COMMONWEALTH of VIRGINIA

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Federal Title V 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 9VAC5-80-50 through 9VAC5-80-300 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:	Griffin Pipe Products Co., LLC
Facility Name:	Griffin Pipe Products Co., LLC
Facility Location:	10 Adams Street, Lynchburg, Virginia
Registration Number:	30397
Permit Number	BRRO-30397

May 5, 2015
Effective Date

May 4, 2020
Expiration Date

August 27, 2015
Modification Date

Robert J Weld, Regional Director

August 27, 2015
Signature Date

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Facility Information

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EPA Identification Number: 51-680-0095

Facility Description: NAICS 331511 [SIC Code 3321] Ductile Iron Foundry – The facility melts scrap iron in a cupola using coke as fuel and treats the molten iron with additives to make ductile iron. The molten iron is poured into water-cooled centrifugal casting machines to make pipe that is used in water supply systems. After casting, the pipe is processed in an annealing oven. The pipe is then finished by grinding and cutting where necessary to meet specification, lined with a thin layer of cement, and painted.

Emission Units

Equipment to be operated 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
Melting Department							
S1	fugitive	Charging System Scrap Steel Handling Coke and Alloy Handling	50 tons/hr	None	N/A	N/A	SOP amended 4/21/15
S2	EP57	94" Cupola pre-1972	50 tons/hr 143 MMBtu/hr	None	N/A	N/A	SOP amended 4/21/15
	EP83			Afterburner GMD Environ. Tech. fabric filter - Model 05-850	S2A1 S2A2	CO PM-10, metal HAPs	None SOP amended 4/21/15
S8	EP68A & B, EP69-72	Iron Trough	50 tons/hr	None	N/A	N/A	SOP amended 4/21/15
S3	EP68A & B, EP69-72, EP81	Desulfurization Ladle with N_2 nozzles	50 tons/hr	ETA Engineering fabric filter	S3A1	PM-10, metal HAPs	SOP amended 4/21/15
S4	EP68A & B, EP69-72	Forehearth - Iron Holding Ladle	50 tons/hr	None	N/A	N/A	SOP amended 4/21/15
S5	EP68A & B, EP69-72	Alloy Addition - Dump Car and Scales	50 tons/hr	None	N/A	N/A	SOP amended 4/21/15
S6	EP68A & B, EP69-72, EP81	Magnesium Plunging Hood	50 tons/hr	ETA Engineering fabric filter	S3A1	PM-10, metal HAPs	SOP amended 4/21/15
S20	EP83	Iron Melting Dust Treatment System	1.14 tons/hr	GMD Environ. Tech. fabric filter - Model 05-850	S2A2	PM-10	mNSR amended 1/12/12
S21	EP81	Iron Plunging/Desulfurization Dust Treatment System	1.14 tons/hr	ETA Engineering fabric filter	S3A1	PM-10	mNSR amended 1/12/12

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
S22	EP82	Dust Treatment Chemical Silo	2200 ft^3\100 tons – 20 tons/hr	GMD Enviro. Tech. fabric filter	S22A1	PM-10	mNSR amended 1/12/12
Pipe Casting							
S7	EP68C, EP73-78	Centrifugal Casting Machine S-7A Centrifugal Casting Machine S-7B Centrifugal Casting Machine S-7C Centrifugal Casting Machine S-7D Centrifugal Casting Machine S-3	32 tons/hr 32 tons/hr 38 tons/hr 32 tons/hr 14 tons/hr	None	N/A	N/A	mNSR amended 1/12/12 mNSR amended 1/12/12 mNSR amended 1/12/12 mNSR amended 1/12/12 SOP amended 4/21/15
S10	EP84	Annealing Oven	106 MMBtu/hr	None	N/A	N/A	mNSR amended 1/12/12
S18	EP44	Shell Sand Silo	100 tons	Whirl Air Flow fabric filter	S18A1	PM-10	SOP amended 4/21/15
S19	EP42	Shell Core Production S19-1 S19-2 S19-3	923 lb/hr & 1 MMBtu/hr 923 lb/hr & 1 MMBtu/hr 374 lb/hr & 0.25 MMBtu/hr	None	N/A	N/A	mNSR amended 1/12/12 mNSR amended 1/12/12 mNSR amended 1/12/12
Finishing							
S11	EP97	Grinding & Cutting	280 tons/hr	Camcorp fabric filter for grinding Wet Suppression for cutting	S11A1 S11A2	PM-10	mNSR amended 1/12/12
S12	Fugitive	Quick Dry Paint Pad Line 1- S12B Line 3 - S12A	5 gal/hr 5 gal/hr	None	N/A	N/A	mNSR amended 1/12/12 SOP amended 4/21/15
S13	EP91B EP91A EP91C	Cement Silo Line 1- S13B Cement Silo Line 3- S13A Cement Transfer Silo Line 1- S13C	150 tons 127 tons 75 tons	Bin Vent Filter Bin Vent Filter Bin Vent Filter	S13BA1 S13AA1 S13CA1	PM-10	mNSR amended 1/12/12
S14	EP92B EP92A	Sand Silo Line 1- S14B Line 3- S14A	150 tons 127 tons	Bin Vent Filter Bin Vent Filter	S14BA1 S14AA1	PM-10	mNSR amended 1/12/12

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
S16	EP89 EP90	Painting Machine Line 1 - S16B Line 3 - S16A	95 gal/hr 45 gal/hr	Fabric Filter Fabric Filter	S16BA1 S16AA1	PM-10	mNSR amended 1/12/12
S23	EP23A, EP23B	Sand Transfer Silo Line 1- S23B Sand Transfer Silo Line 3- S23A	75 tons 75 tons	Bin Vent Filter Bin Vent Filter	S23BA1 S23AA1,	PM-10	mNSR amended 1/12/12
S24	EP24A EP24B	Weigh hopper & Mixer Line 1 – S24B Line 3 – S24A	20 tons/hr 20 tons/hr	Bin Vent Filter Bin Vent Filter	S24BA1 S24AA1	PM-10	mNSR amended 1/12/12
S27	EP27	Pipe Mold Preparation		Fabric Filter	S27A1	PM-10	mNSR amended 1/12/12
S37	Fugitive	Pipe Stencil & Striper					mNSR amended 1/12/12
S39	EP3	Cement Curing Chamber (Line 1)	12 MMBtu/hr	None	N/A		mNSR amended 1/12/12
S44	EP04	Paint Drying Chamber (Line 1)	12 MMBtu/hr	None	N/A		mNSR amended 1/12/12
S45	Fugitive	Pipe Brushing		None	N/A		mNSR amended 1/12/12
S46	EP76-78	Core Sand Removal		None	N/A		mNSR amended 1/12/12
Other Units							
S38	EP38	natural gas fired emergency generator	25 kW	None	N/A		
S60	EP10	Gasoline storage tank	200 gallons	None	N/A		

