

December 17, 2010

Mr. Greg Bott
Vice President and General Manager
Chaparral (Virginia) Inc.
25801 Hofheimer Way
Petersburg VA 23803

Location: County of Dinwiddie
Registration No: 51264
County-Plant Number: 053-0104

Dear Mr. Bott:

Attached is a permit to modify and operate a steel recycling facility in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This modified permit supersedes the previous permit issued on December 18, 2008.

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

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on December 2, 2010. The Department solicited written public comments by placing a newspaper advertisement in The Progress-Index on October 18, 2010. The required comment period provided by 9 VAC 5-80-1775 expired on December 2, 2010. A public hearing was held on November 17, 2010.

This approval to modify and operate shall not relieve Chaparral (Virginia) Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

9 VAC 5-170-200 of the Board's Regulations provides that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

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

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

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

If you have any questions concerning this permit, please call the regional office at (804) 527-5020.

Sincerely,

James E. Kyle, P.E.
Air Permit Manager

JEK/SMF/51264_Proposed Permit v18.doc

Attachments: Permit
Source Testing Report Format

cc: Director, OPATS (electronic file submission)
Manager, Data Analysis (electronic file submission)
Manager, Enforcement and Compliance (electronic file submission)
Chief, Air Enforcement Branch (3AT20), U.S. EPA, Region III

**PREVENTION OF SIGNIFICANT DETERIORATION PERMIT
STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE**

This permit includes designated equipment subject to
New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants.

This permit supersedes your previous permit dated December 18, 2008.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for
the Control and Abatement of Air Pollution,

Chaparral (Virginia) Inc.
25801 Hofheimer Way
Petersburg, VA 23803
Registration No.: 51264
County-Plant No.: 053-0104

is authorized to modify and operate

a steel recycling facility

located

between Church Road and Squirrel Level Road
Dinwiddie County, Virginia

in accordance with the Conditions of this permit.

Approved on December 17, 2010.

Kyle Ivar Winter, P.E.
Deputy Regional Director

Permit consists of 24 pages.
Permit Conditions 1 to 76.
Source Testing Report Format.

PERMIT CONDITIONS - the regulatory reference and authority for each condition is listed in parentheses () after each condition.

1. Except as specified in this permit, the permitted facility is to be modified and operated as represented in the permit applications dated September 2, 1997 and September 5, 2003, including amendment sheets dated September 12, 1997; November 3, 1997; November 11, 1997; November 21, 1997; January 15, 1998; December 22, 1999; April 25, 2000; June 23, 2000; December 16, 2004; October 31, 2005; December 29, 2005; May 22, 2006; September 29, 2006; November 30, 2006; February 20, 2007; March 28, 2007; June 5, 2007; May 12, 2008; September 10, 2008; August 4, 2009; December 22, 2009; March 1, 2010; April 1, 2010; May 21, 2010; August 3, 2010; September 3, 2010 and December 2, 2010. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-80-1625)
2. Equipment to be modified consists of:

Article 8 Emission Units

- One single shaft electric arc furnace rated at 215 tons of molten steel/hour (ES1);
- One ladle refining furnace rated at 215 tons of molten steel/hour (ES2); and
- Miscellaneous meltshop operations consisting of ladle preheaters, ladle dryers, tundish preheaters, and tundish dryers, the combined total rated at 81.1×10^6 Btu/hr heat input (ES8).

Article 6 Emission Units

- Three lime silos with a combined maximum rated loading capacity of 20 tons/hr (ES17);
- One carbon silo (including supplemental transfer vessel) with a maximum rated loading capacity of 20 tons/hr (ES18); and
- One alloy unloading and alloy/lime/carbon transfer system with a maximum rated loading capacity of 100 tons/hr (ES19).

Previously permitted equipment consists of:

Article 8 Emission Units

- One preheat furnace rated at 109×10^6 Btu/hour heat input (ES3);
- One reheat furnace rated at 186×10^6 Btu/hour heat input (ES4);
- One scrap shredder with a cascade separator rated at 235 tons of scrap input/hour (ES5);
- One contact cooling tower rated at 8,900 gallons/minute (ES15);
- One non-contact cooling tower rated at 44,463 gallons/minute (ES16); and
- Unpaved roads, storage piles, and material transfer operations other than the Article 6 Emission Units specified below.

(9 VAC 5-80-1685 E)

Control Technology and Work Practice Requirements

3. Particulate emissions (particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10)) from the electric arc furnace

(ES1) shall be controlled by furnace shaft evacuation and a common positive pressure baghouse (CD1) with a design control efficiency of 99.5% and a design flow rate of 1,100,000 dry standard cubic feet per minute. The common positive pressure baghouse shall be equipped with a device to continuously measure the differential pressure across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times, except during system maintenance/repairs, calibration checks, and zero and span adjustments. The common positive pressure baghouse shall be provided with adequate access for inspection.

