7.3	tons/yr
Carbon Monoxide	1.4	lbs/hr	6.1	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1 and 2.

(9 VAC 5-80-110 and Condition 23 of 12/29/15 Permit)

5. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations - Emissions from the operation of the Bigelow Model #S5488 Serial #HSB12149 boiler (SG-2) shall not exceed the limits specified below:**

PM-10	0.2	lbs/hr	0.7	tons/yr
-------	-----	--------	-----	---------

Nitrogen Oxides (as NO <sub>2</sub> )	2.2	lbs/hr	9.5	tons/yr
Carbon Monoxide	1.8	lbs/hr	8.0	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1 and 3.

(9 VAC 5-80-110, and Condition 24 of 12/29/15 Permit)

6. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations -** Visible emissions from the SG-1 and SG-2 boiler stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9 VAC 5-80-110 and Condition 32 of 12/29/15 Permit)
7. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Limitations -** Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-80-110)
8. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Monitoring –** The permittee shall perform monthly checks for visible emissions during the operation of boilers (SG-1 and SG-2). If visible emissions are observed, the permittee shall take timely corrective action such that the unit(s) resume operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the boiler(s) do not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the boiler resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the boiler to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office  
(9 VAC 5-80-110)
9. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such

records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual consumption of natural gas for the Babcock & Wilcox Model #FMD 1205 and the Bigelow Model #S5488 Serial #HSB12149 boilers (Ref. Nos. SG-1 and SG-2), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. A log of the visible emissions observations, visible emissions evaluations and the corrective actions taken as required by Condition 8.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 36 of 12/29/15 Permit)

10. **Fuel Burning Equipment Requirements – Boilers (SG-1 and SG-2) - Recordkeeping -** The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this Condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110)

**Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99)**

11. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Limitations -** The approved fuel for the Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99) is distillate oil. A change in the fuel may require a new or amended permit.

(9 VAC 5-80-110 and Condition 16 of 12/29/15 Permit)

12. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Limitations -** The Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99), shall consume no more than 2,500 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. The fire pump engine is to be used only for providing power for the emergency fire pump, periodic maintenance testing, and operational training.

(9 VAC 5-80-110 and Condition 19 of 12/29/15 Permit)

13. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Limitations -** The distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for number 2 fuel oil:

Maximum sulfur content per shipment: 0.5%

(9 VAC 5-80-110 and Condition 20 of 12/29/15 Permit)

14. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Limitations -** Emissions from the operation of the Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99) shall not exceed the limits specified below:

Nitrogen Oxides	3.1	lbs/hr	0.8	tons/yr
(as NO <sub>2</sub> )				

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 12 and 13.

(9 VAC 5-80-110 and Condition 25 of 12/29/15 Permit)

15. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Limitations -** Visible emissions from the Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110 and 9 VAC 5-40-80)

16. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) – Federal Requirements – The Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99), is subject to MACT ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:**

Citation	Requirement
40 CFR 63.6603(a)	Emission limitations, operating limitations, and other requirements
40 CFR 63.6604(b)	Fuel requirements as applicable
40 CFR 63.6612, 63.6620 and Table 4 to Subpart ZZZZ	Testing and initial compliance
40 CFR 63.6605 and 63.6640	Continuous compliance requirements
40 CFR 63.6625 (e), (f) and (h), and Table 2d to Subpart ZZZZ	Monitoring, installation, operation and maintenance requirements
40 CFR 63.6645	Notification requirements
40 CFR 63.6650	Reporting requirements
40 CFR 63.6655 and 63.6660	Recordkeeping requirements
Table 8 to Subpart ZZZZ	Applicability of General Provisions to Subpart ZZZZ

(9 VAC 5-80-110 and 40 CFR 63, Subpart ZZZZ)

17. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Monitoring –** The permittee shall perform monthly checks for any visible emissions during the operation of the Cummins Diesel Reciprocating Engine, which operates an Emergency Fire Pump (CP-99), during periods when the unit is operated for emergency purposes or for routine testing for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed, the permittee shall take timely corrective action such that the fire pump engine resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the fire pump engine does not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the fire pump engine resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the fire pump engine to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office.

(9 VAC 5-80-110)

18. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Monitoring -**  
The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the oil was received;
- c. The volume of distillate oil delivered in the shipment;
- d. A statement that the oil complies with the American Society for Testing and Materials specifications (ASTM D396) for number 2 fuel oil;
- e. The sulfur content of the distillate oil;
- f. The method used to determine the sulfur content of the distillate oil.