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

Melting Department Requirements – Cupola (S2), Desulfurization (S3), Magnesium Plunging (S6), and Dust Treatment Systems (S20, S21, S22)

Limitations

1. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the Cupola (S2) and from the Iron Melting Dust Treatment System (S20) shall be controlled by a fabric filter (S2A2). The fabric filter (S2A2) shall be provided with adequate access for inspection and shall be in operation when either the Cupola (S2) or the Iron Melting Dust Treatment System (S20) is operating.
(9VAC5-80-110, Condition 2 of 4/16/07 SOP, last amended 4/21/15, Condition 2 of 12/18/09 NSR permit, last amended 1/12/12)

2. **Emission Controls** - Carbon Monoxide emissions from the Cupola (S2) shall be controlled by the use of an afterburner (S2A1). The afterburner (S2A1) shall be provided with adequate access for inspection and shall be in operation when the Cupola (S2) is operating.
(9VAC5-80-110, Condition 3 of 12/18/09 NSR permit, last amended 1/12/12)

3. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) and from the Iron Treatment Processes Dust Treatment System (S21) shall be controlled by fabric filter (S3A1). The fabric filter (S3A1) shall be provided with adequate access for inspection and shall be in operation when either the Iron Treatment Processes (S3 & S6) or Iron Treatment Processes Dust Treatment System (S21) is operating.
(9VAC5-80-110, Condition 3 of 4/16/07 SOP, last amended 4/21/15, Condition 4 of 12/18/09 NSR permit, last amended 1/12/12)

4. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the Metal Dust Treatment Material Silo (S22) shall be controlled by a bin vent fabric filter (S22A1). The bin vent fabric filter (S22A1) shall be provided with adequate access for inspection and shall be in operation when treatment material is being transferred to the Metal Dust Treatment Material Silo (S22).
(9VAC5-80-110, Condition 13 of 12/18/09 NSR permit, last amended 1/12/12)

5. **Control Efficiency** – The Cupola and Iron Treatment Processes fabric filters (S2A2 & S3A1) shall maintain a control efficiency for particulate matter of no less than 99.9 percent, to be demonstrated by stack test upon request by DEQ.
(9VAC5-80-110, Condition 4 of 4/16/07 SOP, last amended 4/21/15, Condition 14 of 12/18/09 NSR permit, last amended 1/12/12,)

6. **Fuel** - The approved fuel for the Cupola (S2) is coke. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110)

7. **Fuel** - The approved fuels for the Cupola afterburner (S2A1) are natural gas and distillate oil. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110, Condition 25 of 12/18/09 NSR permit, last amended 1/12/12)

8. **Fuel Throughput** - The Cupola afterburner (S2A1), in conjunction with the Pipe Annealing Oven (S10) {see Condition 27}, shall consume no more than 600.06 million cubic feet and 300,000 gallons of distillate oil 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.
(9VAC5-80-110, Condition 26 of 12/18/09 NSR permit, last amended 1/12/12)

9. **Throughput** – The throughput of metal scrap to the Cupola (S2) shall not exceed 222,837 tons 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.
(9VAC5-80-110, Condition 18.b of 12/18/09 NSR permit, last amended 1/12/12, and Condition 8 of 4/16/07 SOP, last amended 4/21/15)

10. **Throughput** - The throughput of treatment material for the Metal Dust Treatment Material Silo (S22) shall not exceed 1,000 tons 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.
(9VAC5-80-110, Condition 19 of 12/18/09 NSR permit, last amended 1/12/12)

11. **Throughput** - The throughput of treatment material for the Iron Melting Dust Treatment System (S20) shall not exceed 1,000 tons 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.
(9VAC5-80-110, Condition 23 of 12/18/09 NSR permit, last amended 1/12/12)

12. **Throughput** - The throughput of treatment material for the Iron Treatment Processes Dust Treatment System (S21) shall not exceed 200 tons 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.
(9VAC5-80-110, Condition 24 of 12/18/09 NSR permit, last amended 1/12/12)

13. **Emissions Limits** - Emissions from the operation of the Cupola (S2) shall not exceed the limits specified below:

PM	42.0	lbs/hr
Sulfur Dioxide	377.5	lbs/hr

(also see 40 CFR 63 Subpart ZZZZZ limits in Condition 68.e)

(9VAC5-80-110, 9VAC5-40-2410, 9VAC5-40-280 B)

14. **Emissions Limits** - Emissions from the operation of the Desulfurization (S3) process shall not exceed the limits specified below:

PM	44.6	lbs/hr
Sulfur Dioxide	2000	ppm

(9VAC5-80-110, 9VAC5-40-260, 9VAC5-40-280 A)

15. **Emissions Limits** - Emissions from the operation of the Magnesium Plunging (S6) process shall not exceed the limits specified below:

PM	44.6 lbs/hr
Sulfur Dioxide	2000 ppm

(9VAC5-80-110, 9VAC5-40-260, 9VAC5-40-280 A)

16. **Emissions Limits** - Emissions from the operation of the Iron Melting Dust Treatment System (S20) shall not exceed the limits specified below:

Particulate Matter (PM)	0.5 lbs/hr	1.0 tons/yr
PM-10	0.5 lbs/hr	1.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 11 and 23.
(9VAC5-80-110, Condition 31 of 12/18/09 NSR permit, last amended 1/12/12)

17. **Visible Emissions Limit** - Visible emissions from the Metal Dust Treatment Material Silo (S22) fabric filter (S22A1) shall not exceed 5 percent opacity.
(9VAC5-80-110, Condition 36 of 12/18/09 NSR permit, last amended 1/12/12)

18. **Visible Emissions Limit** - Visible Emissions from the Cupola (S2) and Iron Melting Dust Treatment System (S20) fabric filter (S2A2) and the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) Iron Treatment Processes Dust Treatment System (S21) fabric filter (S3A1) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup shutdown, and malfunction.
(9VAC5-80-110, Condition 37 of 12/18/09 NSR permit, last amended 1/12/12)

Monitoring

19. **Monitoring Devices** - The Cupola (S2) fabric filter (S2A2) and the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) fabric filter (S3A1) shall be equipped with devices to continuously measure the differential pressure drop across each of the fabric filters.