(40 CFR 63.10686(a), 9 VAC 5-50-400 and 9 VAC 5-80-1705)

4. Particulate emissions (PM and PM10) from the ladle refining furnace (ES2) shall be controlled by a close fitting ladle roof evacuating to the common positive pressure baghouse (CD1). The common positive pressure baghouse shall be equipped with a device to continuously measure the differential pressure across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times, except during system maintenance/repairs, calibration checks, and zero and span adjustments. The common positive pressure baghouse shall be provided with adequate access for inspection.
(40 CFR 63.10686(a), 9 VAC 5-50-400 and 9 VAC 5-80-1705)
5. Fugitive particulate emissions (PM and PM10) from the tapping, slagging, and melting operations shall be controlled by meltshop design and a building evacuation system. The meltshop shall be designed with a building partition and movable crane doors to isolate the electric arc furnace (ES1) for enhanced containment of fugitive emissions. The building evacuation system shall exhaust to the common positive pressure baghouse (CD1). The common positive pressure baghouse shall be provided with adequate access for inspection.
(9 VAC 5-50-400 and 9 VAC 5-80-1705)
6. Fugitive particulate emissions (PM and PM10) from traffic and storage piles shall be controlled through the implementation of a dust management plan. The plan shall contain:
 - a. The name and telephone number of the on site plant personnel who are responsible for the implementation of the plan;
 - b. The frequency of street cleaning for paved roads and paved parking lots;
 - c. The frequency of wetting for dust suppression on unpaved roads and storage piles;
 - d. The frequency of the application of binders to inhibit dust emissions from unpaved roads and storage piles; and
 - e. The enforcement of vehicular traffic speed limitations to prevent airborne dust.

As of the date of this permit, the permittee has submitted, and the Director, Piedmont Regional Office has approved, a dust management plan meeting the requirements of this Condition. A copy of the approved dust management plan shall be kept on site.
(9 VAC 5-80-1705)

7. Fugitive particulate emissions (PM and PM10) from scrap shredding (ES5) shall be controlled by the use of a water deluge system. The scrap shredding process shall be provided with adequate access for inspection.
(9 VAC 5-80-1705)
 8. Fugitive particulate emissions (PM and PM10) from the baghouse dust handling system shall be controlled by enclosure of the equipment. The baghouse dust handling system shall be provided with adequate access for inspection.
(9 VAC 5-50-400 and 9 VAC 5-80-1705)
 9. Nitrogen oxide (NOx) emissions from the electric arc furnace (ES1), the preheat furnace (ES3), the reheat furnace (ES4), and the miscellaneous melt shop operations (ES8) shall be controlled by the use of low NOx burners. The electric arc furnace (ES1), the preheat furnace (ES3), the reheat furnace (ES4), and the miscellaneous melt shop operations (ES8) shall be provided with adequate access for inspection.
(9 VAC 5-80-1705)
 10. Volatile organic compound (VOC) emissions from the electric arc furnace (ES1) shall be controlled through the implementation of a scrap handling, management, and inspection (HMI) plan. At a minimum, the plan shall address:
 - a. The name and telephone number of the on site plant personnel who are responsible for the implementation of the plan;
 - b. The personnel staffing required to execute the plan and individual responsibilities of each employee in the plan; and
 - c. Scrap specifications designed to control inappropriate items and hazardous materials in scrap.
- As of the date of this permit, the permittee has submitted, and the Director, Piedmont Regional Office has approved, a scrap HMI plan meeting the requirements of this Condition. A copy of the approved scrap HMI plan shall be kept on site.
(9 VAC 5-80-1705)
11. Carbon monoxide (CO) emissions from the ducting of the electric arc furnace (ES1) shall be controlled by the use of ducting to capture emissions, the optimization of the operation of the EAF to minimize CO formation and post-combustion shaft burners with a combined maximum rated heat input capacity of at least 20.5×10^6 BTU/hour to provide the time, temperature, and mixing conditions necessary to maximize the conversion of CO to CO₂. The post-combustion shaft burners shall be provided with adequate access for inspection and shall be in operation during all periods the EAF is in power-on mode while scrap is in the shaft such that the CO emissions standards and limits of Condition #13 are complied with.
(9 VAC 5-80-1705)
 12. Chromium-based water treatment chemicals shall not be used in the cooling towers.
(9 VAC 5-80-1705)

Allowable Emission Rates

13. Subject to Condition #32, emissions from the operation of the meltshop (ES1 and ES2) exhausting from the common positive pressure baghouse (CD1) shall not exceed the limits specified below:

Pollutant	Emission Limitation	Averaging Time	Compliance Method
CO	2580.0 lbs/hr	24-hour rolling average	CERMS specified in Condition #47
CO	10.5 lbs/ton	30-day rolling average	CERMS specified in Condition #47
CO	6460.0 tons/yr	Sum of each consecutive 12-month period	CERMS specified in Condition #47
CO	7.6 lbs/ton	12-month rolling average	CERMS specified in Condition #47
NO _x	150.5 lbs/hr	24-hour rolling average	CERMS specified in Condition #47
NO _x	0.7 lbs/ton	30-day rolling average	CERMS specified in Condition #47
NO _x	595.0 tons/yr	Sum of each consecutive 12-month period	CERMS specified in Condition #47

(9 VAC 5-80-1705)

14. Emissions from the operation of the meltshop (ES1 and ES2) exhausting from the common positive pressure baghouse (CD1) shall not exceed the limits specified below:

		<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter as determined by EPA Reference Method 5D	0.0018 gr/dscf	17.0	74.3
PM10 as determined by EPA Reference Method 5D	0.0018 gr/dscf	17.0	74.3
SO ₂ based on a 24-hour average and determined by EPA Reference Method 6 or equivalent	0.7 lbs/ton	150.5	595.0
VOC based on a 24-hour average and determined by EPA Reference Method 25 or equivalent	0.35 lbs/ton	75.3	297.5

	<u>lbs/hr</u>	<u>tpy</u>
Lead based on a 24-hour average and determined by EPA Reference Method 29 or equivalent	0.34	1.49

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-1705)

15. In the event that the actual emissions of SO₂ (in lbs/ton) or VOC (in lbs/ton), as measured during the performance test required by Condition #29, are less than 83.3% of the Best Available Control Technology (BACT) emission standards (lbs/ton) stated in Condition #14, the permit shall be amended such that the hourly and annual emissions limits listed in Conditions #14 and #24 and the BACT emission standards listed in Condition #14 comply with the table below:

SO ₂	If the actual emissions are:	<0.07 lbs/ton	≥0.07 lbs/ton and <0.22 lbs/ton	≥0.22 lbs/ton and <0.58 lbs/ton
	The emission standard becomes:	=0.10 lbs/ton	=1.4x(actual emissions in lbs/ton)	=1.2x(actual emissions in lbs/ton)
VOC	If the actual emissions are:	<0.09 lbs/ton	≥0.09 lbs/ton and <0.17 lbs/ton	≥0.17 lbs/ton and <0.29 lbs/ton
	The emission standard becomes:	=0.13 lbs/ton	=1.4x(actual emissions in lbs/ton)	=1.2x(actual emissions in lbs/ton)

The hourly and annual SO₂ and VOC emission limits of Conditions #14 and #24 shall be amended proportionally to the above adjustment to the BACT emission standards. The amended emission standards and limits of Conditions #14 and #24 shall be effective and enforceable 30 days following the receipt by the Director, Piedmont Regional Office of the emissions information specified in Condition #29. (9 VAC 5-80-1705)

16. In the event that the actual annual emission rate of CO and NO_x (in lbs/ton), as determined by two years of data from the CERMS required in Condition #47, are less than 83.3% of the long-term BACT emission standards (12-month lbs/ton for CO; 30-day lbs/ton for NO_x) stated in Condition #13, the permit shall be amended such that the annual emission limits listed in Conditions #13 and #24 and the long-term BACT emissions standards listed in Condition #13 comply with the table below:

CO	If the actual emissions are:	<1.24 lbs/ton	≥1.24 lbs/ton and <2.85 lbs/ton	≥2.85 lbs/ton and <6.31 lbs/ton
	The emission standard becomes:	=1.73 lbs/ton	=1.4x(actual emissions in lbs/ton)	=1.2x(actual emissions in lbs/ton)
NO _x	If the actual emissions are:	<0.19 lbs/ton	≥0.19 lbs/ton and <0.35 lbs/ton	≥0.35 lbs/ton and <0.58 lbs/ton
	The emission standard becomes:	=0.27 lbs/ton	=1.4x(actual emissions in lbs/ton)	=1.2x(actual emissions in lbs/ton)

The annual CO and NO_x emission limits of Conditions #13 and #24 shall be amended proportionally to the above adjustment to the BACT emission standards. The amended CO and NO_x emission standards and limits of Conditions #13 and #24 shall be effective and enforceable 30 days following the receipt by the Director, Piedmont Regional Office of the emissions information specified in this condition.
 (9 VAC 5-80-1705)

17. Emissions from the operation of the preheat furnace (ES3) and the reheat furnace (ES4) exiting through a common stack and which are based on the use of natural gas shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	3.0	9.7
PM10	3.0	9.7
Carbon Monoxide (CO)	22.1	72.4
Nitrogen Oxides (NO _x)	62.0	203.1
Sulfur Dioxide (SO ₂)	0.2	0.6
Volatile Organic Compounds (VOC)	1.6	5.1

(9 VAC 5-80-1705)

18. Emissions from the operation of the meltshop (ES1 and ES2) exiting through the roof monitor shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	7.3	28.9
PM10	5.6	22.0

(9 VAC 5-80-1705)

19. Fugitive emissions from the operation of the miscellaneous meltshop operations (ES8) shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	0.9	4.0
PM10	0.9	4.0
Carbon Monoxide (CO)	2.0	8.7
Nitrogen Oxides (NO _x)	7.8	34.3
Sulfur Dioxide (SO ₂)	0.1	0.2

Volatile Organic Compounds (VOC)	0.5	1.9
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(9 VAC 5-80-1705)

20. Fugitive emissions from the operation of the shredder (ES5) shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	0.9	3.6
PM10	0.7	3.2

(9 VAC 5-80-1705)

21. Fugitive emissions from the operation of the contact cooling tower (ES15) shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	0.9	3.9
PM10	0.9	3.9

(9 VAC 5-80-1705)

22. Fugitive emissions from the operation of the noncontact cooling tower (ES16) shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	1.1	4.9
PM10	1.1	4.9

(9 VAC 5-80-1705)

23. Fugitive emissions from vehicular traffic shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	10.0	5.5
PM10	2.0	1.1

(9 VAC 5-80-1705)