(9 VAC 5-80-110 and Condition 21 of 12/29/15 Permit)

19. **Fuel Burning Equipment Requirements – Fire Pump Engine (CP-99) - Recordkeeping -**  
The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual consumption of diesel fuel oil for the Cummins Diesel Reciprocating Engine, which operates Emergency Fire Pump (CP-99), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Oil shipments purchased, indicating sulfur content per shipment.
- c. Records required to demonstrate compliance with MACT Subpart ZZZZ.
- d. A log of the visible emissions observations, visible emissions evaluations and the corrective actions taken as required by Condition 17.
- e. A log of actions taken during periods of malfunction to minimize emissions, including any corrective actions.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 36 of 12/29/15 Permit)

**Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01)**

- 20. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) - Fuel**  
 - The emergency engine (GG-01) is designed to use propane fuel. A change in fuel may require a new or amended permit.  
 (9 VAC 5-80-110)
  
- 21. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) – Operating Hours** – The emergency engine (GG-01) shall operate no more than 500 hours/yr, calculated as the sum of each consecutive 12-month period.  
 (9 VAC 5-80-110)
  
- 22. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) – Federal Requirements** - The Generac emergency engine (GG-01) is subject to MACT ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Citation	Requirement
40 CFR 63.6603(a)	Emission limitations, operating limitations, and other requirements
40 CFR 63.6604(b)	Fuel requirements as applicable
40 CFR 63.6612, 63.6620 and Table 4 to Subpart ZZZZ	Testing and initial compliance
40 CFR 63.6605 and 63.6640	Continuous compliance requirements
40 CFR 63.6625 (e), (f) and (h), and Table 2d to Subpart ZZZZ	Monitoring, installation, operation and maintenance requirements
40 CFR 63.6645	Notification requirements
40 CFR 63.6650	Reporting requirements
40 CFR 63.6655 and 63.6660	Recordkeeping requirements
Table 8 to Subpart ZZZZ	Applicability of General Provisions to Subpart ZZZZ

(9 VAC 5-80-110 and 40 CFR 63, Subpart ZZZZ)

- 23. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) - Visible Emissions** - Visible emissions from the emergency engine (GG-01) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.  
 (9 VAC 5-50-80 and 9 VAC 5-80-110)

24. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) - Monitoring** – The permittee shall perform monthly checks for any visible emissions during the operation of the Generac Emergency Engine (GG-01) during periods when the engine is operated for emergency purposes or for routine testing for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed, the permittee shall take timely corrective action such that the emergency engine resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the emergency engine does not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the emergency engine resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the emergency engine to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office  
(9 VAC 5-80-110)
25. **Fuel Burning Equipment Requirements – Generac Emergency Engine (GG-01) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- a. Annual hours of operation of the emergency engine (GG-01) including hours spent for non-emergency operation, calculated monthly as the sum of each consecutive 12 month period.
  - b. A log of the results of the monthly visible emissions observations, visible emissions evaluations, and any corrective action taken.
  - c. The occurrence and duration of each malfunction of the emergency engine.
  - d. A log of actions taken during periods of malfunction to minimize emissions, including any corrective actions.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and 40 CFR 63.6655)

**Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03)**

- 26. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) - Fuel** - The emergency engine (GG-03) is designed to use propane fuel. A change in fuel may require a new or amended permit.  
(9 VAC 5-80-110)
- 27. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) – Operating Hours** – The emergency engine (GG-03) shall operate no more than 500 hours/yr, calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110)
- 28. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) – Federal Requirements** – The Cummins Emergency Engine (GG-03) is subject to NSPS Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines:

Citation	Requirement
40 CFR 60.4233(c), 40 CFR 60.4243(d), and Table 1 to Subpart JJJJ	Emission standards and operating limitations
40 CFR 60.4243	Compliance requirements
40 CFR 60.4244 and Table 2 to Subpart JJJJ	Testing Requirements
40 CFR 60.4237	Monitoring, requirements
40 CFR 60.4245	Notification, reporting and recordkeeping requirements
40 CFR 60.4246 and Table 3 to Subpart JJJJ	Applicability of General Provisions to Subpart JJJJ

(9 VAC 5-80-110 and 40 CFR 60 Subpart JJJJ)

- 29. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) - Visible Emissions** – Visible emissions from the emergency engine (GG-03) shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30 percent opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this section.  
(9 VAC 5-80-110 and 9 VAC 5-50-80)
- 30. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) – Monitoring** – The permittee shall perform monthly checks for any visible emissions during the operation of the Cummins Emergency Engine (GG-03) monthly during periods when the engine is operated for emergency purposes or for routine testing for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed,

the permittee shall take timely corrective action such that the emergency engine resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the emergency engine does not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the emergency engine resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the emergency engine to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office  
(9 VAC 5-80-110)

