



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462
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Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

October 11, 2013

Mr. Paul Grego
Plant Manager
Wheelabrator Portsmouth, Inc.
3809 Elm Avenue
Portsmouth, Virginia 23704-7101

Location: Portsmouth
Registration No.: 61018
AFS Id. No.: 51-740-00078

Dear Mr. Grego:

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

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

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

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

Mr. Paul Grego
Wheelabrator Portsmouth, Inc.
October 11, 2013
Page 2

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

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

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

If you have any questions concerning this permit, please contact Ms. Laura D. Corl at (757) 518-2178 or by e-mail at laura.corl@deq.virginia.gov.

Sincerely,

Troy D. Breathwaite
Regional Air Permits Manager

TDB/LDC/61018_012_13_FOP_T5Renewal_CvrLtr_Wheelabrator Portsmouth.docx

Attachments: Permit
Source Testing Report Format

Link to NSPS, Subpart Db, MACT ZZZZ, MACT DDDDD:
http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl

cc: Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III
Manager/Inspector, Air Compliance



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Federal Operating Permit Article 1

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

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

Permittee Name:	Wheelabrator Portsmouth, Inc.
Facility Name:	Wheelabrator Portsmouth Refused Derived Fuel Processing Facility & Waste to Energy Plant
Facility Location:	3809 Elm Avenue, Portsmouth, Virginia
Registration Number:	61018
Permit Number:	TRO-61018

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 44)
State Only Enforceable Requirements (Page 44)

October 11, 2013

Effective Date

October 10, 2018

Expiration Date

Maria R. Nold

October 11, 2013

Signature Date

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I. Facility Information

Permittee

Wheelabrator Portsmouth, Inc.
3809 Elm Avenue
Portsmouth, Virginia 23704-7101

Responsible Official

Paul Grego
Plant Manager

Facility

Wheelabrator Portsmouth Refused Derived Fuel Processing Facility & Waste to Energy Plant
3809 Elm Avenue
Portsmouth, Virginia 23704-7101

Contact Person

Jeff Landrum
Environmental Manager
(757) 393-3105
jlandrum@wm.com

County-Plant Identification Number: 51-740-00078

SIC Codes: 9511 (Solid Waste Management), 4953 (Refuse Systems), 4911 (Electrical Services), and 4961 (Steam Supply)

NAICS Codes: 562213 and 562219 (Waste management), 221330 (Steam Generation), 221119 (Other electrical generation), and 924110 (Administration)

Facility Description:

Waste is received on the Refuse Derived Fuel (RDF) plant tipping floor and separated into two piles: waste that can be processed and waste that cannot be processed. Any large waste that is processable is then diverted to the portable bulky waste shredder to be shredded to a manageable size. This waste is then introduced back on the tipping floor. All non-processable waste is sent offsite for proper disposal. All processable waste is then introduced to three process lines using a crane to place material on a conveyor belt. Sorting, sizing and separation of aluminum and ferrous materials takes place through a series of hand picking stations, crane picking stations, shredders and magnets on each process line. Waste is then loaded onto the RDF transfer conveyor where it is conveyed to the Waste to Energy (WTE) plant for combustion.

Primary Operating Scenario: The WTE plant consists of four combustion trains in which refuse derived fuel (RDF), Non-Hazardous Solid Waste (liquid), or oil is combusted to produce steam and electricity. The primary fuels burned are RDF and Non-Hazardous Solid Waste with No. 2 fuel oil being used during startup only. The four combustion trains are independent but can operate simultaneously. Each combustion train consists of a boiler, a spray dryer absorber (SDA), and a fabric filter (FF). The utilization of the SDA and FF, as well as good combustion practices (GCP) reduces the levels of Municipal Waste Combustor (MWC) organics (dioxins/furans), MWC acid gases (sulfur dioxide and hydrogen chloride), MWC metals (particulate matter, opacity, cadmium, lead, and mercury), and Carbon Monoxide prior to exhausting through the stack.

Alternate Operating Scenario: This operating scenario includes the receiving, storing and the handling of coal. Coal has not been used at this facility since 2002 and its use has been phased out; meaning the coal pile is gone and the boilers are no longer capable of firing coal. However, the underlying PSD permit allows its use so all references to coal (both firing and handling) have been separated into an alternate operating scenario in this permit. All pollution control equipment listed in the primary operating scenario would be included in this operating scenario if they were to operate using this scenario.

In addition, the facility operates a diesel-fired standby generator, an auxiliary boiler, two No. 2 fuel oil storage tanks, a lime silo, an ash conveyor (with negligible emissions), and truck traffic, as well as a number of insignificant activities.

This facility is a Title V major source of NO_x, CO, SO₂, PM, PM₁₀, VOC and HCl. This source is located in an attainment area for all pollutants, and is a PSD major source. The facility is currently permitted under one PSD permit issued March 26, 1984, last amended on August 20, 2003 (Waste to Energy boilers), and one Minor NSR Permit issued on January 8, 1985, last amended on November 29, 2011 (Refuse Derived Fuel processing plant).

II. 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
Waste to Energy Boilers							
044	001	Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor Combustion Engineering, Inc. Type VU-40 Boiler	49,400 lbs RDF/hr or 237 mmBtu/hr on coal 180,000 lbs steam/hr 625 gal/hr distillate oil	Spray Dryer Absorber & Fabric Filter	SDA-1	MWC Acid Gases SO ₂	8/20/03
					FF-1	MWC Metals PM/PM ₁₀	
045	002	Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor Combustion Engineering, Inc. Type VU-40 Boiler	49,400 lbs RDF/hr or 237 mmBtu/hr on coal 180,000 lbs steam/hr 625 gal/hr distillate oil	Spray Dryer Absorber & Fabric Filter	SDA-2	MWC Acid Gases SO ₂	8/20/03
					FF-2	MWC Metals PM/PM ₁₀	
046	003	Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor Combustion Engineering, Inc. Type VU-40 Boiler	49,400 lbs RDF/hr or 237 mmBtu/hr on coal 180,000 lbs steam/hr 625 gal/hr distillate oil	Spray Dryer Absorber & Fabric Filter	SDA-3	MWC Acid Gases SO ₂	8/20/03
					FF-3	MWC Metals PM/PM ₁₀	
047	004	Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor Combustion Engineering, Inc. Type VU-40 Boiler	49,400 lbs RDF/hr or 237 mmBtu/hr on coal 180,000 lbs steam/hr 625 gal/hr distillate oil	Spray Dryer Absorber & Fabric Filter	SDA-4	MWC Acid Gases SO ₂	8/20/03
					FF-4	MWC Metals PM/PM ₁₀	
Auxiliary Boiler and Storage Tanks							
049	049	English Boiler, Inc., D-style Water Tube NSPS Db and MACT DDDDD	142 mmBtu/hr	-	-	-	8/20/03
109	109	WTE No. 2 fuel oil Storage Tank	55,000 gallons	-	-	-	8/20/03
110	110	WTE No. 2 fuel oil Storage Tank	55,000 gallons	-	-	-	8/20/03