24. Regardless of the emission limitations listed in Conditions #13 through #23, facility wide emissions from all permitted Article 8 emission units shall not exceed:

	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	42.3	136.0
PM10	31.6	123.5
Sulfur Dioxide (SO ₂)	150.8	595.8
Nitrogen Oxides (NO _x)	249.8	832.4
Carbon Monoxide (CO)	2604.1	6541.1
Volatile Organic Compounds (VOC)	77.4	304.5
Lead	0.34	1.49

(9 VAC 5-80-1705)

Visible Emission Requirements

25. The common positive pressure baghouse (CD1) shall not exhibit visible emissions of 3 percent opacity or greater as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-400 and 9 VAC 5-80-1705)
26. Visible emissions from the meltshop building and due solely to the operations of the electric arc furnace (ES1) shall not exceed 6 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.
(40 CFR 63.10686(b)(2), 9 VAC 5-50-400 and 9 VAC 5-80-1705)
27. Visible emissions from the meltshop building shall not exceed 10 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.
(9 VAC 5-80-1705)
28. Visible emissions from the baghouse dust handling system shall not exceed 10 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.
(9 VAC 5-50-400 and 9 VAC 5-80-1705)

Testing Requirements

29. Performance tests shall be conducted for SO₂, VOC and lead from the common positive pressure baghouse (CD1) to determine compliance with the emission limits contained in Condition #14. Performance tests shall also be conducted for mercury from the common

positive pressure baghouse (CD1) for emission inventory purposes. The minimum length of each testing run for SO₂, VOC, lead and mercury shall be 24 hours. The tests shall be performed, and demonstrate compliance, within 180 days after the date of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Four copies of the test results shall be submitted to the Director, Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1675)

30. During the performance tests required by Conditions #29 and #31, the facility shall monitor and include in the testing report the following information:
- a. Charge weights and materials;
 - b. Tap weights and materials;
 - c. Heat times, including start and stop times;
 - d. Log of process operation, including periods of no operation during testing;
 - e. Control device operation log; and
 - f. EPA Method 9 (reference 40 CFR 60, Appendix A) data.

Performance tests shall be conducted under conditions that are representative of the facility's performance. Operations during startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of start-up, shutdown, and malfunction be considered a violation of the applicable emission limit during a performance test. (9 VAC 5-50-30)

31. To ensure that the performance tests required by Condition #29 are representative of the facility's performance, the facility shall perform subsequent performance tests when the annual production rate of steel exceeds 1,300,000 tons per year or two years after the date of this permit, whichever is earlier. The facility shall perform testing to ensure compliance with the limits listed in Condition #14, as amended by Condition #15, for the following pollutants: particulate matter, SO₂, VOC and lead. Performance tests shall also be conducted for mercury for emission inventory purposes. The annual production rate of steel shall be calculated as the sum of each consecutive 12 month period. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Four copies of the test result shall be submitted to the Director, Piedmont Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 and 9 VAC 5-80-1675)

32. If the results of the initial 24 months of CO emission data referenced in Condition #16 indicate CO emissions from the operation of the meltshop (ES1 and ES2) exceed the 12-month CO lbs/ton emission limit of Condition #13, the permittee shall complete an optimization of all equipment affecting such emissions and monitor the CO emissions from the operation of the meltshop (ES1 and ES2) in accordance with the following:
- a. The permittee shall submit to the Director, Piedmont Regional Office for approval a plan for optimizing the performance of all equipment affecting CO emissions. The optimization plan shall be submitted within 60 days of reporting to DEQ the results of the initial 24 months of CO emission data.
 - b. The permittee shall complete the approved optimization and notify the Director, Piedmont Regional Office in writing of such completion within 90 days of DEQ approval of the optimization plan. If additional time is needed to complete the approved optimization, the permittee may submit a written request for additional time to the Director, Piedmont Regional Office.
 - c. Upon completion of the approved optimization, the permittee shall monitor an additional 12 months of CO emission data from the operation of the meltshop (ES1 and ES2) and report the results within 30 days of completion of this monitoring period. The details of this monitoring and the associated report shall be arranged with the Director, Piedmont Regional Office.

If results of the monitoring required in paragraph c. of this condition indicate an exceedance of the 12-month CO lbs/ton emission limit of Condition #13, a change to the permit in accordance with 9 VAC 5-80-1925 shall be initiated within 30 days of reporting to DEQ the results of the emission monitoring to revise the 12-month CO lbs/ton emission limit to the optimized rate up to a maximum rate of 8.4 lbs/ton. During the initial 24-month emission monitoring period referenced in Condition #16; the preparation, submittal and consideration by the Director, Piedmont Regional Office, of the optimization plan; the implementation of the approved optimization; the subsequent 12-month emission monitoring period; the preparation, submittal and consideration by the Director, Piedmont Regional Office, of the monitoring report; or the permit change as required in this condition, failure to meet the 12-month CO lbs/ton emission limit in this permit shall not be a violation of this permit so long as the CO emissions do not exceed 8.4 lbs/ton on a rolling 12-month basis.
(9 VAC 5-80-1675 and 9 VAC 5-50-30 G)