    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 Cupola fabric filter (S2A2) and the Iron Treatment Processes fabric filter (S3A1) are operating.
(9VAC5-80-110, Condition 17 of 12/18/09 NSR permit, last amended 1/12/12, Condition 5 of 4/16/07 SOP, last amended of 4/21/15)

20. **Periodic Monitoring** - At least one time per calendar day an observation of the presence of visible emissions from the Cupola (S2) stack shall be made. The presence of visible emissions shall require the permittee to:

    a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,

    b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 20 percent opacity or less, as required by Condition 18. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

    The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the day, it shall be noted in the log book.
    (9VAC5-80-110 E, 9VAC5-80-110 K)

21. **Periodic Monitoring** - While treatment material is being transferred to the Metal Dust Treatment Material Silo (S22), but no more than once per day, an observation of the presence of visible emissions from the Metal Dust Treatment Material Silo (S22) fabric filter (S22A1) stack shall be made. If visible emissions are observed the permittee shall:

    a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,

    b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 5 percent opacity or less, as required by Condition 17. If any of the observations exceed the opacity limitation of 5 percent, timely corrective action shall be taken such that the emissions point resumes operation within the 5 percent opacity limit.

    The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the day, it shall be noted in the log book.
    (9VAC5-80-110 E, 9VAC5-80-110 K)

22. **Compliance Assurance Monitoring (CAM)** - The permittee shall implement a Compliance Assurance Monitoring (CAM) Plan to monitor:

    the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) fabric filter (S3A1),

    which is a CAM-affected units, controlling particulate matter from the iron treatment

process department.

The approved monitoring plan shall be the attached CAM Plan (Attachment A) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 63; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 64; or (3) otherwise approved by the DEQ conforming with Condition 57, including, but not limited to, changes initiated by DEQ. The permittee shall comply with the CAM requirements in Conditions 57 through 67 . (9VAC5-80-110 E and 40 CFR 64.6(c))

Recordkeeping

23. **Records** - 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 Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. The annual consumption of coke calculated monthly as the sum of each consecutive 12-month period.
    b. Records of all coke shipments purchased, indicating the sulfur content per shipment.
    c. Annual throughput of scrap charged (in tons), 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. ***A*** & ***B***
    d. Annual throughput of Metal Dust Treatment Material through the bulk silo (S22), the Iron Melting Dust Treatment System (S20), and Iron Treatment Processes Dust Treatment System (S21) (in tons), 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***
    e. Annual consumption of natural gas and distillate oil by the Cupola afterburner (S2A1), in conjunction with the Pipe Annealing Oven (S10) {see Condition 34.c}, 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. ***A*** & ***B***
    f. Material Safety Data Sheets (MSDS) or other vendor information showing composition of the Metal Dust Treatment Material. ***B***
    g. Records of the visible emission and opacity observations for the Cupola (S2) as required by Condition 20.
    h. Records of the visible emission and opacity observations for the Metal Dust Treatment Material bulk silo (S22) fabric filter (S22A1) required by Condition 21.
    i. CAM Plan records for the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) fabric filter (S3A1) stacks as required by Condition 22, and in compliance with the CAM Plan recordkeeping requirements of Condition 66.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-40-50, 9VAC5-50-50, 9VAC5-80-110 F, 40 CFR 64.9(b), [A]- Condition 12 of 4/16/07 SOP, last amended 4/21/15, [B]- Condition 41 of 12/18/09 NSR permit, last amended 1/12/12)

Reporting

24. **Reports** - The permittee shall submit CAM Plan reports for the Iron Treatment Processes (Desulfurization (S3) and Magnesium Plunging (S6)) fabric filter (S3A1) in compliance with the CAM Plan reporting requirements of Condition 67.
(9VAC5-80-110 F and 40 CFR 64.9(a))

Pipe Casting Department Requirements – Casting (S7), Annealing (S10), and Shell Sand Silo (S18)

Limitations

25. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the Shell Sand Silo (S18) shall be controlled by a fabric filter (S18A1). The fabric filter (S18A1) shall be provided with adequate access for inspection and shall be in operation when sand is being transferred to the Shell Sand Silo (S18).
(9VAC5-80-110, Condition 12 of 12/18/09 NSR permit, last amended 1/12/12)

26. **Fuel** - The approved fuels for the Pipe Annealing Oven (S10) are natural gas and distillate oil. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110, Condition 25 of 12/18/09 NSR permit, last amended 1/12/12)

27. **Fuel Throughput** - The Pipe Annealing Oven (S10), in conjunction with the Cupola afterburner (S2A1) {see Condition 8}, shall consume no more than 600.06 million cubic feet and 300,000 gallons of distillate oil 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.
(9VAC5-80-110, Condition 26 of 12/18/09 NSR permit, last amended 1/12/12)

28. **Emissions Limits** - Emissions from the operation of the Casting Operation (S7) shall not exceed the limits specified below:

Particulate Matter (PM)	13.8 lbs/hr	28.2 tons/yr
PM-10	7.1 lbs/hr	14.4 tons/yr
PM-2.5	7.1 lbs/hr	14.4 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 9 and 23.
(9VAC5-80-110, Condition 32 of 12/18/09 NSR permit, last amended 1/12/12)

29. **Emissions Limits** - Emissions from the operation of the Pipe Annealing Oven (S10) shall not exceed the limits specified below:

Particulate Matter (PM) (filterable & condensable)	2.5	lbs/hr	2.8	tons/yr
PM-10	0.8	lbs/hr	2.4	tons/yr
PM-2.5	0.8	lbs/hr	2.3	tons/yr
Sulfur Dioxide	23.3	lbs/hr	4.7	tons/yr
Nitrogen Oxides	15.4	lbs/hr	33.0	tons/yr
Carbon Monoxide	8.9	lbs/hr	26.0	tons/yr
Volatile Organic Compounds	0.6	lbs/hr	1.7	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 26, 27, 77, 78, 82, and 34,
(9VAC5-80-110, Condition 33 of 12/18/09 NSR permit, last amended 1/12/12)

30. **Visible Emissions Limit** - Visible emissions from the Pipe Annealing Oven (S10) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.
(9VAC5-80-110, 9VAC5-50-80)

31. **Visible Emissions Limit** - Visible emissions from the Shell Sand Silo (S18) fabric filter (S18A1) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.
(9VAC5-80-110, 9VAC5-50-80)

Monitoring

32. **Periodic Monitoring** - At least one time per calendar day an observation of the presence of visible emissions from the Pipe Annealing Oven (S10) stack shall be made when being fueled by distillate oil. The presence of visible emissions shall require the permittee to:

    a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,

    b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 20 percent opacity or less, as required by Condition 30. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

    The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the process has not been operated for any period during the day, it shall be noted in the log book.
    (9VAC5-80-110 E, 9VAC5-80-110 K)

33. **Periodic Monitoring** - At least one time per calendar week while in operation an observation of the presence of visible emissions from the Shell Sand Silo (S18) fabric filter (S18A1) stack shall be made. The presence of visible emissions shall require the permittee to :

    a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,

    b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 20 percent opacity or less, as required by Condition 31. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

    Additionally, following an observation that detects the presence of visible emissions, a daily observation shall be made during the subsequent four (4) operational periods for the presence of visible emissions.