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Internal Combustion Engines							
100	100	Morrison-Knudsen Peak Shaver Generator Diesel Engine - Model #20-645-F4B	8.5 MMBtu/hr, 2500 KW	-	-	-	8/20/03
128	128	WTE Fire Pump Diesel Engine	290 HP / 0.74 mmBtu/hr	-	-	-	-
207	207	RDF Fire Pump Diesel Engine	290 HP	-	-	-	-
Coal Handling – Operating Scenario							
048	-	Open Coal Storage	15,000 ton	Wet Suppression System (WSS)	WSS	PM/PM ₁₀	8/20/03
101	101	Coal conveying system, coal unloading area	100 tons/hr	Fabric Filter	FF-101	PM/PM ₁₀	8/20/03
102	102	Coal conveying system, transfer point No. 1	100 tons/hr	Fabric Filter	FF-102	PM/PM ₁₀	8/20/03
103	103	Coal conveying system, transfer point No. 2	100 tons/hr	Fabric Filter	FF-103	PM/PM ₁₀	8/20/03
104	104	Coal conveying system, transfer to coal silo	100 tons/hr	Fabric Filter	FF-104	PM/PM ₁₀	8/20/03
105	105	Coal conveying system, transfer to conical for boiler No. 1	100 tons/hr	Fabric Filter	FF-105	PM/PM ₁₀	8/20/03
106	106	Coal conveying system, transfer to conical for boiler No. 2	100 tons/hr	Fabric Filter	FF-106	PM/PM ₁₀	8/20/03
107	107	Coal conveying system, transfer to conical for boiler No. 3	100 tons/hr	Fabric Filter	FF-107	PM/PM ₁₀	8/20/03
108	108	Coal conveying system, transfer to conical for boiler No. 4	100 tons/hr	Fabric Filter	FF-108	PM/PM ₁₀	8/20/03

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
RDF Plant Emission Units							
200	-	Tipping Floor	200 ton/hr	Buffalo Filters (rolled)	B1-5	PM/PM ₁₀	11/29/11
201A	201A	Bulky Waste Shredder, DW 3060K, Buffalo Slow Speed, equipped with a 430 HP Diesel Engine (Non-Road)	100 ton/hr	Fabric Filter	FF-201	PM/PM ₁₀	11/29/11
202a1	202a1	RDF Process Line A Shredder	200 ton/hr	Fabric Filter	FF-202A1	PM/PM ₁₀	11/29/11
202b1	202b1	RDF Process Line B Shredder	200 ton/hr	Fabric Filter	FF-202B1	PM/PM ₁₀	11/29/11
202c1	202c1	RDF Process Line C Shredder	200 ton/hr	Fabric Filter	FF-202C1	PM/PM ₁₀	11/29/11
203	203	RDF conveyor	200 ton/hr	-	-	-	11/29/11
206	-	RDF Plant Truck Traffic	200 trucks/day	-	-	-	8/20/03
251	251	RDF Ultra Low Sulfur Diesel Fuel Oil Storage Tank	3,000 gallons	-	-	-	-
Miscellaneous WTE Emission Units							
111	111	WTE Ash conveying system to truck discharge location	30 ton/hr	Ash (Wet) Conditioning System	-	-	-
112	112	WTE Lime silo	125 ton	Fabric Filter	FF-112	PM/PM ₁₀	8/20/03
113	-	WTE Plant Truck Traffic	25 trucks/day	-	-	-	8/20/03
133	133	WTE Permanent 'Helper' Cooling Tower SPX Technologies, Model: NC 8414WAS8	1.5 MGal/hr				
134	134	WTE 'Original' Cooling Tower Composite Cooling Solutions, Model, FM-4FT-3042-200-P6IL	2.46 MGal/hr				

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

III. Definitions and Clarifications

A. Clarifications

CEMS and data collected from CEMS shall be operated and collected as described in 9 VAC 5-40-8140D, 8140G and 8150C.

At least 2 data points per hour shall be obtained in order to calculate a valid 1-hour arithmetic average.

Each 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.

40 CFR 60.13(e)(2) requires the continuous emission monitoring systems to complete at least one cycle of operation (sampling, analyzing, and data recording) for each 15-minute period.

All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements listed above are not met.

Valid one-hour averages shall be obtained for 75% of the operating hours per day for 90% of the operating days per calendar quarter.

Startup, Shutdown, and Malfunction

9 VAC 5-40-8100 Compliance

- B. The provisions for startup, shutdown, and malfunction in subsections B 1 and B 2 of this section apply. Test methods and procedures for determining compliance shall be performed as specified in 9 VAC 5-40-8140.
1. Except as provided by 9 VAC 5-40-8060 C, the standards under this article apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided in subdivision 1 c of this subsection.
 - a. The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
 - b. Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
 - c. For the purpose of compliance with the carbon monoxide emission limits in 9 VAC 5-40-7980, if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 9 VAC 5-40-8160 B.6 and D.1.

B. Definitions

“*Distillate oil*” means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosene, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17). 40 CFR 60, Subpart Db

“*Four-hour block average*” means the average of all hourly emission concentrations when the municipal waste combustion unit is operating and combusting municipal solid waste measured over any of six four-hour periods: (i) midnight to 4 a.m., (ii) 4 a.m. to 8 a.m., (iii) 8 a.m. to noon, (iv) noon to 4 p.m., (v) 4 p.m. to 8 p.m., and (vi) 8 p.m. to midnight.

“*No. 2 Fuel Oil*” means a distillate fuel oil for use in atomizing type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM D396 specifies for this grade distillation temperatures at the 90-percent point between 540 and 640 degrees Fahrenheit, and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees Fahrenheit.

“*One-hour arithmetic averages*” for each pollutant shall be calculated as specified in 9 VAC 5-40-8140.

“*Operating Day*” means any day the unit combusts any municipal solid waste or refuse-derived fuel.

“*Operating Hour*” means each hour that the facility operates 30 minutes or more.

“*Residual oil*” means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17). 40 CFR 60, Subpart Db

“*Twenty-four hour daily average*” or “*24-hour daily average*” means either the arithmetic mean or geometric mean (as specified) of all hourly emission concentrations when the municipal waste combustion unit operates and combusts municipal solid waste measured during the 24 hours between midnight and the following midnight.

Primary Operating Scenario
The Firing and Handling of RDF, Fuel Oil and Non-Hazardous Solid Waste

IV. Waste to Energy (WTE) Boiler Requirements - (Units 044, 045, 046 and 047)

A. Limitations

1. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Particulate emissions and acid gases from each WTE boiler shall be controlled by a spray dryer absorber and a fabric filter in series. The absorbers and fabric filters shall be provided with adequate access for inspection and shall be in operation when the associated boiler is operating.
(9 VAC 5-80-110 and Condition 3 of the 8/20/03 Permit)
2. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Each spray dryer absorber shall be equipped with a water/lime slurry injection flow meter. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed and maintained in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.
(9 VAC 5-80-110 and Condition 5 of the 8/20/03 Permit)
3. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - The approved fuels for the WTE boilers are Refuse Derived Fuel (RDF), No. 2 fuel oil and Non-Hazardous Solid Waste. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 18 of the 8/20/03 Permit)
4. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - The No. 2 fuel oil, RDF and Non-Hazardous Solid Waste shall meet the specifications below:
No. 2 Fuel Oil which meets ASTM D396 specifications for numbers 1 or 2 fuel oil, and the following:
Maximum sulfur content per shipment: 0.05%
Maximum nitrogen content per shipment: 0.3%
Note: By definition, if the No. 2 fuel oil meets the specifications for ASTM D396, it meets the definition of distillate oil which is defined as having a nitrogen content of less than 0.05% nitrogen.
RDF: Refuse Derived Fuel for the purpose of this permit shall be a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification.
MSW: Municipal solid waste means household, commercial/retail, and/or institutional waste.
Non-Hazardous Solid Waste shall include solid waste that is in liquid form.
(9 VAC 5-80-110, 40 CFR 60.41b, and Condition 22 of the 8/20/03 Permit)
5. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Each of the WTE boilers shall consume no more than 94,000 gallons of No. 2 fuel oil per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 13 of the 8/20/03 Permit)
6. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - The throughput of Non-Hazardous Solid Waste to the four WTE boilers combined shall not exceed 40,000 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 15 of the 8/20/03 Permit)
7. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Each WTE boiler shall be operated to produce no more than 110% of the maximum steam load measured during the most recent dioxin/furan test performed on each boiler. The temperature of the flue gas from each boiler measured at the inlet to the particulate matter control device shall not exceed 17° C above the maximum temperature measured during the most recent dioxin/furan test for that unit.
(9 VAC 5-80-110, 9 VAC 5-40-8120, 9 VAC 5-40-8150C, 40 CFR Part 62.11640 and Condition 26 of the 8/20/03 Permit)

8. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Emissions from the operation of each WTE boiler during the combustion of RDF by itself or in combination with any other approved fuel, shall not exceed the limits specified below:

Pollutant	Concentration Limit	Hourly Limit	Compliance Method/Averaging Time*
Particulate Matter	27 mg/dscm @ 7% O ₂	15 lbs/hr	Annual stack test - 3 runs (no more than 12 months between tests) 9 VAC 5-40-8140B
Sulfur Dioxide	29 ppm _{dv} @ 7% O ₂ or 75% reduction by weight corrected to 7% O ₂ , whichever is less stringent	274 lbs/hr	CEMS 24-hour daily geometric average of hourly emission concentrations - 9 VAC 5-40-8140D Hourly rates to be verified during annual stack tests
Nitrogen Dioxide	250 ppm _{dv} @ 7% O ₂	160 lbs/hr	CEMS 24-hour daily arithmetic average of hourly emission concentrations - 9 VAC 5-40-8140G Hourly rates to be verified during annual stack tests
Carbon Monoxide	200 ppm _{dv} @ 7% O ₂	113 lbs/hr	CEMS 24- hour daily arithmetic average - 9 VAC 5-40-8150C Hourly rates to be verified during annual stack tests
Volatile Organic Compounds	0.07 lbs/mmBtu	15 lbs/hr	Annual stack test - average of at least 3 runs at representative full load operating conditions (no more than 12 months between tests)
Cadmium	0.040 mg/dscm (18 gr/10 ⁶ dscf)	-	Annual stack test - average of at least 3 runs at representative full load operating conditions (no more than 12 months between tests) 9 VAC 5-40-8140C
Lead	0.440 mg/dscm (196 gr/10 ⁶ dscf)	-	Annual stack test - average of at least 3 runs at representative full load operating conditions (no more than 12 months between tests) 9 VAC 5-40-8140C
Mercury	0.080 mg/dscm (35 gr/10 ⁶ dscf) or 85% reduction by weight corrected to 7% O ₂ , whichever is less stringent	-	Annual stack test - average of at least 3 runs at representative full load operating conditions (no more than 12 months between tests) 9 VAC 5-40-8140C
Hydrogen Fluoride	-	1.6 lbs/hr	Annual stack test - average of at least 3 runs at representative full load operating conditions (no more than 12 months between tests)-
Hydrogen Chloride	29 ppm _{dv} @ 7% O ₂ or 95% removal efficiency whichever is less stringent.	150 lbs/hr	Annual stack test - 3 runs (no more than 12 months between tests) 9 VAC 5-40-8140E
Dioxin/ Furan (Total Mass)	30 ng/dscm @ 7% O ₂	-	Stack Test Schedule per Condition 23 9 VAC 5-40-8140F

* Arithmetic and geometric averages shall be calculated as specified in 9 VAC 5-40-8150.

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 Condition numbers IV 3, 4, 5, 6, 11, 14, 15, 16 and 22.

(9 VAC 5-80-110, 9 VAC 5-40-7970 to 8090, 40 CFR Part 62.11640 and Condition 27 of the 8/20/03 Permit)

9. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Emissions from the operation of each WTE boiler during the combustion of No. 2 fuel oil, by itself, shall not exceed the limits specified below:

Particulate Matter	-	0.07 lbs/mmBtu (24 hour avg.)	15 lbs/hr
Sulfur Dioxide	523 ppmdv @ 7% O ₂	1.20 lbs/mmBtu (24 hour avg.)	274 lbs/hr
Nitrogen Dioxide	364 ppmdv @ 7% O ₂	0.60 lbs/mmBtu (24 hour avg.)	160 lbs/hr
Carbon Monoxide	528 ppmdv @ 7% O ₂	0.53 lbs/mmBtu (24 hour avg.)	113 lbs/hr
Volatile Organic Compounds	-	0.07 lbs/mmBtu (24 hour avg.)	15 lbs/hr

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 (including hourly) may be determined as stated in Condition numbers 3, 4, 5, 11, 14, 15 and 19.b.
 (9 VAC 5-80-110 and Condition 29 of the 8/20/03 Permit)

10. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Emissions from the operation of each WTE boiler shall not exceed the limits specified below:

Particulate Matter	49 tons/yr**
Sulfur Dioxide	914 tons/yr*
Nitrogen Oxides (as NO ₂)	533 tons/yr*
Carbon Monoxide	368 tons/yr*
Volatile Organic Compounds	49 tons/yr**
Hydrogen Fluoride	7.1 tons/yr**
Hydrogen Chloride	600 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.
 *Annual emissions shall be determined from the CEMS data 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.
 **Compliance with these emission limits shall be determined using the emission data from the annual stack test and as stated in with the following conditions: 3, 4, 5, 6, 11, 14, 15, 19, and 22.
 (9 VAC 5-80-110 and Condition 30 of the 8/20/03 Permit)

11. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Visible emissions from each WTE boiler shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A) or COMS. This condition applies at all times except during startup, shutdown, and malfunction.
 (9 VAC 5-80-110, 9 VAC 5-40-8060, 9 VAC 5-40-20 and Condition 34 of the 8/20/03 Permit)
12. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Operation of the WTE boilers shall be carried out in accordance with the requirements of 9 VAC 5-40-8130. This includes operator training and certifications, maintaining and updating a site specific operating manual and establishing a training program for specified personnel.
 (9 VAC 5-80-110 and 9 VAC 5-40-8130)

13. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Limitations** - Except where this permit is more restrictive than the applicable requirement, each WTE boiler shall be operated in compliance with the requirements of 9 VAC 5 Chapter 40, Article 54, as applicable.
- Note:** All applicable requirements of 9 VAC 5 Chapter 40, Article 54 **are not** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
(9 VAC 5-80-110 and Condition 41 of the 8/20/03 Permit)

B. Monitoring

14. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Monitoring** - For each WTE boiler a Continuous Emission Monitoring System (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the emissions of CO, SO₂ and NO_x from the flue in each stack as ppm_{dv} corrected to 7% O₂. Each boiler shall be equipped with a device to continuously measure and display the oxygen content in the flue gas from the point where the CEMS is getting its sample. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 60.13 of Subpart A and 40 CFR Part 60, Appendices B and F.
(9 VAC 5-80-110, 9 VAC 5-40-8150, 40 CFR Part 62.11640 and Condition 8 of the 8/20/03 Permit)
15. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Monitoring** - For each WTE boiler a Continuous Opacity Monitoring System (COMS), meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the opacity of emissions from the flue in each stack. The COMS shall be installed, calibrated, maintained and operated in accordance with the requirements of 40 CFR 60.13 of Subpart A. Data shall be reduced to six minute averages.
(9 VAC 5-80-110, 9 VAC 5-40-8150, 40 CFR Part 62.11640 and Condition 9 of the 8/20/03 Permit)
16. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Monitoring** - A CEMS/COMS quality control program which meets the requirements of 40 CFR 60.13 and 40 CFR Part 60, Appendices B & F shall be implemented for all continuous monitoring systems.
(9 VAC 5-80-110, 9 VAC 5-40-8150, 40 CFR Part 60, 40 CFR Part 62.11640, and Condition 10 of the 8/20/03 Permit)
17. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Monitoring** - Each WTE boiler shall be equipped with a device to continuously measure and record the steam (or feedwater) flow in either pounds per hour or kilograms per hour. 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 each boiler is operating. The flows shall be averaged and reduced in 4-hour block arithmetic averages.
(9 VAC 5-80-110, 40 CFR Part 62.11640 and 9 VAC 5-40-8150)
18. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Monitoring** - Each WTE boiler shall be equipped with a device to continuously measure and record the inlet temperature of the flue gas to the fabric filter. 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 each boiler is operating. The temperatures shall be averaged and reduced in 4-hour block arithmetic averages.
(9 VAC 5-80-110, 40 CFR Part 62.11640 and 9 VAC 5-40-8150)