31. **Fuel Burning Equipment Requirements – Cummins Emergency Engine (GG-03) – Recordkeeping** – The facility shall maintain records documenting conformance with applicable operating limitations, work practice, and management practice standards found in the New Source Performance Standards (NSPS) 40 CFR 60 Subpart JJJJ for Spark Ignition Stationary Engines. These records shall include but are not limited to:
- a. Annual hours of operation of each emergency engine, including hours spent for non-emergency operation, calculated as the sum of each consecutive 12-month period.
  - b. Maintenance conducted on the emergency engine which demonstrates that the engine is being operated and maintained according to the manufacturer's emission related written instructions.
  - c. A log of actions taken during periods of malfunction to minimize emissions, including the duration of each malfunction and the corrective actions taken to minimize emissions and restore the malfunctioning engine.
  - d. The results of the visible emission observations, visible emissions evaluations, and details of any corrective action taken as a result of these inspections.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110)

**Process Equipment Requirements - Polyolefin Fiber Production Lines (Lines 2, 3, 4, 5, 8, 12 and 13)**

32. **Process Equipment Requirements – (Lines 2, 3, 4, 5, 8, 12 and 13) - Limitations –** ODS Chlorinated Solvent emissions from the manufacturing of polyolefin fiber, specifically Reference Numbers Lines 2, 3, 4, 5 and 8 shall be controlled by a combination of carbon bed adsorbers and a molecular sieve (Ref. No. CB/HZ). The carbon bed adsorbers and the molecular sieve shall maintain a removal efficiency of at least 99%, calculated as a rolling 24-hour average. The carbon adsorbers and the molecular sieve shall be provided with adequate access for inspection and shall be in operation when any combination of Lines 2, 3, 4, 5 and 8 are operating.  
(9 VAC 5-80-110 and Condition 1 of 12/29/15 Permit)
33. **Process Equipment Requirements – (Line 12) - Limitations –** ODS Chlorinated Solvent emissions from the manufacturing of polyolefin fiber by Reference Number Line 12 shall be controlled by a carbon bed adsorber (Ref. No. CB-4). The carbon bed adsorber shall maintain an overall removal efficiency of at least 95%, calculated as a rolling 24-hour average. The carbon bed adsorber shall be provided with adequate access for inspection and shall be in operation when Line 12 is operating.  
(9 VAC 5-80-110 and Condition 2 of 12/29/15 Permit)
34. **Process Equipment Requirements – (Line 13) - Limitations –** ODS Chlorinated Solvent emissions from the manufacturing of polyolefin fiber, specifically Reference Number Line 13, shall be controlled by a carbon bed adsorber (Ref. No. CB-5). The carbon bed adsorber shall maintain a removal efficiency of at least 95%, calculated as a rolling 24-hour average. The carbon bed adsorber shall be provided with adequate access for inspection and shall be in operation when Line 13 is operating.  
(9 VAC 5-80-110 and Condition 3 of 12/29/15 Permit)
35. **Process Equipment Requirements – (Lines 12 and 13) - Limitations –**Honeywell shall maintain a Preventative Operation Plan (PMO Plan) for Lines 12 and 13. The PMO Plan shall consist of a compilation of Honeywell's procedures for good air pollution control practices and minimizing fugitive ODS Chlorinated Solvent emissions from Lines 12 and 13. The PMO Plan shall include, but not be limited to, startup and shutdown procedures, emergency procedures, and schedules for preventive maintenance and maintenance turnarounds that coincide with scheduled turnarounds of process units. Honeywell shall implement its approved PMO Plan, as updated, at all times, including periods of startup, shutdown and malfunction. Honeywell shall review the PMO Plan annually and updated the PMO Plan as necessary. Honeywell shall maintain the original PMO Plan and all subsequent revisions at the facility for a period of five (5) years.  
(9 VAC 5-80-110 and Condition 4 of 12/29/15 Permit)
36. **Process Equipment Requirements – (Lines 2, 3, 4, 5, and 8) - Limitations –** Particulate emissions (PM and PM-10) from the manufacturing of polyolefin fiber from Lines 2, 3, 4, 5 and 8 shall be controlled by a mist eliminator (Ref. No. OME-F5868). The particulate

matter reduction efficiency of the mist eliminator shall be at least 97% or the mist eliminator shall achieve an outlet particulate matter concentration of 0.002 grains per dry standard cubic foot, whichever is less stringent. Compliance with either the percent reduction standard or the outlet concentration standard shall be determined as the average of three one-hour performance test runs. The mist eliminator shall be provided with adequate access for inspection and shall be in operation when any combination of Lines 2, 3, 4, 5 and 8 is operating.  
 (9 VAC 5-80-110 and Condition 5 of 12/29/15 Permit)