Allowable Fuels and Throughput Requirements

33. The approved fuel for the preheat furnace (ES3) and the reheat furnace (ES4) is natural gas. The approved fuel for the miscellaneous meltshop operations (ES8) is natural gas. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1985 E and 9 VAC 5-80-1705)
34. The combined annual throughput of natural gas to the preheat furnace (ES3) and the reheat furnace (ES4) shall not exceed 1,934 million cubic feet per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1985 E and 9 VAC 5-80-1705)

35. The steel recycling facility shall produce no more than 1,700,000 tons of molten steel per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1985 E)

40 CFR 63 Subpart YYYYY (National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities) Requirements

36. *Pollution prevention plan (PP Plan)*. For the production of steel other than leaded steel, the permittee shall operate in accordance with the PP Plan (for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the electric arc furnace (ES1)) most recently approved by the Director, Piedmont Regional Office. In the event the permittee desires to produce leaded steel, the permittee shall prepare and implement a PP Plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the electric arc furnace (ES1). The permittee shall submit the PP Plan to the Director, Piedmont Regional Office for approval. The permittee shall operate according to the PP Plan as submitted during the review and approval process, operate according to the approved PP Plan at all times after approval, and address any deficiency identified by the Director, Piedmont Regional Office within 60 days following disapproval of a PP Plan. The permittee may request approval to revise the PP Plan and may operate according to the revised PP Plan unless and until the revision is disapproved by the Director, Piedmont Regional Office. The permittee shall keep a copy of the PP Plan onsite, and the permittee shall provide training on the PP Plan's requirements to all plant personnel with materials acquisition or inspection duties. The PP Plan shall include the information in 40 CFR 63.10685 paragraphs (a)(1)(i) through (iii):
- a. Specifications that scrap materials shall be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the electric arc furnace (ES1);
 - b. A requirement in the permittee's scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel; and
 - c. Procedures for determining if the requirements and specifications in (a) and (b) of this condition are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

The requirements of this condition do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the electric arc furnace (ES1). These exempted materials must be identified in the pollution prevention plan.
(40 CFR 63.10685(a) and 9 VAC 5-80-1985 E)

37. *Mercury requirements*. For scrap containing motor vehicle scrap, the permittee shall procure scrap pursuant to either Condition #38 or #39 for each scrap provider, contract or shipment. For scrap that does not contain motor vehicle scrap, the permittee shall procure the scrap pursuant to the requirements of Condition #40 for each scrap provider, contract or shipment. The permittee may have one scrap provider, contract or shipment subject to one Condition and others subject to another Condition. As of the date of this permit, the permittee has submitted a

Notification of Compliance Status certifying compliance with the mercury requirements of 40 CFR 63 Subpart YYYYYY by use of the option specified in Condition #38. The selection by the permittee of one of the two Conditions for procuring scrap that contains motor vehicle scrap shall not limit the ability of the permittee to change to the other Condition at its election (provided all requirements associated with making that change, including the required notifications, are met). (40 CFR 63.10685(b) and 9 VAC 5-80-1985 E)

38. *Option for approved mercury programs.* As of the date of this permit, the permittee has certified in its Notification of Compliance Status that it participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of 40 CFR 63.10685. If the permittee purchases motor vehicle scrap from a broker, the permittee shall certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of 40 CFR 63.10685. The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under 40 CFR 63.10685(b)(2) unless and until the Administrator disapproves the program (in part or in whole) under 40 CFR 63.10685(b)(2)(iii). The permittee shall develop and maintain onsite a plan demonstrating the manner through which the permittee is participating in the EPA-approved program.
- a. The plan shall include facility-specific implementation elements, corporate- wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.
 - b. The permittee shall provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Director, Piedmont Regional Office, the permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
 - c. The permittee shall conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

(40 CFR 63.10685(b)(2) and 9 VAC 5-80-1985 E)

39. *Option for specialty metal scrap.* In the event the permittee elects to comply with Condition #37 using this Condition #39, the permittee shall submit and certify in a notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches. (40 CFR 63.10685(b)(3) and 9 VAC 5-80-1985 E)
40. *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in Conditions #38 and #39, the permittee shall certify in its notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap. (40 CFR 63.10685(b)(4) and 9 VAC 5-80-1985 E)

41. *Recordkeeping and reporting requirements.* In addition to the records required by 40 CFR 63.10, the permittee shall keep records to demonstrate compliance with the requirements for the PP Plan in Condition #36 and for mercury in Conditions #37 through #39 as applicable. The permittee shall keep records documenting compliance with Condition #40 for scrap that does not contain motor vehicle scrap.

- a. The permittee shall maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the permittee purchases motor vehicle scrap from a broker, the permittee shall maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.
- b. The permittee shall submit semiannual compliance reports to the Director, Piedmont Regional Office for the control of contaminants from scrap according to the requirements in §63.10(e). The report shall clearly identify any deviation from the requirements in Conditions #36 through #40 and the corrective action taken. The permittee shall identify which compliance option in Condition #37 applies to each scrap provider, contract, or shipment.

(40 CFR 63.10685(c) and 9 VAC 5-80-1985 E)

42. *Electric Arc Furnace Requirements.* The permittee shall not discharge or cause the discharge into the atmosphere from the electric arc furnace (ES1) any gases which exit from the common positive pressure baghouse (CD1) and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf). Note that the requirements of 63.10686(a) and 63.10686(b)(2) are included in Conditions #3 and #26 of this permit.