C. Recordkeeping

19. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater regional Office. These records shall include, but are not limited to:
- a. Monthly and annual throughput of No. 2 fuel oil (in 1000 gallons) for each WTE boiler. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - b. Design firing rate of No. 2 fuel oil for each WTE boiler in gal/hour and any changes that have taken place. (see Streamlined Conditions section of the Statement of Basis)
 - c. Monthly and annual throughput of Non-Hazardous Solid Waste for the WTE boilers. The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - d. Monthly and annual calculated emissions from the WTE boilers while burning RDF or any combination of fuels. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
 - e. Monthly records of steam load and inlet temperature to the particulate matter control device for each WTE boiler.
 - f. All fuel supplier certifications.
 - g. Records of the nitrogen content of the No. 2 fuel oil, as burned, if necessary. (See Conditions VI.44 and VI.45. Average fuel nitrogen content shall be calculated monthly as the sum of each consecutive 12-month period.
 - h. Continuous monitoring system calibrations and calibration checks, and excess emissions.
 - i. All 1-hour average emission concentrations and 24-hour averages from CEMS and all 6-minute average opacity levels from COMS data, 4-hr average data for steam loads and inlet temperatures for the fabric filters.
 - j. All stack test data.
 - k. All other records as specified in 9 VAC 5-40-8160.
 - l. Training records of all chief facility operator, shift supervisor and control room operators including initial training, renewal certification training, documentation of current certifications, review of operating manuals (initial and annual), and the ongoing training programs. These records shall include the names of the each person and the dates of the training.

Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years. (9 VAC 5-80-110, 9 VAC 5-40-8160, 40 CFR Part 62.11640 and Condition 42 of the 8/20/03 Permit)

D. Reporting

20. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Reporting** - The permittee shall furnish written reports to the Director, Tidewater Regional Office of excess emissions from any process monitored by a continuous monitoring system (COMS/CEMS) on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
- 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), the corrective action taken or preventative measures adopted;
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
 - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.
- (9 VAC 5-80-110, 40 CFR 60.7(c) and Condition 44 of the 8/20/03 Permit.)

21. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Reporting** - The permittee shall submit reports to the Director, Tidewater Regional Office within 30 days after the end of each semi-annual period. The report shall include:

- a. The requirements of 9 VAC 5-40-8160 D:
 - i. A summary of data collected for all pollutants and parameters regulated under 9 VAC 5-40 Article 54, which includes the information specified in paragraphs 9 VAC 5-40-8160 D.
 - (A) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels achieved during the annual performance tests recorded under paragraph 9 VAC 5-40-8160 B 8.
 - (B) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor steam load level, and particulate matter control device inlet temperature based on the data recorded under paragraphs 9 VAC 5-40-8160 B 2 b (1)-(5).
 - (C) List the highest opacity level measured based on the data recorded under paragraph 9 VAC 5-40-8160 B 2 a (1).
 - (D) The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor steam load, and the inlet temperature data to the particulate matter control device were not obtained based on the data recorded under paragraph 9 VAC 5-40-8160 B 5.
 - (E) The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor steam load, and inlet temperature to the particulate matter control device were excluded from the calculation of average emission concentrations or parameters based on the data recorded under paragraph 9 VAC 5-40-8160 B 6.
 - ii. The summary of data reported under paragraph 9 VAC 5-40-8160 D 1 shall provide the types of data specified in paragraphs 9 VAC 5-40-8160 D 1 for the calendar year preceding the year being reported, in order to provide the Administrator with a summary of the performance of the affected facility over a 2-year period.
 - iii. The summary of data including the information specified in paragraphs 9 VAC 5-40-8160 D 1 and D 2 shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified in 9 VAC 5-Chapter 40, Article 54.
 - iv. A notification of intent to begin the reduced dioxin/furan emission testing schedule specified in the 9VAC5-40-8140 F 5 b during the following calendar year.
- b. The requirements of 9 VAC 5-40-8160 E for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in 9 VAC 5-Chapter 40, Article 54 according to the schedule specified in 9 VAC 5-40-8160 E 6:

- i. The semiannual report shall include information recorded under 9 VAC 5-40-8160 B 3 for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.
- ii. For each date recorded as required by 9 VAC 5-40-8160 B 3 and reported as required by 9 VAC 5-40-8160 E 1, the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable, recorded under subsections 9 VAC 5-40-8160 B 2 b (1) through B 2 b (4) and B 2 a (1), as applicable.
- iii. If the test reports recorded under 9 VAC 5-40-8160 B 8 document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.
- iv. Semiannual reports required by 9 VAC 5-40-8160 E shall be submitted according to the schedule specified in 9 VAC 5-40-8160 E 6 a and E 6 b.
 - (A) If the data reported in accordance with 9 VAC 5-40-8160 E 1 through E 5 were collected during the first calendar half, then the report shall be postmarked by August 1 following the first calendar half.
 - (B) If the data reported in accordance with 9 VAC 5-40-8160 E 1 through E 5 were collected during the second calendar half, then the report shall be postmarked by **February 1** following the second calendar half.

(9 VAC 5-80-110, 9 VAC 5-40-8160, 40 CFR Part 62.11640 and Condition 45 of the 8/20/03 Permit)

E. Testing

22. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Testing** - The permitted facility shall conduct performance testing annually (no more than 12 months following the previous performance test) on each WTE boiler. PM and opacity shall be tested in accordance with 9 VAC 5-40-8140 B, Cadmium, Lead and Mercury shall be tested in accordance with 9 VAC 5-40-8140 C, SO₂ shall be monitored in accordance with 9 VAC 5-40-8140 D, HCl shall be tested in accordance with 9 VAC 5-40-8140 E, NO_x shall be monitored in accordance with 9 VAC 5-40-8140 G, CO shall be monitored in accordance with 9 VAC 5-40-8150 C, load level shall be monitored in accordance with 9 VAC 5-40-8150 C.8, inlet temperature to PM control device shall be monitored in accordance with 9 VAC 5-40-8150 C.8. HF shall be tested in accordance with 40 CFR 60 Methods 26/26A. All compliance determinations shall be performed in accordance with 9 VAC 5-40-8140 and 9 VAC 5-40-8150. The permittee shall submit a test protocol for approval at least 30 days prior to testing. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. One copy of the test results shall be submitted to the Tidewater Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit or as approved by DEQ.
(9 VAC 5-80-110, 9 VAC 5-40-8140, 9 VAC 5-40-8150 and 40 CFR Part 62.11640)

23. **Primary Operating Scenario Requirements - (Units 044, 045, 046 and 047) - Testing** - Each WTE boiler shall utilize the performance testing methods and schedules in section 9 VAC 5-40-8140 and 9 VAC 5-40-8150 except for dioxin/furan testing (See 9 VAC 5-40-8140F).