37. **Process Equipment Requirements – (Line 12) - Limitations –** Particulate emissions (PM and PM-10) from the manufacturing of polyolefin fiber from Line 12 shall be controlled by a mist eliminator (Ref. No. OME-12). The particulate matter reduction efficiency of the mist eliminator shall be at least 97% or the mist eliminator shall achieve an outlet particulate matter concentration of 0.002 grains per dry standard cubic foot, whichever is less stringent. Compliance with either the percent reduction standard or the outlet concentration standard shall be determined as the average of three one-hour performance test runs. The mist eliminator shall be provided with adequate access for inspection and shall be in operation when Line 12 is operating.  
 (9 VAC 5-80-110 and Condition 6 of 12/29/15 Permit)

38. **Process Equipment Requirements – (Line 13) - Limitations –** Particulate emissions (PM and PM-10) from the manufacturing of polyolefin fiber from Line 13 shall be controlled by a mist eliminator (Ref. No. OME-13). The particulate matter reduction efficiency of the mist eliminator shall be at least 97% or the mist eliminator shall achieve an outlet particulate matter concentration of 0.002 grains per dry standard cubic foot, whichever is less stringent. Compliance with either the percent reduction standard or the outlet concentration standard shall be determined as the average of three one-hour performance test runs. The mist eliminator shall be provided with adequate access for inspection and shall be in operation when Line 13 is operating.  
 (9 VAC 5-80-110 and Condition 7 of 12/29/15 Permit)

39. **Process Equipment Requirements – (Lines 2, 3, 4, 5, 8, 12 and 13) - Limitations –** The production of polyolefin fiber from all lines (Lines 2, 3, 4, 5, 8, 12, and 13) shall not exceed 102.8 fiber units per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual totals from the preceding 11 months.  
 (9 VAC 5-80-110 and Condition 13 of 12/29/15 Permit)

40. **Process Equipment Requirements – (Lines 2, 3, 4, 5, 8, 12 and 13) - Limitations -** Emissions from the operation of the polyolefin fiber lines (Lines 2, 3, 4, 5, 8, 12 and 13) shall not exceed the limits specified below:

Particulate Matter (PM)	4.4	lbs/hr	19.5	tons/yr
PM-10	4.4	lbs/hr	19.5	tons/yr

Volatile Organic Compounds	4.4	lbs/hr	19.5	tons/yr
ODS Chlorinated Solvent	181.3	lbs/hr	190.8	tons/yr
	4,063.2	lbs/day		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 32–39.  
 (9 VAC 5-80-110 and Condition 22 of 12/29/15 Permit)

41. **Process Equipment Requirements – (Line 12) - Limitations – Emissions of ODS Chlorinated Solvent from Line 12 shall be less than 100 tons per year. Annual Line 12 ODS Chlorinated Solvent emissions shall be calculated monthly as the sum of each consecutive 12-month period in accordance with the following procedure:**

$$L12CS = CB4_{ps} + L12CS_{fg}$$

Where:

$$L12CS_{fg} = L12PR * FWCS_{fg}/FWPR$$

Where:

$$FWCS_{fg} = FWCS_{tot} - CB4_{ps} - CB5_{ps} - HZ_{ps}$$

Where:

- CB4<sub>ps</sub> = Annual point source Line 12 ODS Chlorinated Solvent emissions from CB-4
- CB5<sub>ps</sub> = Annual point source Line 13 ODS Chlorinated Solvent emissions from CB-5
- HZ<sub>ps</sub> = Annual point source Lines 2, 3, 4, 5 and 8 Chlorinated Solvent emissions from HZ
- L12CS<sub>fg</sub> = Annual fugitive Line 12 ODS Chlorinated Solvent emissions
- L12CS = Annual Line 12 ODS Chlorinated Solvent emissions
- L12PR = Annual Line 12 production (in pounds)
- FWCS<sub>tot</sub> = Annual total facility-wide ODS Chlorinated Solvent emissions
- FWCS<sub>fg</sub> = Annual fugitive facility-wide ODS Chlorinated Solvent emissions
- FWPR = Annual facility-wide production (in pounds)

(9 VAC 5-80-110 and Condition 28 of 12/29/15 Permit)

42. **Process Equipment Requirements – (Lines 13) - Limitations – Emissions of ODS Chlorinated Solvent from Line 13 shall be less than 100 tons per year. Annual Line 13**

ODS Chlorinated Solvent emissions shall be calculated monthly as the sum of each consecutive 12-month period in accordance with the following procedure:

$$L13CS = CB5_{ps} + L13CS_{fg}$$

Where:

$$L13CS_{fg} = L13PR * FWCS_{fg}/FWPR$$

Where:

$$FWCS_{fg} = FWCS_{tot} - CB4_{ps} - CB5_{ps} - HZ_{ps}$$

Where:

$CB4_{ps}$  = Annual point source Line 12 ODS Chlorinated Solvent emissions from CB-4

$CB5_{ps}$  = Annual point source Line 13 ODS Chlorinated Solvent emissions from CB-5