    The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the process has not been operated for any period during the week, it shall be noted in the log book.
    (9VAC5-80-110 E, 9VAC5-80-110 K)

Recordkeeping

34. **Records** - 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 Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Annual throughput of resin coated shell core sand (in tons), 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. ***A*** & ***B***

    b. Annual throughput of pipe shop drain-out tub binders (in gallons), 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. ***A*** & ***B***

    c. Annual consumption of natural gas and distillate oil by the Pipe Annealing Oven (S10), in conjunction with the Cupola afterburner (S2A1) {see Condition 23.e}, 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. [A]

d. Semi-annual analysis of the total dissolved solids content of the circulating water of the cooling towers associated with the centrifugal casting machines. [B]

e. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content and HAP content for each shell core binder and drain-out tub binder used. [A]

f. Records of the visible emission and opacity observations for the Pipe Annealing Oven (S10) and the Shell Sand Silo (S18) fabric filter (S18A1) as required by Condition 32.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 9VAC5-50-50, [A]- Condition 12 of 4/16/07 SOP, last amended of 4/21/15, [B]- Condition 41 of 12/18/09 NSR permit, last amended 1/12/12)

Finishing Department Requirements –Grinding and Cutting (S11), Quick Dry Pipe Paint (S12), Cement Silos (S13A, B & C), Sand Silos (S14A & B), Pipe Painting Machines (S16A & B), and Sand Transfer Silos (S23A & B)

Limitations

35. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the grinding in the Grinding and Cutting Operation (S11) shall be controlled by a fabric filter (S11A1), with a control efficiency of not less than 99.9%. Particulate matter (PM and PM-10) emissions from the cutting in the Grinding and Cutting Operation (S11) shall be controlled by wet suppression (S11A2) or a fabric filter (S11A1), with a control efficiency of not less than 99.9%. The fabric filter (S11A1) and wet suppression (S11A2) shall be provided with adequate access for inspection and shall be in operation when the Grinding and Cutting Operation (S11) is operating.
(9VAC5-80-110, Condition 5 of 12/18/09 NSR permit, last amended 1/12/12)

36. **Emission Controls** - Particulate matter (PM and PM-10) emissions from the Sand Transfer Silos (S23A & S23B) shall be controlled by a fabric filters (S23AA1 & S23BA1). The fabric filters (S23AA1 & S23BA1) shall be provided with adequate access for inspection and shall be in operation when sand is being transferred to the Sand Transfer Silos (S23A & S23B).
(9VAC5-80-110, Condition 6 of 12/18/09 NSR permit, last amended 1/12/12)

37. **Emission Controls** - Particulate emissions (PM and PM-10) from the Sand Silos of Line 1 (S14B) and Line 3 (S14A) shall be controlled by fabric filters (S14BA1 & S14AA1), with a control efficiency of not less than 99%. The fabric filters (S14BA1 & S14AA1) shall be provided with adequate access for inspection and shall be in operation when sand is being transferred to the Sand Silos (S14B & S14A).
(9VAC5-80-110, Condition 7 of 12/18/09 NSR permit, last amended 1/12/12)

38. **Emission Controls** - Particulate emissions (PM and PM-10) from the Cement Silos of Line 1 (S13B & S13C) and Line 3 (S13A) shall be controlled by a fabric filters

(S13BA1, S13CA1, & S13AA1), with a control efficiency of not less than 99%. The fabric filters (S13BA1, S13CA1, & S13AA1) shall be provided with adequate access for inspection and shall be in operation when cement is being transferred to the Cement Silos (S13B, S13C, & S13A).
(9VAC5-80-110, Condition 8 of 12/18/09 NSR permit, last amended 1/12/12)

39. **Emission Controls** - Particulate emissions (PM and PM-10) from the Weigh Hopper and Mixer of Line 1 (S24B) and Line 3 (S24A) shall be controlled by a fabric filters (S24BA1 & S24AA1), with a control efficiency of not less than 99%. The fabric filters (S24BA1 & S24AA1) shall be provided with adequate access for inspection and shall be in operation when the Weigh Hopper and Mixer of Line 1 and Line 3 (S24B & S24A) are operating.
(9VAC5-80-110, Condition 9 of 12/18/09 NSR permit, last amended 1/12/12)

40. **Emission Controls** - Particulate matter (PM and PM-10) emissions from Mold Preparation (S27) shall be controlled by a fabric filter (S27A1), with a control efficiency of not less than 99%. The fabric filter (S27A1) shall be provided with adequate access for inspection and shall be in operation when Mold Preparation (S27) is operating.
(9VAC5-80-110, Condition 10 of 12/18/09 NSR permit, last amended 1/12/12)

41. **Emission Controls** - Particulate matter (PM and PM-10) emissions from Painting Machine 1 (S16B) and 3 (S16A) shall be controlled by filters (S16BA1 & S16AA1), with a control efficiency of not less than 90%. The filters (S16BA1 & S16AA1) shall be provided with adequate access for inspection and each shall be in operation when the associated Painting Machine (S16B or S16A) is operating.
(9VAC5-80-110, Condition 11 of 12/18/09 NSR permit, last amended 1/12/12)

42. **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, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9VAC5-80-110, Condition 7 of 4/16/07 SOP, last amended 4/21/15, Condition 16 of 12/18/09 NSR permit, last amended 1/12/12)

43. **Throughput** - The throughput of Quick Dry Solvent Based Paint Pads (S12), with a VOC content not to exceed 5.39 pounds per gallon, shall not exceed 11,668 gallons 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.
(9VAC5-80-110, Condition 20 of 12/18/09 NSR permit, last amended 1/12/12)

44. **Throughput** - The throughput of VOCs from coatings through Painting Machine 1 and 3 (S16A & S16B) shall not exceed 337.2 tons per year. VOC emissions shall be controlled by use of VOC-based coatings and waterborne coatings. The VOC content of VOC-based coatings shall not exceed 3.11 pounds per gallon. Waterborne coatings are defined

as coatings whose volatile portion consists of 91% or more by volume of water and 9% or less by volume of volatile organic compounds. Throughput of coatings shall be 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.
(9VAC5-80-110, Condition 21 of 12/18/09 NSR permit, last amended 1/12/12)

45. **Throughput** - The throughput of Mineral Spirits and VM&P Naphtha (S16), combined, shall not exceed 21,000 gallons 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.
(9VAC5-80-110, Condition 22 of 12/18/09 NSR permit, last amended 1/12/12)

46. **Emission Limits** - Emissions from the operation of the Quick Dry Solvent Based Paint Pads (S12) shall not exceed the limits specified below:

Volatile Organic Compounds	27.0 lbs/hr	31.4 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 43 and 55.
(9VAC5-80-110, Condition 34 of 12/18/09 NSR permit, last amended 1/12/12)

47. **Emission Limits** - Emissions from the Pipe Painting operation (S16A & S16B) shall not exceed the limits specified below:

Particulate Matter (PM)	1.5 tons/yr
PM-10	1.5 tons/yr
Volatile Organic Compounds	337.2 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 44 and 55.
(9VAC5-80-110, Condition 35 of 12/18/09 NSR permit, last amended 1/12/12)

48. **Visible Emission Limit** - Visible emissions from the Grinding and Cutting Operation (S11) shall not exceed five (5) percent opacity.
(9VAC5-80-110, Condition 38 of 12/18/09 NSR permit, last amended 1/12/12)

49. **Visible Emission Limit** - Visible emissions from the Sand Transfer Silos (S23A & S23B), the Sand Silos of Line 1 and Line 3 (S14B & S14A), the Cement Silos of Line 1 and Line 3 (S13B, S13C, & S13A), the Weigh Hopper and Mixer of Line 1 and Line 3 (S24B & S24A), and Mold Preparation (S27) shall not exceed five (5) percent opacity.
(9VAC5-80-110, Condition 39 of 12/18/09 NSR permit, last amended 1/12/12)

50. **Visible Emission Limit** - Visible emissions from the Pipe Painting operation (S16A & S16B) shall not exceed five (5) percent opacity.
(9VAC5-80-110, Condition 40 of 12/18/09 NSR permit, last amended 1/12/12)

Monitoring

51. **Monitoring Devices** - The Sand Transfer Silo fabric filters (S23AA1 & S23BA1) shall be equipped with a device to continuously measure the differential pressure drop across each of the fabric filters.

    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 Sand Transfer Silo fabric filters (S23AA1 & S23BA1) is operating.
    (9VAC5-80-110, Condition 17 of 12/18/09 NSR permit, last amended 1/12/12)

52. **Periodic Monitoring** - At least one time per calendar week when in operation an observation of the presence of visible emissions from the Sand Transfer Silos (S23A & S23B) fabric filters (S23AA1 & S23BA1), Sand Silos of Line 1 and Line 3 (S14B & S14A) fabric filters (S14BA1 & S14AA1), Cement Silos of Line 1 and Line 3 (S13B, S13C & S13A) fabric filters (S13BA1, S13CA1 & S13AA1), Weigh Hopper and Mixer of Line 1 (S24B) fabric filter (S24BA1), and Pipe Painting Operation of Line 1 and Line 3 (S16B & S16A) fabric filters (S16BA1 & S16AA1). The presence of visible emissions shall require the permittee to:

    a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
    b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the emissions point are 5 percent opacity or less, as required by Conditions 49, and 50. If any of the observations exceed the opacity limitation of 5 percent, timely corrective action shall be taken such that the emissions point resumes operation within the 5 percent opacity limit.

    Additionally, following an observation that detects the presence of visible emissions, a daily observation shall be made during the subsequent four (4) operational periods of the emissions point, with visible emissions, for the presence of visible emissions.

    The permittee shall maintain an emissions point observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the emissions point has not been operated for any period during the week, it shall be noted in the log book.
    (9VAC5-80-110 E, 9VAC5-80-110 K)

53. **Periodic Monitoring** - At least one time per calendar week an observation of the presence of visible emissions from the Weigh Hopper and Mixer of Line 3 (S24A) fabric filters (S24AA1) and Mold Preparation (S27) fabric filter (S27A1). The presence of visible emissions shall require the permittee to take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions.

    Additionally, following an observation that detects the presence of visible emissions, a

daily observation shall be made during the subsequent four (4) operational periods of the emissions point, with visible emissions, for the presence of visible emissions.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, any necessary corrective action, and the name of the observer. If the emissions point has not been operated for any period during the week, it shall be noted in the log book.
(9VAC5-80-110 E, 9VAC5-80-110 K)

54. **Compliance Assurance Monitoring (CAM)** - The permittee shall implement a Compliance Assurance Monitoring (CAM) Plan to monitor the Grinding and Cutting Operation (S11) fabric filter (S11A1) which is a CAM-affected unit, controlling particulate matter from the finishing department.

    The approved monitoring plan shall be the attached CAM Plan (Attachment A) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 63; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 64; or (3) otherwise approved by the DEQ conforming with Condition 57, including, but not limited to, changes initiated by DEQ. The permittee shall comply with the CAM requirements in Conditions 57 through 67.
    (9VAC5-80-110 E and 40 CFR 64.6(c))

Recordkeeping

55. **Records** - 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 Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Annual throughput of coatings, thinners, and cleaners (in gallons), 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. ***A & B***
    b. Annual throughput of VOCs from coatings (in tons), 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***
    c. Annual throughput of sand for the Sand Transfer Silos (S23A & S23B) (in tons), 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***
    d. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing VOC content, toxic compound content, HAP content, water content, and solids content, as applicable, for each coating, thinner, and cleaner used. ***A*** & ***B***
    e. Records of the visible emission and opacity observations for the Sand Transfer Silo (S23A & S23B) fabric filters (S23AA1 & S23BA1), Sand Silos of Line 1 and Line 3

(S14A & S14B) fabric filters (S14BA1 & S14AA1),Cement Silos of Line 1 and Line 3 (S13B, S13C & S13A) fabric filters (S13BA1, S13CA1 & S13AA1), Weigh Hopper and Mixer of Line 1 and Line 3 (S24B & S24A) fabric filters (S24BA1 & S24AA1), Mold Preparation (S27) fabric filter (S27A1), and Pipe Painting operation of Line 1 and Line 3 (S16B & S16A) fabric filters (S16BA1 & S16AA1) stacks as required by Condition 52 and 53.

f. CAM Plan records for the Grinding and Cutting Operation (S11) fabric filter (S11A1) stack as required by Condition 54, and in compliance with the CAM Plan recordkeeping requirements of Condition 66.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-40-50, 9VAC5-50-50, 9VAC5-80-110, [A]- Condition 12 of 4/16/07 SOP, last amended 4/21/15, [B]- Condition 41 of 12/18/09 NSR permit, last amended 1/12/12)

Reporting

56. **Reports** - The permittee shall submit CAM Plan reports for the Grinding and Cutting Operation (S11) fabric filter (S11A1) in compliance with the CAM Plan reporting requirements of Condition 67.
(9VAC5-80-110 F and 40 CFR 64.9(a))

General Compliance Assurance Monitoring (CAM) Plan Provisions

57. **CAM Plan** - Each monitor shall be operated according to manufacturer's specifications, unless other methods are approved, and in compliance with 40 CFR 64.3(b) or (d). The approved CAM Plan shall include, at a minimum, the following information:

    a. Indicator;
    b. Measurement Approach;
    c. Indicator Range or Condition(s) for Range Development; and
    d. The following performance criteria:
        (i) Data Representativeness;
        (ii) Verification of Operational Status;
        (iii) QA/QC Practices and Criteria;
        (iv) Monitoring Frequency;
        (v) Data Collection Procedures;
        (vi) Averaging Period