For Dioxin/furan testing, if annual performance tests for 2 consecutive years on all 4 boilers show dioxin/furan emissions (total mass) below 15 ng/dscm @ 7% O₂, only one boiler (on a rotating basis) per year (no more than 12 calendar months following the previous performance test) must be tested. Should any emission performance tests exceed 15 ng/dscm @ 7% O₂, all 4 boilers must be retested each year until testing for 2 consecutive years shows emissions to be less than 15 ng/dscm @ 7% O₂. Then emissions testing can be reduced again to only one boiler per year (on a rotating basis) after notification to DEQ. The permittee shall submit a test protocol at least 30 days prior to testing. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories. One copy of the test results shall be submitted to the Tidewater Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit or as approved by DEQ.

(9 VAC 5-80-110, 9 VAC 5-40-8140, 40 CFR Part 62.11640 and Condition 39 of the 8/20/03 Permit)

***Alternate Operating Scenario
The Firing and Handling of Coal***

If the permittee does not operate using this scenario, no monitoring or recordkeeping is required and the facility is considered in compliance with this section of the permit.

V. WTE Boilers Operating Using Coal - (Units 044, 045, 046, 047, 048, and 101-108)

All conditions in Section IV apply in addition to those listed below:

A. Limitations

24. **Coal - Alternate Operating Scenario (Units 044, 045, 046 and 047) - Limitations** - Each of the WTE boilers shall consume no more than 4,375 tons of coal per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 12 of the 8/20/03 Permit)
25. **Coal - Alternate Operating Scenario (Units 044, 045, 046 and 047) – Limitations** - The approved fuel for the boilers is coal. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 18 of the 8/20/03 Permit)
26. **Coal - Alternate Operating Scenario (Units 044, 045, 046 and 047) – Limitations** - The coal shall meet the specifications below:
COAL:
Maximum sulfur content per shipment: 0.83%
Maximum ash content per shipment: 18.0%
(9 VAC 5-80-110, 40 CFR 60.41b, and Condition 22 of the 8/20/03 Permit)
27. **Coal - Alternate Operating Scenario (Units 044, 045, 046 and 047) – Limitations** - The permittee shall obtain a certification from the fuel supplier with each shipment of coal. Each fuel supplier certification shall include the following:
a. The name of the fuel supplier,
b. The date on which the coal was received, and
c. The sulfur content and the ash content per shipment.
(9 VAC 5-80-110, 40 CFR 60.49b and Condition 25 of the 8/20/03 Permit)
28. **Coal - Alternate Operating Scenario (Units 048 and 101-108) – Limitations** - Fugitive coal dust emission controls shall include the following, or equivalent, as a minimum:
a. Dust from material handling (car unloading hopper, coal pile reclaimers), coal pile, and load-outs (coal ash loadout), shall be controlled by a permanently installed wet suppression system.
b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
d. Dust from the coal silos, bins and conveyor belts shall be controlled by fabric filters.
(9 VAC 5-80-110 and Condition 7 or the 8/20/03 Permit)

29. **Coal - Alternate Operating Scenario (Units 048 and 101-108) – Limitations** - Fugitive dust emissions from the operation of coal handling and storage shall not exceed the limits specified below:

Particulate Matter 9.5 lbs/hr 26.5 tons/yr

These emissions are derived from the estimated overall emission contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Condition 28.
 (9 VAC 5-80-110 and Condition 31 of the 8/20/03 Permit)

30. **Coal - Alternate Operating Scenario (Units 044, 045, 046 and 047) – Limitations** - Emissions from the operation of each WTE boiler during the combustion of coal, by itself, for steam generation, shall not exceed the limits specified below:

Pollutant	Concentration	Heat Input	Pounds per Hour
Particulate Matter	-	0.05 lbs/mmBtu (24 hour avg.)	15 lbs/hr
Sulfur Dioxide	491 ppmdv @ 7%O ₂	1.20 lbs/mmBtu (24 hour avg.)	274 lbs/hr
Nitrogen Dioxide	342 ppmdv @ 7%O ₂	0.60 lbs/mmBtu (24 day avg.)	160 lbs/hr
Carbon Monoxide	496 ppmdv @ 7%O ₂	0.53 lbs/mmBtu (24 hour avg.)	113 lbs/hr
Volatile Organic Compounds	-	0.07 lbs/mmBtu (24 hour avg.)	15 lbs/hr
Hydrogen Fluoride	-	-	1.6 lbs/hr
Hydrogen Chloride	-	-	150 lbs/hr

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 Condition numbers 24, 25, 26 and 27.
 (9 VAC 5-80-110 and Condition 28 of the 8/20/03 Permit)

B. Monitoring

31. **Coal - Alternate Operating Scenario (Unit 048) - Monitoring** - The permittee shall perform periodic visual emissions checks of the coal pile and the conveyors on a weekly basis if operating using coal. If visible emissions are noted, the permittee shall take appropriate action to correct the cause of the opacity such that no visible emissions exist. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, whether or not there was visible emission, any necessary corrective action taken. If the equipment has not been operated during the week, it shall be noted in the logbook that the equipment was not operated and that a visual observation was not required. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
 (9 VAC 5-80-110 E)

32. **Coal - Alternate Operating Scenario (Unit 048) - Monitoring** - The permittee shall perform monthly evaluations of the coal pile wet suppression system to verify that the system is in proper working order. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, what parameters are checked, and whether the system was functioning properly. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
(9 VAC 5-80-110)
33. **Coal - Alternate Operating Scenario (Units 101-108) - Monitoring** - The differential pressure gauges used to continuously measure the pressure drop across each fabric filter (FF-101-FF-108) shall be monitored (while the fabric filters are operating) by the permittee on a monthly basis to ensure good performance of the fabric filter. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, the pressure drop and any corrective action taken. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
(9 VAC 5-80-110)

C. Recordkeeping

34. **Coal - Alternate Operating Scenario - (Units 044, 045, 046, 047,048 and 101-108) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. The monthly and annual throughput of coal (in tons) for the WTE boilers. The annual throughput shall be calculated as the sum of each consecutive 12-month period;
 - b. The records of visual evaluations, visible emissions evaluations and any corrective action taken; and
 - c. Logbook records of the differential pressure gauges.
- Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 42 of the 8/20/03 Permit)

VI. Auxiliary Boiler and Storage Tank Requirements – (Units 049, 109 and 110)

A. Limitations

35. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - The annual capacity factor for the No. 2 fuel oil being burned in the auxiliary boiler shall not exceed 10%. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

$$\text{Annual Capacity Factor} = \frac{\text{actual heat input}}{\text{potential heat input @ 8760 hours}} \times 100$$

(9 VAC 5-80-110, 40 CFR 60.44b(j)(3), 40 CFR 60.49b(d), 40 CFR 63.7575 and Condition 40 of the 8/20/03 Permit)

36. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - The approved fuel for the auxiliary boiler is No. 2 fuel oil. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 19 of the 8/20/03 Permit)

37. **Auxiliary Boiler Requirements - (Units 109 and 110) - Limitations** - The approved fuel for storage in the above ground storage tanks is No. 2 fuel oil. A change in the fuel may require a permit to modify and operate.
 (9 VAC 5-80-110 and Condition 21 of the 8/20/03 Permit)

38. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - The No. 2 fuel oil shall meet the specifications below:

No. 2 Fuel Oil which meets ASTM D396 specifications for numbers 1 or 2 fuel oil, and the following:

Maximum sulfur content per shipment:	0.05%
Maximum nitrogen content per shipment	0.3%

Note: By definition, if the No. 2 fuel oil meets the specifications for ASTM D396, it meets the definition of distillate oil which is defined as having a nitrogen content of less than 0.05% nitrogen.