$HZ_{ps}$  = Annual point source Lines 2, 3, 4, 5 and 8 ODS Chlorinated Solvent emissions from HZ

$L13CS_{fg}$  = Annual fugitive Line 13 ODS Chlorinated Solvent emissions

$L13CS$  = Annual Line 13 ODS Chlorinated Solvent emissions

$L13PR$  = Annual Line 13 production (in pounds)

$FWCS_{tot}$  = Annual total facility-wide ODS Chlorinated Solvent emissions

$FWCS_{fg}$  = Annual fugitive facility-wide ODS Chlorinated Solvent emissions

$FWPR$  = Annual facility-wide production (in pounds)

(9 VAC 5-80-110 and Condition 29 of 12/29/15 Permit)

43. **Process Equipment Requirements – (Lines 2, 3, 4, 5, 8, 12 and 13) - Limitations -** Visible emissions from the polyolefin fiber lines (Lines 2, 3, 4, 5, 8, 12 and 13) shall not exceed 5% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 31 of 12/29/15 Permit)
44. **Process Equipment Requirements – (Lines 2, 3, 4, 5, and 8) - Monitoring –** The ODS Chlorinated Solvent emission control system (Ref. CB/HZ) for the capture and control of ODS Chlorinated Solvent emissions from Lines 2, 3, 4, 5, and 8 shall be equipped with devices to measure gas inlet concentrations of ODS Chlorinated Solvent to the system and the gas outlet concentration of ODS Chlorinated Solvent from the system. The devices measuring ODS Chlorinated Solvent outlet concentration shall be provided with a high concentration alarm (greater than 100 ppm). Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the ODS Chlorinated Solvent emission control system is operating. (9 VAC 5-80-110 and Condition 33 of 12/29/15 Permit)

45. **Process Equipment Requirements – (Lines 12 and 13) - Monitoring –** The carbon bed adsorbers (Ref. Nos. CB-4 & CB-5) for the capture and control of ODS Chlorinated Solvent emissions from Lines 12 & 13 shall be equipped with devices to measure gas inlet and outlet concentrations of ODS Chlorinated Solvent. The devices measuring ODS Chlorinated Solvent outlet concentration shall be provided with a high concentration alarm (greater than 100 ppm). The monitoring devices shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the adsorber is operating.  
(9 VAC 5-80-110 and Condition 34 of 12/29/15 Permit)
46. **Process Equipment Requirements – (Lines 12 and 13) - Monitoring –** The monitoring devices used to measure inlet and outlet ODS Chlorinated Solvent concentration required by Conditions 44 and 45 shall be observed by the permittee with a frequency of not less than once per day. Operators shall promptly respond to any high ODS Chlorinated Solvent outlet concentration alarm. The permittee shall keep a log of the observations from the adsorber monitoring devices, as well as any high alarm event and corrective action taken.  
(9 VAC 5-80-110 and Condition 35 of 12/29/15 Permit)
47. **Process Equipment Requirements - (emission unit ID Lines 2, 3, 4, 5, 8, 12 and 13) - Monitoring –** Each polyolefin fiber line shall be observed visually for at least a brief period of time at least once in any calendar quarter in which the line is operated to determine whether there are any visible emissions (does not include vapor/steam). If visible emissions are observed, the permittee shall take timely corrective action such that the polyolefin fiber line resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the emergency engine does not exceed the opacity limits in Condition 43. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the polyolefin fiber line resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions.  
(9 VAC 5-80-110)

48. **Process Equipment Requirements - (Lines 2, 3, 4, 5, and 8) - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the oil mist eliminators controlling the polyolefin fiber lines according to the following:

<b>OME F-5868 (and OME-5,8 when used as backup)</b>		
<b>Monitoring, Frequency, Records</b>	<b>Performance Criteria</b>	<b>Indicator Range; Averaging Period</b>
Monitor OME stack exhaust flow rate. Exhaust is monitored continuously through the plant's Distributed Controls System (DCS). Data is stored in an electronic historian database, which allows for measurements to be pulled in 5 second averages.	Stack exhaust flow rate: 8,600 – 4,000 SCFM -Value outside of listed range triggers high or low alarm in DCS system, indicating to operations there is an issue with the system. I.  II.	Stack exhaust flow rate: 0 – 10,000 SCFM -Avg. Period: 5 seconds
OME system has two filters that all collected material passes through, a pre-filter and main filter. The differential pressure (DP) across both filters is monitored continuously through the plant's DCS. Data is stored in an electronic historian database, which allows for measurements to be pulled in 5 second averages.	Pre-filter DP: 0.01 – 5.4 INH <sub>2</sub> O -Value outside of listed range triggers high or low alarm in DCS system, indicating to operations there is an issue with the system.  Main filter DP: 1 – 12 INH <sub>2</sub> O -Value outside of listed range triggers high or low alarm in DCS system, indicating to operations there is an issue with the system.	Pre-filter DP: 0 – 6 INH <sub>2</sub> O -Avg. Period: 5 seconds  Main filter DP: 0 – 20 INH <sub>2</sub> O -Avg. Period: 5 seconds