(40 CFR 63.10686(b)(1) and 9 VAC 5-80-1985 E)

43. *Startup, shutdown and malfunction (SSM) plan.* The permittee shall develop and implement a written startup, shutdown and malfunction (SSM) plan as specified in 40 CFR 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the electric arc furnace (ES1) during periods of SSM and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63 Subpart YYYYYY. As of the date of this permit, the permittee has submitted, and the Director, Piedmont Regional Office has approved a SSM plan meeting the requirements of this Condition. A copy of the approved SSM plan shall be kept on site.

(40 CFR 63.6(e)(3) and 9 VAC 5-80-1985 E)

44. *Recordkeeping.* The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with the requirements of 40 CFR 63 Subpart YYYYYY. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed the particulate matter emission standard of Condition #42 or the opacity emission standard of Condition #26;

- b. The occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the required air pollution control and monitoring equipment;
- c. All required maintenance performed on the air pollution control and monitoring equipment;
- d. Actions taken during periods of startup or shutdown when the source exceeded the particulate matter emission standard of Condition #42 or the opacity emission standard of Condition #26 and when the actions taken are different from the procedures specified in the permittee's SSM plan; or actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the permittee's SSM plan;
- e. All information necessary, including actions taken, to demonstrate conformance with the permittee's SSM plan when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed the particulate matter emission standard of Condition #42 or the opacity emission standard of Condition #26), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan (the information needed to demonstrate conformance with the SSM plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events); and
- f. All notifications of compliance status and all documentation supporting the initial notifications and notifications of compliance status required by 40 CFR 63 Subpart YYYYYY.

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

(40 CFR 63.10(b) and 9 VAC 5-50-50)

45. *General Requirement* - Except where this permit is more restrictive than the applicable requirement, the permittee shall operate the EAF (ES1) in compliance with all requirements of 40 CFR 63 Subparts A and YYYYYY).
(40 CFR 63 Subparts A and YYYYYY and 9 VAC 5-80-1985 E)

Monitoring Requirements

46. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 F)
47. Except during periods of acceptable monitor downtime as defined below, the permittee shall install, calibrate, operate, maintain and record the output of a continuous emission rate monitoring system (CERMS), for measuring emissions of carbon monoxide and nitrogen oxides from the operation of the meltshop (ES1 and ES2) exhausting to the common positive pressure

baghouse (CD1). Each CERMS shall be installed, located, operated and maintained in accordance with the requirements of 40 CFR 60.13 and all applicable Appendixes and Performance Specifications of 40 CFR Part 60 (including 40 CFR 60, Appendixes B and F). Unless otherwise approved by the Director, Piedmont Regional Office, the flow monitor portion of the CERMS shall meet the calibration drift assessment, relative accuracy test audit and reporting provisions of 40 CFR 60, Appendix F, procedure 1. Data from the CERMS, adjusted as applicable in accordance with 40 CFR 60.13(h)(2), shall be used to determine direct compliance with the emission limits in Condition #13, as modified by Conditions #16 or #32, on a twenty-four hour or thirty day rolling average, as applicable. In accordance with 9 VAC 5-50-50, the Director, Piedmont Regional Office may approve adjustments to the CERMS requirements of Conditions #47-49 of this permit. For the purposes of this permit, acceptable monitor downtime includes reasonable periods due to (i) damage, malfunctions or breakdowns of the monitoring system that are not reasonably preventable, (ii) scheduled monitoring system maintenance based on the equipment manufacturer's recommendations, (iii) repairs of the monitoring system, and (iv) monitoring system downtime to conduct calibration drift checks, zero and span adjustments, calibration error audits, relative accuracy test audits, linearity checks, cylinder gas audits, or any other tests, checks, adjustments or audits required by this permit, any compliance document, applicable requirement, or at the request or direction of the Director, Piedmont Regional Office, or other applicable authority.
(9 VAC 5-50-40)

48. Unless the frequency of such reports has been reduced by the Director, Piedmont Regional Office, the permittee shall submit excess emission reports for each CERMS to the Director, Piedmont Regional Office within 30 days after the end of each calendar quarter. Excess NO_x and CO emissions are defined as any 24-hour or 30-day rolling average emission rate, computed in accordance with 40 CFR 60.13(h), that exceeds the applicable emission limit in Condition #13, as modified by Conditions #16 or #32. Each quarterly excess emission report shall contain, at a minimum, the dates included in the calendar quarter and the following (additional details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office):
- a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), and the corrective action taken or preventative measures adopted;
 - c. The date and time identifying each period during which the CERMS was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments; and
 - d. When no excess emissions have occurred or the CERMS have not been inoperative, repaired or adjusted, such information shall be stated in that report.