(9 VAC 5-80-110, 40 CFR 60.41b, and Condition 22 of the 8/20/03 Permit)

39. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - The auxiliary boiler shall not operate more than 876 hours per year, calculated monthly as the sum of each consecutive 12-month period.
 (9 VAC 5-80-110 and Condition 16 of the 8/20/03 Permit)

40. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below:

Particulate Matter	2.1 lbs/hr	0.9 tons/yr
Sulfur Dioxide	8.1 lbs/hr	3.6 tons/yr
Nitrogen Oxides (as NO ₂)	15.2 lbs/hr	6.7 tons/yr
Carbon Monoxide	5.2 lbs/hr	2.3 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. Annual emissions shall be determined 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. Compliance with these emission limits may be determined as stated in Condition numbers 36-39 and 41.
 (9 VAC 5-50-260 and Condition 32 of the 8/20/03 Permit)

41. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - Visible emissions from the auxiliary boiler shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27% 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 5-80-110, 40 CFR 60.43b(f) and Condition 35 of the 8/20/03 Permit)
42. **Auxiliary Boiler Requirements - (Unit 049) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the auxiliary boiler shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart Db and 40 CFR Part 63, Subpart DDDDD (a limited-use boiler).
- Note:** All applicable requirements of 40 CFR Part 60, Subpart Db and 40 CFR Part 63, Subpart DDDDD (5D) **are not** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit.
(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410, 9 VAC 5-60-90 and 9 VAC 5-60-100)

B. Monitoring

43. **Auxiliary Boiler Requirements - (Unit 049) - Monitoring** - At least once during each daylight shift when the auxiliary boiler is operating, an observer certified in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) will perform a 6-minute visible emission observation consisting of 24 consecutive readings of the stack for the auxiliary boiler. If the average opacity for a 6-minute set of readings made in accordance with the above exceeds 10%, the observer will collect two additional 6-minute sets of visible emission readings for a total of three data sets. Results from these observations will be recorded in a log book, listing the date and time of each visible emission observation and the resulting opacity.
(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.48b(j)(7) and (I) and Condition 38 of the 8/20/03 Permit)
44. **Auxiliary Boiler Requirements - (Units 049, 109 and 110) - Monitoring** - The permittee shall obtain a certification from the fuel supplier with each shipment of No. 2 fuel oil. Each fuel supplier certification shall include the following:
- The name of the fuel supplier;
 - The date on which the oil was received;
 - The volume of oil delivered in the shipment;
 - The sulfur content of oil delivered in the shipment;
 - The nitrogen content of oil delivered in the shipment (see Condition 45); and
 - A statement that the oil complies with the American Society for Testing and Materials (ASTM) specifications D396 or D975 for Grades 1 or 2 fuel oil, or other DEQ approved fuel specifications.
(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.41b, 60.44b(j) and Condition 23 of the 8/20/03 Permit)
45. **Auxiliary Boiler Requirements - (Units 049, 109 and 110) - Monitoring** - In the event that certification of the fuel oil received does not list the fuel oil as meeting the ASTM D396 specification, or the certification does not list the nitrogen content of the No. 2 fuel oil then, the permittee must sample and test each above ground storage tank, once each month, if a shipment of fuel oil was received. The sampling and testing methods are to be arranged with the Director, Tidewater Regional Office.
(9 VAC 5-80-110 and Condition 24 of the 8/20/03 Permit)
46. **Auxiliary Boiler Requirements - (Units 049, 109 and 110) - Monitoring** - If oil sampling is required to comply with Condition 45 a log shall be maintained with the following information:
- Date the sample was taken;
 - Who took the sample;
 - Where the sample was taken and tested; and

d. The method used to determine the sulfur or nitrogen content of the No. 2 fuel oil.
(9 VAC 5-80-110)

47. **Auxiliary Boiler Requirements - (Unit 049) - Monitoring** - The auxiliary boiler (a limited-use boiler) shall comply with the applicable requirements as listed below:
- a. Complete a tune-up every 5 years as specified in 63.7540. Limited-use boilers are not subject to the emission limits, the annual tune-ups, the energy assessment, or the operating limits of this subpart;
 - b. Keep fuel use records for the days the boiler was operated per 63.7555(d)(3); and
 - c. Requirements of the General Provisions listed in 40 CFR Subpart A, as specified in 63.7565 and Table 10 of 40 CFR Part 63, Subpart DDDDD.
- (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

C. Recordkeeping

48. **Auxiliary Boiler Requirements - (Unit 049) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater regional Office. These records shall include, but are not limited to:
- a. Monthly and annual throughput of No. 2 fuel oil to the auxiliary boiler. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period;
 - b. Monthly and annual hours of operation for the auxiliary boiler. Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period;
 - c. Annual capacity factor records for the auxiliary boiler. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month;
 - d. The opacity readings for the auxiliary boiler;
 - e. All fuel supplier certifications; and
 - f. Records of the nitrogen content of the No. 2 fuel oil, as burned, if No. 2 fuel oil is fired. Average fuel nitrogen content shall be calculated monthly as the average of each consecutive 12-month period.

Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years.
(9 VAC 5-80-110, 9 VAC 5-40-8160, 40 CFR Part 62.11640 and Condition 42 of the 8/20/03 Permit)

49. **Auxiliary Boiler Requirements - (Unit 049) – Monitoring** – For each steam generating unit operating day, the permittee shall maintain records of:
- a. the date;
 - b. the number of hours of operation; and
 - c. the hourly steam load.
- (9 VAC 5-80-110, 40 CFR 60.48b(j) and (l) and 40 CFR 60.49b(p))

50. **Auxiliary Boiler Requirements - (Unit 049) - Recordkeeping – MACT 5D** - The auxiliary boiler (a limited-use boiler) shall comply with the applicable requirements as listed below:
- a. Keep records of notifications submitted;
 - b. Keep records of the 5-year tune-ups specified in 63.7540;
 - c. Keep fuel use records for the days the boiler was operated per 63.7555(d)(3);
 - d. All other records as specified in 63.7555; and
 - e. Requirements of the General Provisions listed in 40 CFR Subpart A, as specified in 63.7565 and Table 10 of 40 CFR Part 63, Subpart DDDDD.
- (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

D. Reporting

51. **Auxiliary Boiler Requirements - (Unit 049) - Reporting** - The permittee shall submit reports to the Director, Tidewater Regional Office within 30 days after the end of each calendar semi-annual period. These reports shall include, but are not limited to, the following information:
- a. Fuel quality reports. If no shipments of No. 2 fuel oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If No. 2 fuel oil was received during the calendar quarter, the reports shall include:
 - i. The dates included in the calendar quarter;
 - ii. A copy of all fuel supplier certifications for all shipments of No. 2 fuel oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition 44 for each shipment of No. 2 fuel oil; and,
 - iii. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the No. 2 fuel oil burned or received at the facility.
 - b. Annual capacity factor for the No. 2 fuel oil being burned in the auxiliary boiler for the previous 12 months.
 - c. Average fuel nitrogen content during the reporting period, if No. 2 fuel oil is fired.
 - d. Copies of this report shall be sent to EPA Region III at the address listed below:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-50, 9 VAC 5-50-410 and Condition 46 of the 8/20/03 Permit)

52. **Auxiliary Boiler Requirements - (Unit 049) - Reporting** - The permittee shall furnish written reports to the Director, Tidewater Regional Office of excess emissions from the opacity monitoring via visible emission readings of the auxiliary boiler. This report shall be submitted on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. If there are no excess emissions to report, then the report can be submitted semi-annually. This report shall include, but is not limited to the following information:
- a. The total time of the visible emission observations during the calendar quarter;
 - b. The duration of any excess emissions. For reporting purposes, excess emission is defined as any 6-minute period during which the average opacity exceeds 20% and the duration is defined as the period of time from the Method 9 observation that first detects the exceedance to the first Method 9 that does not exceed the opacity limit;
 - c. The number of gallons of No. 2 fuel oil burned during the quarter; and
 - d. The calculated annual capacity factor as of the end of the quarter. If this annual capacity factor exceeds 10%, the permittee will no longer qualify for this alternate monitoring and must install a Continuous Opacity Monitor.