(9VAC5-80-110 and 40 CFR 64.6 (c))

49. **Process Equipment Requirements - (Lines 12 and 13) - Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the oil mist eliminators controlling the polyolefin fiber lines according to the following:**

OME-12 and OME-13		
Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Monitor OME stack exhaust flow rate. Exhaust is monitored continuously through the plant's Distributed Controls System (DCS). Data is stored in an electronic historian database, which allows for measurements to be pulled in 5 second averages.	Stack exhaust flow rate: 5,600 – 1,600 SCFM  -Value outside of listed range triggers high or low alarm in DCS system, indicating to operations there is an issue with the system.	Stack exhaust flow rate: 0 – 8,000 SCFM  -Avg. Period: 5 seconds
OME system has a filter that all collected material passes through. The differential pressure (DP) across the filter is monitored continuously through the plant's DCS. Data is stored in an electronic historian database, which allows for measurements to be pulled in 5 second average.	Filter DP: 0.1 – 16 INH <sub>2</sub> O  -Value outside of listed range triggers high or low alarm in DCS system, indicating to operations there is an issue with the system.	Filter DP: 0 – 20 INH <sub>2</sub> O  -Avg. Period: 5 seconds

(9VAC5-80-110 and 40 CFR 64.6 (c))

50. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.**

(9VAC5-80-110 and 40 CFR 64.6 (c))

51. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
(9VAC5-80-110 and 40 CFR 64.7 (b))
52. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the polyolefin fiber lines are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.  
(9VAC5-80-110 and 40 CFR 64.7 (c))
53. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the polyolefin fiber lines (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))
54. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.  
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

55. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9VAC5-80-110 and 40 CFR 64.7(e))
56. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the polyolefin fiber lines for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- a. Improved preventative maintenance practices;
  - b. Process operation changes;
  - c. Appropriate improvements to control methods;
  - d. Other steps appropriate to correct control performance; and
  - e. More frequent or improved monitoring.
- (9VAC5-80-110 and 40 CFR 64.8(a) and (b))
57. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).  
(9VAC5-80-110 and 40 CFR 64.9(b))

58. **Process Equipment Requirements - (Lines 2, 3, 4, 5, 8, 12 and 13) - Recordkeeping -**  
The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- a. Annual consumption of ODS Chlorinated Solvent, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. The inventory records that support the consumption estimates of ODS Chlorinated Solvent, recorded at the end of each calendar month.
  - c. Annual production of polyolefin fiber, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - d. Estimated emissions calculations of ODS Chlorinated Solvent for Lines 12 & 13 and also for the entire facility, calculated monthly as the sum of each consecutive 12-month period in accordance with Conditions 41 and 42. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - e. Monitoring records for emission control devices CB/HZ, CB-4 and CB-5.
  - f. Results of all stack tests and performance evaluations.
  - g. A log of the observations from the adsorber monitoring devices, high outlet concentration alarm events, and corrective action taken as required by Condition 46.
  - h. A log of the visual observations, visible emissions evaluations, and the cause and corrective measures taken as required by Condition 47.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 36 of 12/29/15 Permit)



63. **Process Equipment Requirements – Cooling Towers (TW-3, TW-5, TW-6, TW-8, TW-9, TW-10 and TW-11) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to the combined yearly throughput of water for the Marley Induced Draft Cooling Towers (TW-3, TW-5, TW-6, TW-7, TW-8, TW-9, TW-10 and TW-11), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and Condition 36(g) of 12/29/15 Permit)

### **Process Equipment Requirements – Cold Solvent Cleaner (CSC)**

64. **Process Equipment Requirements – Cold Solvent Cleaner (CSC) – Limitations** – The permittee shall equip the cold solvent cleaner with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 85 percent by weight of all volatile organic compound emissions. Compliance with this emission standard will be demonstrated by compliance with the applicable control and operating requirements of 9 VAC 5-40-3290 C.  
(9 VAC 5-80-110 and Condition 10 of the 12/29/15 Permit)
65. **Process Equipment Requirements – Cold Solvent Cleaner (CSC) – Limitations** – The cold solvent cleaner(s) shall not use any cleaning solvents which contain methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination of these halogenated hazardous air pollutant solvents, in a total concentration that is greater than 5 percent by weight.  
(9 VAC 5-80-110 and Condition 11 of the 12/29/15 Permit)
66. **Process Equipment Requirements – Cold Solvent Cleaner (CSC) – Limitations** – The requirement in Condition 64 shall be achieved by using the following methods:
- a. Reservoirs shall be covered or enclosed. Covers shall be designed so that they can be easily operated with one hand. Enclosed remote reservoirs should be designed such that they provide reduction effectiveness equivalent to that of a cover.
  - b. External or internal drainage facilities shall be provide to collect and return the solvent to a closed container or a solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100 °F, then the drainage facilities shall be internal, so that parts are enclosed under the cover while draining. The drainage system may be external for applications where an internal type cannot fit into the cleaning system.