    Changes to the CAM Plan pertaining to the information in this condition require prior approval by the DEQ and may require public participation according to the requirements of 9VAC5-80-230.
    (9VAC5-80-110 E and 40 CFR 64.6(c))

58. **CAM Plan** - 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 E and 40 CFR 64.6(c))

59. **CAM Plan** - 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 E and 40 CFR 64.7(b))

60. **CAM Plan** - 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 CAM-affected unit is 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 E and 40 CFR 64.7(c))

61. **CAM Plan** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the CAM-affected unit (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 E and 40 CFR 64.7(d)(1))

62. **CAM Plan** - 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 E and 40 CFR 64.7(d)(2))

63. **CAM Plan** - 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 (in accordance with Condition 96) notify the Blue Ridge Regional Office and, if necessary, submit a revised CAM Plan for approval to the Blue Ridge Regional Office 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 E, 40 CFR 64.7(e) and 40 CFR 64.6(c))

64. **CAM Plan** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the CAM-affected unit for a semiannual reporting period, or as otherwise required by the DEQ in accordance with review conducted under 40 CFR 64.7(d)(2), 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 at the permitted facility. In the event that changes are made to the CAM Plan as a result of a QIP, the permittee shall record the revision date on Page 1 of the CAM Plan and monitor in accordance with the most recent CAM Plan. The permittee shall submit a copy of the most recent CAM Plan to the Blue Ridge Region within 30 days of the revision date. For the purposes of this condition, the most recent version of the CAM Plan shall be based on the date as shown on page 1 of the CAM Plan.
(9VAC5-80-110 E and 40 CFR 64.8(a) and (b))

65. **CAM Plan** - Monitoring imposed under 40 CFR Part 64 shall not excuse the permittee from complying with any existing requirements under federal, state, or local law, or any other applicable requirement under the Act, as described in 40 CFR 64.10.
(9VAC5-80-110 and 40 CFR 64.10)

66. **CAM Plan Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
(9VAC5-80-110 F and 40 CFR 64.9(b))

67. **CAM Plan Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by Condition 94 of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:

    a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
    b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
    c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

    (9VAC5-80-110 F and 40 CFR 64.9(a))

NESHAP for Iron And Steel Foundries Area Sources (40 CFR 63 Subpart ZZZZZ)

68. **Standards and Management Practices Requirements**

As designated by §63.10895 of the subpart the permittee shall comply with the applicable Standards and Management Practices requirements for the iron foundry as designated by §63.10895 of the subpart, which includes:

a. The permittee must comply with the metallic scrap management program requirements under §63.10885(a). The permittee must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each of your scrap providers. The permittee may have certain scrap subject to either of the options at its facility provided the metallic scrap remains segregated until charge make-up. [A]

b. Comply with one of the mercury requirement compliance options under §63.10885(b) for each scrap provider, contract, or shipment. The permittee may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision. [A]

c. Where applicable, comply with the binder formulation requirements under §63.10886.

d. Operate a capture and collection system for each metal melting furnace. Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.

e. The permittee must not discharge to the atmosphere emissions from any metal melting furnace that exceed the applicable limit of 0.8 pounds of particulate matter (PM) per ton of metal charged or 0.06 pounds of total metal HAP per ton of metal charged.. When an alternative emissions limit is provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limit is used to demonstrate compliance.

f. The permittee must not discharge to the atmosphere fugitive emissions from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 30 percent.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, [A]- Condition 6 of 4/16/07 SOP, last amended 4/21/15, and 40 CFR 63 Subpart ZZZZZ)

69. **Operation and Maintenance Requirements**

As designated by §63.10896 of the subpart the permittee must operate at all times according to a written operation and maintenance (O&M) plan for each control device for an emissions source subject to a PM, metal HAP, or opacity emissions limit in Condition 68. The O&M plan must be prepared so that it contains the applicable information in §63.10896 (a)(1) thru (5); or, the permittee may us any other O&M, preventative maintenance, or similar plan which addresses these plan requirements to demonstrate compliance with the requirements for an O&M plan. The permittee must maintain a copy of the O&M plan at the facility and make it available for review upon request. At a minimum, each plan must address the requirements as listed in this section of the subpart. (9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart ZZZZZ)

70. **Monitoring Requirements**

As designated by §63.10897 of the subpart the permittee must perform the Monitoring requirements of the subpart which including:

a. Perform periodic inspections and maintenance of each PM control device for a metal melting furnace as designated in §63.10897(a), or the permittee may install, operate, and maintain a bag leak detection system for each baghouse according to the requirements as designated by §63.10897(d).

b. Make monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The permittee must repair any defect or deficiency in the capture system as soon as practicable, but no later than 90 days. The permittee must record the date and results of each inspection and the date of repair of any defect or deficiency.

c. Install, operate, and maintain each continuous parameter monitoring system (CPMS) or other measurement device according to your O&M plan. The permittee must record all information needed to document conformance with these requirements.

d. In the event of an exceedance of an established emissions limitation (including an operating limit), you must restore operation of the emissions source (including the control device and associated capture system) to its normal or usual manner or 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 exceedance. The permittee must record the date and time correction action was initiated, the correction action taken, and the date corrective action was completed.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart ZZZZZ)

71. **Performance Test Requirements**

As designated by §63.10898 of the subpart the permittee shall comply with the Performance Test requirements, which include:

a. Conduct performance tests to demonstrate compliance with all applicable PM or total metal HAP emissions limits in Condition 68.e for a metal melting furnace no less frequently than every 5 years and each time you elect to change an operating limit or make a process change likely to increase HAP emissions.

b. Conduct each performance test according to the requirements in §63.7(e)(1), Table 1 of the subpart, and paragraphs (d) through (g) of §63.10898.

c. Conduct each opacity test for fugitive emissions according to the requirements in §63.6(h)(5) and Table 1 of the subpart.

d. Conduct performance tests to demonstrate compliance with the opacity limit in Condition 68.f) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.

e. In your performance test report, you must certify that the capture system operated normally during the performance test.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart ZZZZZ)

72. **Recordkeeping and Reporting Requirements**

As designated by §63.10899 of the subpart the permittee shall comply with the Recordkeeping and Reporting requirements of the subpart, which include:

a. Maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

b. In addition to the records required by 40 CFR 63.10, the permittee must keep records of the information specified in the following:

(i) Keep records as specified in 40 CFR 63.10899(b)(1) of your written materials specifications according to Condition 68.a and records that demonstrate compliance with the requirements for the scrap metal materials acquisition requirements options used under §63.10885(a) and the mercury requirement compliance options under §63.10885(b). Keep records documenting compliance with §63.10885(b)(4) for scrap that does not contain motor vehicle scrap. ***A***

(ii) Keep records and submitted reports for the applicable mercury program option as required under 63.10899 (b)(2) and (3). ***A***

(iii) Keep records to document use of any binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.