Copies of this report shall be sent to EPA Region III at the address listed below:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.7(c) and Condition 43 of the 8/20/03 Permit)

VII. Internal Combustion Engine Requirements (Units 100, 128 and 207)

A. Limitations

53. **Internal Combustion Engine Requirements - (Unit 100) - Limitations** - The generator shall not operate more than 300 hours per year, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition 17 of the 8/20/03 Permit)
54. **Internal Combustion Engine Requirements - (Unit 100) - Limitations** - The approved fuel for the generator is No. 2 fuel oil. A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 20 of the 8/20/03 Permit)
55. **Internal Combustion Engine Requirements - (Unit 100) - Limitations** - Emissions from the operation of the generator shall not exceed the limits specified below:

Carbon Monoxide	20.5 lbs/hr	3.1 tons/yr
Nitrogen Oxides (as NO ₂)	89.4 lbs/hr	13.4 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. Annual emissions shall be determined as the sum of each consecutive 12-month period. Compliance with these emission limits may be determined as stated in Condition numbers VI.38, 53, 54, and 56. (9 VAC 5-80-110 and Condition 33 of the 8/20/03 Permit)

56. **Internal Combustion Engine Requirements - (Unit 100) - Limitations** - Visible emissions from the generator (100) shall not exceed 10% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20% 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 5-80-110 and Condition 34 of the 8/20/03 Permit)
57. **Internal Combustion Engine Requirements - (Unit 207) - Limitations** - Visible emissions from the RDF fire pump diesel engine shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-50-80 and 9 VAC 5-80-110)
58. **Internal Combustion Engine Requirements - (Unit 128) - Limitations** - Visible emissions from the WTE fire pump diesel engine shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-50-80 and 9 VAC 5-80-110)
59. **Internal Combustion Engine Requirements - (Units 100, 128 and 207) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the internal combustion engines shall be operated in compliance with the requirements of 40 CFR 63, Subpart ZZZZ.

Note: All applicable requirements of 40 CFR Part 63, Subpart ZZZZ **are not** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit. (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

60. **Internal Combustion Engine Requirements - (Unit 100) - Limitations** - The existing non-emergency CI \geq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. This unit shall comply with the applicable requirements as listed below:
- Emission limitations and work practices as specified in 63.6600 (d), Table 2c;
 - Operating limitations as specified in 63.6600(d) 2b;
 - Fuel requirements as specified in 63.6604; and
 - Requirement of the general provision requirements as specified in 40 CFR Part 63, Subpart A. (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)
61. **Internal Combustion Engine Requirements - (Units 128 and 207) - Limitations** - All existing emergency CI generators \leq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the applicable:
- Emission limitations as specified in 40 CFR 63.6602, Table 2c; and
 - Requirements of the General Provisions listed in 40 CFR Subpart A, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h). (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

B. Monitoring

62. **Internal Combustion Engine Requirements - (Units 100, 128 and 207) - Monitoring** - The permittee shall perform periodic visual emissions checks of each engine once each time the unit is operating. If such periodic checks indicate any opacity, the permittee shall take appropriate action to correct the cause of the opacity such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of 6 minutes, taking 24 consecutive readings at 15-second intervals. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, whether or not there was visible emissions, any VEE recordings and any necessary corrective action. If the equipment has not been operated during the week, it shall be noted in the logbook that the equipment was not operated and that a visual observation was not required. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period. (9 VAC 5-80-110 E)
63. **Internal Combustion Engine Requirements - (Unit 100) - Monitoring - The existing** non-emergency CI \geq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. This unit shall comply with the applicable requirements as listed below:
- Monitoring, installation, collection, operation and maintenance requirements as specified in 63.6625(a), (b), (g), and (h);
 - Initial compliance as specified in 63.6630 and Table 5;
 - Continuous compliance as specified in 63.6605, 63.6635, and 63.6640; and
 - Requirement of the general provision requirements as specified in 63 Subpart A. (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

64. **Internal Combustion Engine Requirements - (Units 128 and 207) - Monitoring** - All existing emergency CI generators \leq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the applicable:
- Monitoring, installation, collection, operation and maintenance requirements as specified in 40 CFR 63.6625(e), (f), (h), (i);
 - Continuous compliance requirements as specified in 40 CFR 63.6605 and 63.6640; and
 - Requirements of the general provisions listed in 40 CFR Part 63, Subpart A, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
(9 VAC 5-80-110)

C. Recordkeeping

65. **Internal Combustion Engine Requirements - (Units 100, 128 and 207) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater regional Office. These records shall include, but are not limited to:
- Monthly and annual throughput of No. 2 fuel oil for the generator (Unit 100). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - Monthly and annual hours of operation of the generator (Unit 100). Annual hours of operation 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. These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years.
(9 VAC 5-80-110, 9 VAC 5-40-8160, 40 CFR Part 62.11640 and Condition 42 of the 8/20/03 Permit)
66. **Internal Combustion Engine Requirements - (Unit 100) - Recordkeeping** - The existing non-emergency CI \geq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. This unit shall comply with the applicable requirements as listed below:
- Recordkeeping requirements as specified in 63.6655 (except 63.6655 (c), (e), and (f)); and
 - Requirement of the general provision requirements as specified in 40 CFR Part 63, Subpart A.
(9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)
67. **Internal Combustion Engine Requirements - (Units 128 and 207) - Recordkeeping** - All existing emergency CI generators \leq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the applicable:
- Recordkeeping requirements as specified in 63.6655 (except 63.6655(c)); and
 - Requirements of the General Provisions listed in 40 CFR Subpart A, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).
(9 VAC 5-80-110)

D. Reporting

68. **Internal Combustion Engine Requirements - (Unit 100) - Reporting** - The existing non-emergency CI \geq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. This unit shall comply with the applicable requirements as listed below:
- a. Notification requirements as specified in 63.6645;
 - b. Reporting requirements as specified in 63.6650 (except 63.6650(g); and
 - c. Requirement of the general provision requirements as specified in 40 CFR Part 63, Subpart A. (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)
69. **Internal Combustion Engine Requirements - (Units 128 and 207) - Reporting** - All existing emergency CI generators \leq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. These units shall comply with the applicable:
- a. Reporting requirements as specified in the Footnote 1 of Table 2d; and
 - b. Requirements of the General Provisions listed in 40 CFR Subpart A, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h). (9 VAC 5-80-110)

E. Testing

70. **Internal Combustion Engine Requirements - (Unit 100) - Testing** - The existing non-emergency CI \geq 500 HP shall be in compliance with 40 CFR Part 63, Subpart ZZZZ by May 3, 2013. This unit shall comply with the applicable requirements as listed below:
- a. Performance testing as specified in 63.6610, 63.6615, 63.6620 and Tables 3, 4 and 5;
 - b. Continuous compliance as specified in 63.6605, 63.6635, and 63.6640; and
 - c. Requirement of the general provision requirements as specified in 40 CFR Part 63, Subpart A. (9 VAC 5-80-110, 9 VAC 5-60-90 and 9 VAC 5-60-100)

VIII. RDF Handling Operations

The emission units associated with this section of the permit are 200, 201, 202 and 203.