- c. A permanent label, summarizing the operating procedures listed below, shall be placed in a conspicuous location on or near the cold solvent cleaner.
- d. If used, the solvent spray should be a solid stream and not a fine, atomized, or shower type spray, and at a pressure that does not cause excessive splashing.
- e. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate into the atmosphere. Store waste solvent only in closed containers.
- f. The parts washer cover should be closed whenever not handling parts in the cleaner.
- g. Parts shall drain for at least 15 seconds or until dripping ceases.
- h. Disposal of waste solvent from solvent metal cleaning operations should be by either reclamation (either by outside services or in house) or incineration.

(9 VAC 5-80-110 and 9 VAC 5-40-3290 C)

**67. Process Equipment Requirements – Cold Solvent Cleaner (CSC) - Recordkeeping -**  
The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. The annual throughput of solvent for the cold solvent cleaner(s), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. The type of cleaning solvent used by the cold solvent cleaner(s) and the total concentration by weight of the individual cleaning solvent used or any combination of cleaning solvents used by the cold solvent cleaner(s).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 36(h) and 36(n) of 12/29/15 Permit)

### **Process Equipment Requirements – Lindberg Oven**

68. **Process Equipment Requirements - Lindberg Oven – Limitations** – Annual operating cycles for the Lindberg oven shall not exceed 19,272 periods per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 14 of 12/29/2015 Permit)
69. **Process Equipment Requirements - Lindberg Oven - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to the yearly operating cycles for the Lindberg oven, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-110 and Condition 36(a) of 12/29/15 Permit)

### **Process Equipment Requirements – Oil/Water Separator (OWS)**

70. **Process Equipment Requirements – Oil/Water Separator (OWS) – Limitations** – Volatile Organic Compounds from the Oil/Water Separator (OWS) shall be controlled by a sealed cover which shall be maintained in proper working order at all times. (9 VAC 5-80-110 and Condition 8 of 12/29/2015 Permit)
71. **Process Equipment Requirements – Oil/Water Separator (OWS) – Monitoring** – The permittee shall annually inspect the sealed cover for the Oil/Water Separator to ensure that it is in proper working order. (9 VAC 5-80-110)
72. **Process Equipment Requirements – Oil/Water Separator (OWS) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to a log of annual inspections of the Oil/Water Separator sealed cover. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-110)

## Facility Wide Conditions

73. **Facility Wide Conditions – Limitations – Hazardous air pollutant (HAP) emissions**, as defined by § 112(b) of the Clean Air Act, shall not exceed 10 tons per year of any individual HAP or 25 tons per year of any combination, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 30 of 12/29/15 Permit)
74. **Facility Wide Conditions – VOC Work Practice Standards** – At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.  
(9 VAC 5-80-110 and Condition 12 of 12/29/15 Permit)
75. **Facility Wide Conditions - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- a. The yearly throughput of hazardous air pollutants, as defined by Section 112(b) of the Clean Air Act, calculated monthly as the sum of each consecutive 12-month period, for all facility-wide operations. This recordkeeping is required for those hazardous air pollutants whose actual emissions are greater than 0.05 tons or 100 pounds in the most recent 12-month period.
  - b. Data on properties of materials used at the Technical Center sufficient to demonstrate compliance with applicable requirements in this permit. This data shall include VOC content by weight and hazardous air pollutant content by weight, and may include density or specific gravity. This data may be in any format approved by the Piedmont Regional Office, including, but not limited to, Safety Data Sheets (SDS).
  - c. The results of all stack tests, visible emissions observations, visible emissions evaluations and performance evaluations.
- These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and Condition 36 of 12/29/2015 Permit)
76. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)

77. **Facility Wide Conditions - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)