(9 VAC 5-50-50)

49. The permittee shall submit reports to the Director, Piedmont Regional Office for each CERMS within 30 days after the end of each semi-annual period. Each semi-annual report shall include the dates included in the semi-annual period and the following:
- a. The hourly NO_x and CO emission rates, in lbs/hr, as 24-hour rolling averages;
 - b. Identification of days for which NO_x and CO data have not been obtained by an approved method for at least 75 percent of operating hours, reasons for not obtaining sufficient data and corrective actions taken;
 - c. Identification of any times when emissions data have been excluded from the calculation of average emission rates (except as allowed by 40 CFR 60.13), justification for excluding data and a description of corrective action taken;
 - d. Identification of any times when the pollutant concentration exceeded the full span of the CERMS;
 - e. Description of any modifications to the CERMS that could affect its ability to comply with the requirements of 40 CFR 60, Appendices B and F; and
 - f. Summary of the results of daily CERMS calibration drift tests and semi-annual accuracy assessments as required by 40 CFR 60, Appendix F, Procedure 1.

The first semi-annual periods shall begin on the effective date of this permit and shall conclude at the earlier of June 30 or December 31 following the effective date. Thereafter, semi-annual periods shall begin on January 1 and July 1 and conclude six months later.
(9 VAC 5-50-50)

50. Visible emission observations shall be conducted on the common positive pressure baghouse (CD1) at least once per day when the electric arc furnace (ES1) is operating in the melting and refining period. These observations shall be taken in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A), and, for at least three 6-minute periods, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly related to the cause or location of visible emissions observed during a single incident. Records shall be maintained of any 6 minute average that is in excess of the emission limit specified in Condition #25. Allowances shall be made for periods of meltshop down time and poor weather.
(9 VAC 5-50-400)

51. The facility shall check and record on a once-per-shift basis the control system fan motor amperes and damper position.
(9 VAC 5-50-400)

52. The facility shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system. This inspection shall include observations of the physical appearance of the equipment, including, but not limited to, presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion. Any deficiencies shall be noted and proper maintenance performed. (9 VAC 5-50-400)

Notification, Reporting and Recordkeeping Requirements

53. The permittee shall furnish written notification to the Director, Piedmont Regional Office of:

- a. The anticipated date of performance tests listed in Conditions #29 and #31 postmarked at least 30 days prior to such date; and
- b. Applicable Notifications of Compliance (NOC) containing the information specified in 40 CFR 63.9(h)(2)(i). Each NOC shall also include the applicable certifications specified at 40 CFR 63.10690(b). Each NOC shall be postmarked before the close of business on the 60th day following completion of the relevant compliance demonstration, except to the extent such time period has been adjusted by the Director, Piedmont Regional Office, in accordance with 40 CFR 63.9(h)(2)(ii).

(40 CFR 63.10690, 40 CFR 63.9(h) and 9 VAC 5-50-50)

54. The permittee shall submit the following reports to demonstrate compliance with this permit. The content of and format of such reports shall be arranged with the Director, Piedmont Regional Office. These reports shall include, but are not limited to:

- a. Periodic Start-up, Shutdown and Malfunction Reports containing the information specified in 40 CFR 63.10(d)(5)(i) shall be submitted if actions taken by the permittee during a startup or shutdown (and the startup or shutdown causes the electric arc furnace (ES1) to exceed the particulate matter emission standard of Condition #42 or the opacity emission standard of Condition #26), or malfunction of the electric arc furnace (ES1) (including actions taken to correct a malfunction) are consistent with the procedures specified in the SSM plan. The SSM report shall be delivered or postmarked by the 30th day following the end of each calendar half;
- b. Immediate Start-up, Shutdown and Malfunction Reports containing the information specified in 40 CFR 63.10(d)(5)(ii) shall be submitted any time an action taken by the permittee during a startup or shutdown that caused the electric arc furnace to exceed the particulate matter emission standard of Condition #42 or the opacity emission standard of Condition #26, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the SSM plan. The permittee shall submit the report within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event; and
- c. Performance test reports as required by Conditions #29 and #31.

(40 CFR 63.10(d) and 9 VAC 5-50-50)

55. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
- a. The yearly production of steel in tons, calculated monthly as the sum of each consecutive 12 month period;
 - b. The daily production of steel in tons;
 - c. The combined yearly throughput of natural gas in million cubic feet to the preheat furnace (ES3) and the reheat furnace (ES4), calculated monthly as the sum of each consecutive 12 month period;
 - d. Periods during which the control system fan motor amperes operated at values exceeding ± 15 percent of the values established in accordance with 40 CFR 60.274a(c);
 - e. Periods during which the 6-minute average required to be recorded in Condition #50 are in excess of the emission limit specified in Condition #25;
 - f. Time, date, and findings of the monthly operational status inspections required in Condition #52;
 - g. Monthly total dissolved solids test results from the cooling tower water to be used to determine compliance with the emission limits in Conditions #21 and #22;
 - h. Continuous monitoring system calibrations and calibration checks, percent operating time and excess emissions, and adjustments and maintenance performed on continuous monitoring systems and devices; and
 - i. Information required in each excess emission report and continuous monitoring system semi-annual report as required in this permit.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50)

56. Semi annually the facility shall submit a written report of exceedances of the opacity standard in Condition #25. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater. These reports shall also contain the periods during which the control system fan motor amperes value exceeded ± 15 percent of the value established in accordance with 40 CFR 60.274a(c). Operation at these values may be considered to be unacceptable operation and maintenance of the facility.
(9 VAC 5-50-400)

Minor NSR (Article 6) Requirements

Conditions #57-66 contain applicable requirements which result from the implementation of Virginia's minor NSR permitting program and are therefore not considered requirements of the Prevention of Significant Deterioration permitting program. All other conditions originate from Article 8 with an effective date of December 17, 2010.