(iv) Keep records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.

(v) Keep records of monthly metal melt production for each calendar year.

(vi) Keep a copy of the operation and maintenance plan as required by Condition 69 and records that demonstrate compliance with plan requirements.

(vii) If applicable, the permittee must keep records for bag leak detection systems as required under §63.10899(b)(9).

(viii) Keep records of capture system inspections and repairs as required by Condition 70.b.

(ix) Keep records demonstrating conformance with your specifications for the operation of CPMS as required by Condition 70.c.

(x) Keep records of corrective action(s) for exceedances and excursions as required by Condition 70.d

(xi) If applicable, record the results of each inspection and maintenance as required by Condition 70.a for PM control devices according to the requirements designated in §63.10899(b)(13).

c. Submit semiannual compliance reports to the Administrator according to the requirements in §63.10(e). The reports must include, at a minimum, the following information as applicable:

(i) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective action taken;

(ii) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other calibration checks, if applicable); and

(iii) Summary information on any deviation from the pollution prevention management practices in §§63.10885 and 63.10886 and the operation and maintenance requirements §63.10896 and the corrective action taken.

d. Submit written notification to the Administrator of any subsequent reclassification of your existing affected source as a large iron and steel facility as required in §63.10881(d).

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, [A]- Condition 12.j of 4/16/07 SOP, last amended 4/21/15, and 40 CFR 63 Subpart ZZZZZ)

73. **General Provision Requirements**

As designated by §63.10900 of the subpart the permittee shall comply with the General Provision requirements, which include:

a. Comply with the requirements of the General Provisions (40 CFR Part 63, Subpart A) according to Table 3 of the subpart.

b. The notification of compliance status required by §63.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of the subpart.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart ZZZZZ)

NESHAP for Source Category: Gasoline Dispensing Facilities (40 CFR 63 Subpart CCCCCC)

The gasoline storage tank (S60) for the facility is subject to the following conditions related to 40 CFR 63 Subpart CCCCCC.

74. **General Duties**

As designated by §63.11115 of the subpart the permittee shall comply with the General Duty requirements, which include:

You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart CCCCCC)

75. **Management Practices**

As designated by §63.11116 of the subpart the permittee shall comply with the Management Practices requirements, which include:

a. You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
   (i) Minimize gasoline spills;
   (ii) Clean up spills as expeditiously as practicable;
   (iii) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
   (iv) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
b. You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or 40 CFR 63 Subpart A, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
c. You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
d. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with Condition 75.a(iii).

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart CCCCCC)

76. **General Provision Requirements**

As designated by §63.11130 of the subpart the permittee shall comply with the General Provision requirements, which include:

Comply with the requirements of the General Provisions (40 CFR Part 63, Subpart A) according to Table 3 of the subpart.

(9VAC5-60-90, 9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63 Subpart CCCCCC)

Facility Wide Conditions

Limitations

77. **Fuel** - The distillate oil specified in Condition 8 and 27 shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:
Maximum sulfur content per shipment: 0.214 %
(9VAC5-80-110, Condition 27 of 12/18/09 NSR permit, last amended 1/12/12)

78. **Fuel** - The natural gas specified in Condition 8 and 27 shall meet the specifications below:

NATURAL GAS:
Minimum heat content: 1,000 Btu/cf HHV as determined by ASTM D1826, D2382, or a DEQ-approved equivalent method.
(9VAC5-80-110, Condition 28 of 12/18/09 NSR permit, last amended 1/12/12)

79. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier for each shipment of distillate oil specified in Condition 8 and 27. Each fuel supplier certification shall include the following:

a. The name of the fuel supplier;
b. The date on which the distillate oil was received;
c. The quantity of distillate oil delivered in the shipment;
d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil;
e. The sulfur content of the distillate oil;

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 77. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9VAC5-80-110, Condition 29 of 12/18/09 NSR permit, last amended 1/12/12)

80. **Visible Emissions Limit** - Unless otherwise specified in this permit, for a new emission unit at the facility, visible emissions shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-50-80 and 9VAC 5-80-110)

81. **Maintenance/Operating Procedures** - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
b. Maintain an inventory of spare parts.
c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
d. Train operators in the proper operation of all such equipment and familiarize the

operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of the trainees, the date of training, and the nature of the training.

(9VAC5-80-110, Condition 47 of 12/18/09 NSR permit, last amended 1/12/12)

Recordkeeping

82. **Records** - 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 Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Annual consumption of natural gas by the facility, calculated monthly as the sum of each consecutive 12-month period.
    b. All fuel supplier certifications.
    c. Monthly and annual calculations of particulate matter (PM & PM-10), carbon monoxide, sulfur dioxide, nitrogen oxides, and VOCs (in tons) for the facility using calculation methods approved by the Blue Ridge Regional Office. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period. The consecutive 12-month period sum 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. It should be noted that t-butyl acetate is a VOC for purposes of all recordkeeping, emission reporting, photochemical dispersion modeling and inventory requirements that apply to VOCs and shall be uniquely identified in emission reports. However, t-butyl acetate is not a VOC for purposes of VOC emission standards, VOC emission limitations, or VOC content requirements.
    d. Scheduled and unscheduled maintenance, and operator training.
    e. Results of all stack tests, visible emissions evaluations, and performance evaluations. [A]

    These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
    (9VAC5-80-110, Condition 41 of 12/18/09 NSR permit, last amended 1/12/12 and [A]- Condition 12.k of 4/16/07 SOP, last amended 4/21/15)

Testing

83. **Emissions Testing** - The ductile iron pipe manufacturing facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
    (9VAC5-80-110, Condition 42 of 12/18/09 NSR permit, last amended 1/12/12)

Facility Wide Conditions for Hazardous Air Pollutant Emissions

Limitations

84. **Emission Limits** - Hazardous air pollutant (HAP) emissions, as defined by §112(b) of the Clean Air Act, from the facility shall not exceed 9.4 tons per year of any individual HAP or 24.4 tons per year of any combination, calculated monthly as the sum of each

consecutive 12 month period. HAPs which are not accompanied by a specific CAS number shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.4 tons per year.
(9VAC5-80-110, Condition 9 of 4/16/07 SOP, last amended 4/21/15)

85. **Emission Limits** - Emissions of individual hazardous air pollutants (HAP) from the ductile iron manufacturing facility shall not exceed any corresponding emissions factor previously approved by DEQ as stipulated in Condition 87.
(9VAC5-80-110, Condition 10 of 4/16/07 SOP, last amended 4/21/15)

86. **Emissions Testing** - Upon request by the DEQ, the permittee shall conduct additional performance tests for HAP metals from the facility to demonstrate compliance with the emission limits contained in this permit. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided. The details of the tests shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110, Condition 11 of 4/16/07 SOP, last amended 4/21/15)