## Insignificant Emission Units

78. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
HT-19	Dowtherm Relief Storage Tank (pressurized)	9 VAC 5-80-270B	VOC	100 gallons
HT-21	Gasoline Tank			250 gallons
HT-22	Mobifuel Diesel Fuel Tank			250 gallons
HT-24	Fire Pump Diesel Tank			225 gallons
1HT-5430	White Walpit Oil Horizontal Fixed Roof Tank (pressurized)			6000 gallons
Liquid Nitrogen	Liquid Nitrogen Storage Tank (pressurized)			9000 gallons
VT-221	White Walpit Oil Vertical Fixed Roof Tank			600 gallons
VT-222	White Walpit Oil Vertical Fixed Roof Tank			600 gallons
VT-301	Recycled Oil Storage Tank			600 gallons
VT-302	Recycled Oil Storage Tank			600 gallons
VT-7061	Aluminum non-HAP VOC Tank			3 gallons/min, 480 gallons
VT-01	Walpit Oil			440 gallons
HT-5430 A	Walpit Oil			8500 gallons
VT-5313	Walpit Oil (Line 5, 8)			1000 gallons
VT-5307	Slurry Oil (Line 5, 8)			240 gallons
HT-5876	Virgin chlorinated solvent			8250 gallons
HT-5880	Used chlorinated solvent			8250 gallons
VT-119	Walpit oil/water/ chlorinated solvent			2000 gallons
VT-100	Walpit Oil			300 gallons
VT-5100	Walpit oil/chlorinated solvent			700 gallons
VT-5101	Chlorinated solvent			300 gallons
VT-322	Walpit oil/chlorinated solvent – SRU			300 gallons
BB 2	Walpit oil/ chlorinated solvent			70 gallons
BB 3	Walpit oil/ Chlorinated solvent			300 gallons
VT-2918	Walpit Oil Slurry			79 gallons

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
VT-5784	Walpit Oil Slurry	9 VAC 5-80-270B	VOC	79 gallons
VT-1000	Walpit Oil			517 gallons
VT-5413	Walpit oil/ chlorinated solvent			600 gallons
D-5447	Walpit oil/ chlorinated solvent			1000 gallons
VT-5829	Walpit oil/water			151 gallons
VT-5674	Dirty walpit oil			1043 gallons
VT-5678	Clean walpit oil			1580 gallons
VT-398	Walpit oil			100 gallons
HT-5413	Therminol			30 gallons
HT-154	Therminol			49 gallons
HT-1012	Therminol			200 gallons
HT-5319	Therminol			235 gallons
HT-6047	Therminol			150 gallons
Used Oil	Used Lube Oil Tank			400 gallons

These emission units are presumed to be in compliance with all requirements of the federal 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.

(9 VAC 5-80-110)

### Permit Shield & Inapplicable Requirements

79. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 63, Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	The MACT is not applicable, since the State Operating Permit (and Title V Permit) prohibits the use of chromium.
40 CFR 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	The subpart does not apply to boilers SG-1 and SG-2 because they are authorized to use natural gas fuel only.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-110 and 9 VAC 5-80-140)

### General Conditions

80. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.  
(9 VAC 5-80-110)
81. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
82. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
83. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
84. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
85. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted

pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

86. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.  
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
87. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110)
88. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110)
89. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
  - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

- i. Exceedance of emissions limitations or operational restrictions;
  - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
  - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110)

90. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
  - b. The identification of each term or condition of the permit that is the basis of the certification;
  - c. The compliance status;
  - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
  - e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
  - f. Such other facts as the permit may require to determine the compliance status of the source; and

- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9 VAC 5-80-110)

91. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 89 of this permit. (9 VAC 5-80-110 and 9 VAC 5-80-250)
92. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office. (9 VAC 5-80-110 and 9 VAC 5-20-180)
93. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification. (9 VAC 5-20-180 and 9 VAC 5-50-50)
94. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board semiannually. All semi-annual reports shall be postmarked by the 30th day following the end of each calendar semi-annual period (June 30th and January 30th). All reports shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.  
(9 VAC 5-20-180 C and 9 VAC 5-50-50)

95. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9 VAC 5-80-110)
96. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9 VAC 5-80-110)
97. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
(9 VAC 5-80-110)
98. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9 VAC 5-80-110, 9 VAC 5-80-190 and 9 VAC 5-80-260)

99. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-110)
100. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.  
(9 VAC 5-80-110)
101. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.  
(9 VAC 5-80-110)
102. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.  
(9 VAC 5-80-110, 9 VAC 5-80-340 and 9 VAC 5-80-2340)
103. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90 and 9 VAC 5-80-110)

104. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-80-110)

105. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110)

106. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

107. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110)

108. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-110 and 9 VAC 5-80-150)

109. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-110 and 9 VAC 5-80-160)

110. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-110 and 9 VAC 5-80-160)

111. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source

name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-110 and 9 VAC 5-80-160)

112. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.  
(9 VAC 5-80-110, 9 VAC 5-80-190 C and 9 VAC 5-80-260)
113. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.  
(9 VAC 5-80-110 and 9 VAC 5-80-80 E)
114. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(9 VAC 5-80-110 and 40 CFR Part 82)
115. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-110)
116. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(9 VAC 5-80-110 and 40 CFR Part 68)
117. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110)

118. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
  - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
  - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110)