- 57. Particulate emissions (PM and PM10) from the common vent from lime silos #1 and #2 and the vent from lime silo #3 (collectively ES17) shall be controlled by a bin vent filters. The bin vent filters shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation.
 (Origin: Article 6; Authority: 9 VAC 5-50-260; Effective date: December 17, 2010)
- 58. Particulate emissions (PM and PM10) from the carbon silo (ES18) shall be controlled by a bin vent filter. The bin vent filter shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation.
 (Origin: Article 6; Authority: 9 VAC 5-50-260; Effective date: December 17, 2010)
- 59. Particulate emissions (PM and PM10) from the alloy unloading and alloy/lime/carbon transfer system (ES19) shall be controlled by fabric filters, partial enclosures or equivalent. The fabric filters, partial enclosures or equivalent shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation.
 (Origin: Article 6; Authority: 9 VAC 5-50-260; Effective date: December 17, 2010)
- 60. The combined annual throughput of lime to the lime silos (ES17) shall not exceed 85,000 tons per year, calculated as the sum of each consecutive 12 month period.
 (Origin: Article 6; Authority: 9 VAC 5-80-1180; Effective date: December 17, 2010)
- 61. The annual throughput of carbon to the carbon silo (ES18) shall not exceed 36,000 tons per year, calculated as the sum of each consecutive 12 month period.
 (Origin: Article 6; Authority: 9 VAC 5-80-1180; Effective date: December 17, 2010)
- 62. The annual throughput of alloy to the alloy unloading and alloy/lime/carbon transfer system (ES19) shall not exceed 60,000 tons per year, calculated as the sum of each consecutive 12 month period.
 (Origin: Article 6; Authority: 9 VAC 5-80-1180; Effective date: December 17, 2010)
- 63. Emissions from the operation of the emission units specified below shall not exceed the limits specified below:

<u>Lime Silos (ES17)</u>	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	0.1	0.3
PM10	0.1	0.2
<u>Carbon Silo (ES18)</u>	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	0.1	0.1
PM10	0.1	0.1

<u>Alloy Unloading and Alloy/Lime/Carbon Transfer System (ES19)</u>	<u>lbs/hr</u>	<u>tpy</u>
Particulate Matter	2.5	1.6
PM10	1.2	0.8

(Origin: Article 6; Authority: 9 VAC 5-50-260; Effective date: December 17, 2010)

64. Visible emissions from each fabric filter and bin vent filter required by Conditions #57-59 shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(Origin: Article 6; Authority: 9 VAC 5-50-260; Effective date: December 16, 2010)

65. Each fabric filter and bin vent filter required by Conditions #57-59 shall be observed visually once per week for at least a brief time period during normal operations to determine if there are any visible emissions. For the bin vent filters, the weekly observation shall be performed during the silo loading process. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.

(Origin: Article 6; Authority: 9 VAC 5-80-1180; Effective date: December 17, 2010)

66. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

- a. The yearly throughput of lime, carbon and alloy, in tons, to the lime silos (ES17), carbon silo (ES18) and alloy unloading and alloy/lime/carbon transfer system (ES19), respectively, calculated monthly as the sum of each consecutive 12 month period; and
- b. The visible emission observation log required by Condition #65.

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

(Origin: Article 6; Authority: 9 VAC 5-50-50; Effective date: December 17, 2010)

General Conditions

67. This permit may be suspended or revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;

- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1985 F and 9 VAC 5-80-1210 F)

68. The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
- c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
- d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130)

69. The permittee shall furnish notification to the Director, Piedmont Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

70. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such 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; and
- 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 trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E)

- 71. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J)
- 72. The permittee shall furnish notification to the Director, Piedmont Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
 - a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.
(9 VAC 5-20-180 B)
- 73. The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I)
- 74. In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1975 B and 9 VAC 5-80-1240 B)

75. Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-170-60 and 9 VAC 5-20-160)
76. The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1985 E and 9 VAC 5-80-1180)

SOURCE TESTING REPORT FORMAT

Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Tester; name, address and report date

Certification

1. Signed by team leader / certified observe (include certification date)
- * 2. Signed by reviewer

Introduction

1. Test purpose
2. Test location, type of process
3. Test dates
- * 4. Pollutants tested
5. Test methods used
6. Observers' names (industry and agency)
7. Any other important background information

Summary of Results

1. Pollutant emission results / visible emissions summary
2. Input during test vs. rated capacity
3. Allowable emissions
- * 4. Description of collected samples, to include audits when applicable
5. Discussion of errors, both real and apparent

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Process and control equipment data

* Sampling and Analysis Procedures

1. Sampling port location and dimensioned cross section
2. Sampling point description
3. Sampling train description
4. Brief description of sampling procedures with discussion of deviations from standard methods
5. Brief description of analytical procedures with discussion of deviation from standard methods

Appendix

- * 1. Process data and emission results example calculations
2. Raw field data
- * 3. Laboratory reports
4. Raw production data
- * 5. Calibration procedures and results
6. Project participants and titles
7. Related correspondence
8. Standard procedures

* Not applicable to visible emission evaluations.