Recordkeeping

87. **Records** - 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 Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Monthly and annual emissions calculations for HAPs from the facility using calculation methods and emission factors approved by the Blue Ridge Regional Office to verify compliance with the emissions limitations in Condition 84. 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. [Condition 12.i of 4/16/07 SOP, last amended 4/21/15]

    b. Records of the emissions factors used for the calculations in Condition 87.a, along with the source of emissions factors and any associated information to justify that the factors are still appropriate. [9VAC5-80-110]

    (9VAC5-80-110, Condition 12.i of 4/16/07 SOP, last amended 4/21/15)

Insignificant Emission Units

88. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity (9VAC5-80-720 C)
S34	Cooling tower	9VAC5-80-720 B	PM	-
S24	Space heating	9VAC5-80-720 B	PM, NOx, SO_2, CO, VOC	-

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity (9VAC5-80-720 C)
S43	Hot water heaters	9VAC5-80-720 B	PM, NOx, SO_2, CO, VOC	-
S58	Parts Cleaner	9VAC5-80-720 B	VOC	-
S59	fuel oil storage tank	9VAC5-80-720 B	VOC	-
S61	hydraulic oil storage tank	9VAC5-80-720 B	VOC	-
S62	gear oil storage tank	9VAC5-80-720 B	VOC	-
S63	motor oil storage tank	9VAC5-80-720 B	VOC	-
S64	Used Oil Tank	9VAC5-80-720 B	VOC	-
S65	Oil-water separator	9VAC5-80-720 B	VOC	-
S69	Groundwater and soil remediation	9VAC5-80-720 B	VOC	-

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 9VAC5-80-110.

Permit Shield & Inapplicable Requirements

89. **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 Part 63 Subpart Q	MACT for Industrial Process Cooling Towers	No chromium based chemicals are used in the cooling towers
40 CFR Part 63 Subpart T	MACT for Halogenated Solvent Cleaning	No halogenated cleaning solvents are used by the facility.
40 CFR Part 63 Subpart JJJJJJ	MACT for Industrial, Commercial, and Institutional Boilers Area Sources	Hot water heaters are exempt from the subpart (§63.11195).
40 CFR Part 63 Subpart ZZZZ	MACT for Stationary Reciprocating Internal Combustion Engines (RICE)	25 KW new spark ignition RICE at an area source is subject to 40 CFR Part 60 Subpart JJJJ (§63.6590(c)(1))
40 CFR Part 60 Subpart JJJJ	NSPS for Stationary Spark Ignition Internal Combustion Engines	25kW new spark ignition emergency generator manufactured prior to July 1, 2008 is not subject to the subpart (60.4230(a)(3)(iii)
9VAC5-40-20 E	Startup, shut down, and malfunction opacity exclusion	Not a part of the SIP for Virginia

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.
(9VAC5-80-140)

General Conditions

90. **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.
(9VAC5-80-110 N)

91. **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 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9VAC5-80-110 D and 9VAC5-80-170 B)

92. **Permit Expiration - Application Submittal** - 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.
(9VAC5-80-80 C)

93. **Permit Expiration - Application Shield** - The following apply to sources subject to Article 1, Part II of 9VAC5 Chapter 80:

    a. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, 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 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.

    b. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.

    c. If an applicant submits a timely and complete application under section 9VAC5-80-80 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 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

    d. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 shall cease to apply if, subsequent to the completeness determination made pursuant section

9VAC5-80-80 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.

(9VAC5-80-80 F)

94. **Recordkeeping and Reporting** - To meet the requirements with respect to monitoring:

a. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

(i) The date, place as defined in the permit, and time of sampling or measurements.

(ii) The date(s) analyses were performed.

(iii) The company or entity that performed the analyses.

(iv) The analytical techniques or methods used.

(v) The results of such analyses.

(vi) The operating conditions existing at the time of sampling or measurement.

b. 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.

c. 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 9VAC5-80-80 G, and shall include:

(i) 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.

(ii) All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

(iii) 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."

(9VAC5-80-110 F)

95. **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 DEQ and EPA no later

than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitations, 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 9VAC5-80-80 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 9VAC5-80-110 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.
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

(9VAC5-80-110 K.5)

96. **Permit Deviation Reporting** - The permittee shall notify the Blue Ridge 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 94.c of this permit. (9VAC5-80-110 F.2 and 9VAC5-80-250)

97. **Failure/Malfunction Reporting** - In the event that any affected facilities 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 Blue Ridge 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 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring

requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.
(9VAC5-20-180 C)

98. **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.
(9VAC5-80-110 G.1)

99. **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 grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9VAC5-80-110 G.2)

100. **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.
(9VAC5-80-110 G.3)

101. **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 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1790, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC5-80-190 and 9VAC5-80-260)

102. **Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110 G.5)

103. **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.
(9VAC5-80-110 G.6)

104. **Duty to Submit Information Certification** - 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 9VAC5-80-80 G.
(9VAC5-80-110 K.1)

105. **Duty to Pay Permit Fees** - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit

maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the proceeding 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 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index. (9VAC5-80-110 H and 9VAC5-80-340 C)

106. **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 other 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.

    (9VAC5-40-90 and 9VAC5-50-90, Condition 15 of 12/18/09 NSR permit, last amended 1/12/12)

107. **Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, 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.
    (9VAC5-40-20 E and 9VAC5-50-20 E)

108. **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 9VAC5-80-140 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 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110 J)

109. **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.

    (9VAC5-80-110 K.2)

110. **Reopening For Cause** -

    a. 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 9VAC5-80-80 F.
    b. 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.
    c. 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.
    d. 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 9VAC5-80-110 D.

    (9VAC5-80-110 L)

111. **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.
(9VAC5-80-150 E)

112. **Transfer of Permits** -

a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another. (9VAC5-80-160)

b. 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 9VAC5-80-200. (9VAC5-80-160)

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 9VAC5-80-200.
(9VAC5-80-160)

113. **Malfunction as an Affirmative Defense** -

a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 113.b are met.

b. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

(i) A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

(ii) The permitted facility was at the time being properly operated.

(iii) During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.

(iv) The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9VAC5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9VAC5-20-180 C.

c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

d. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9VAC5-80-250)

114. **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 9VAC5 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 of the grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-190 C and 9VAC5-80-260)

115. **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.
(9VAC5-80-80 E)

116. **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.
(40 CFR Part 82, Subparts A-F)

117. **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).
(9VAC5-60-70 and 9VAC5-80-110 A.1)

118. **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.
(40 CFR Part 68)

119. **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.
(9VAC5-80-110 I)

120. **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 9VAC5-80-110, except subsection N, shall be included to determine compliance.

b. The permit shield described in 9VAC5-80-140 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 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110 I)