A. Limitations

71. **RDF Handling Operations – (Units 200-201A) – Limitations** - Particulate emissions from the tipping floor, including the bulky waste shredder, shall be controlled by five (5) fabric filters (material on a roll) located on the roof. The fabric filters shall be provided with adequate access for inspection and shall be in operation when the bulky waste shredder is operating and when Municipal Solid Waste (MSW) is being received on the tipping floor.
(9 VAC 5-80-110 and Condition 3 of the 11/29/11 Permit)
72. **RDF Handling Operations – (Units 202A1, B1 and C1) – Limitations** - Particulate emissions from each process conveyor line shredder (202A1, 202B1 and 202C1) shall be controlled by a fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when its respective conveyor line is operating.
(9 VAC 5-80-110 and Condition 4 of the 11/29/11 Permit)
73. **Fugitive Dust and Fugitive Emission Controls** – Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
 - b. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt or material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
(9 VAC 5-80-110 and Condition 5 of the 11/29/11 Permit)
74. **RDF Handling Operations – (Unit 201A) – Limitations** - The bulky waste shredder shall only be operated on the tipping floor.
(9 VAC 5-80-110 and Condition 6 of the 11/29/11 Permit)
75. **RDF Handling Operations – (Unit 200) – Limitations - Receipt of MSW** - The receipt of Municipal Solid Waste (MSW) (as defined in 9 VAC 20-81-10) shall not exceed 1.5 million 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.
(9 VAC 5-80-110 and Condition 7 of the 11/29/11 Permit)
76. **RDF Handling Operations – (Units 200-203) – Limitations - Production of RDF** - The production of Refuse Derived Fuel (RDF) (as defined in 9 VAC 20-81-10) shall not exceed 1.2 million 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.
(9 VAC 5-80-110 and Condition 8 of the 11/29/11 Permit)
77. **RDF Handling Operations – (Units 200 and 201A) – Limitations** - Visible emissions from each of the five fabric filters on the tipping floor roof shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and Condition 9 of the 11/29/11 Permit)

78. **RDF Handling Operations – (Units 202A, B and C) – Limitations** - Visible emissions from each of the process conveyor line shredder fabric filters shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and Condition 10 of the 11/29/11 Permit)

B. Monitoring and Recordkeeping

79. **RDF Handling Operations – (Units 200, 201A, 202A, 202B and 202C) – Monitoring** - The permittee shall perform periodic visual emissions checks of the vents from each fabric filter (the 5 tipping floor roof fabric filters and the 3 process conveyor line shredder fabric filters) while the process is operating once each calendar week. If such periodic evaluations indicate any opacity, the permittee shall take appropriate action to correct the cause of the opacity such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of 6 minutes, taking 24 consecutive readings at 15-second intervals. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, whether or not there was visible emissions, any VEE recordings and any necessary corrective action. If the process for a fabric filter has not been operated during the week, it shall be noted in the logbook that the process was not operated and that a visual observation was not required. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
(9 VAC 5-80-110 E and Condition 11 of the 11/29/11 Permit)
80. **RDF Handling Operations – (Units 200-203) – Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:
- a. Annual receipt of MSW, in tons, calculated monthly as the sum of each consecutive 12-month period.
 - b. Annual production of RDF, in tons, calculated monthly as the sum of each consecutive 12-month period.
 - c. Records of visual emissions checks, visible emissions evaluations and any corrective action taken.
 - d. Scheduled and unscheduled maintenance, and operator training.
- Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years.
(9 VAC 5-80-110 and Condition 12 of 11/29/11 Permit)

IX. Lime Silo, Ash Handling, and Truck Traffic Requirements

The equipment associated with this section of the permit is the Lime Silo (Unit 112), the Ash conveying system (Unit 111), Truck traffic at the steam plant (Unit 113).

A. Limitations

81. **Lime Silo Equipment - (Unit 112) – Limitations** - Particulate emissions from the lime silo (112) shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection and shall be in operation when the lime silo is being filled.
(9 VAC 5-80-110 and Condition 4 of the 8/20/03 Permit)
82. **Lime Silo Equipment - (Unit 112) – Limitations** - The lime silo fabric filter shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed and maintained in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or good operating practice.
(9 VAC 5-80-110 and Condition 6 of the 8/20/03 Permit)
83. **Lime Silo Equipment - (Unit 112) – Limitations** - The throughput of lime shall not exceed 11,000 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.
(9 VAC 5-80-110 and Condition 11 of the 8/20/03 Permit)
84. **Ash Handling Equipment and Truck Traffic – (Units 111 and 113) – Limitations** - Fugitive dust emission controls shall include the following, or equivalent, as a minimum:
 - a. Dust from ash handling (Unit 111), and the ash load-out, shall be controlled by a permanently installed ash conditioning system.
 - b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.
 - c. Dust from haul roads and traffic (Unit 113) areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
(9 VAC 5-80-110)
85. **Ash Conveying System– (Unit 111) – Limitations** - Visible emissions from the ash conveying system (including conveyor transfer points) shall not exceed 5% of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Method 22 (reference 40 CFR 60, Appendix A) as specified in 9 VAC 5-40-8140H, except as provided in 9 VAC 5-8070 C and D. This condition applies at all times except during maintenance and repair of the ash conveying systems.
(9 VAC 5-80-110, 9 VAC 5-40-8070 and Condition 37 of the 8/20/03 Permit)
86. **Lime Silo Equipment – (Unit 112) – Limitations** - Visible emissions from the lime silo fabric filter shall not exceed 5% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10% 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 5-80-110 and Condition 36 of the 8/20/03 Permit)

B. Monitoring and Recordkeeping

87. **Ash Conveying System – (Unit 111) – Monitoring** - The permittee shall perform periodic visual emissions checks of the ash conveying system once each calendar week when the ash is being conveyed. If such periodic checks indicate any fugitive emissions, the permittee shall take appropriate action to correct the cause of the visible emissions such that no fugitive emissions exist. If such corrective action fails to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR 60, Appendix A) for a minimum of three 1-hour observations. The average duration of the fugitive emissions per hour shall be calculated from the three 1-hour observations. This average will be used to determine compliance with Condition 85. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, whether or not there were visible emissions, any VEE recordings and any necessary corrective action. If the equipment has not been operated during the week, it shall be noted in the logbook that the equipment was not operated and that a visual observation was not required. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
(9 VAC 5-80-110 E)
88. **Lime Silo – (Unit 112) – Monitoring** - The permittee shall perform periodic visual emissions checks of each unit once each calendar week when the units are operating. If such periodic evaluations indicate any opacity condition, the permittee shall take appropriate action to correct the cause of the opacity such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of 6 minutes, taking 24 consecutive readings at 15-second intervals. The permittee shall maintain a log to demonstrate compliance with this condition. The log shall include the date and time of the observations, the observer's name, whether or not there were visible emissions, any VEE recordings and any necessary corrective action. If the equipment has not been operated during the week, it shall be noted in the logbook that the equipment was not operated and that a visual observation was not required. The logbook shall be kept at the facility and available for inspection by the DEQ for the most recent 5 year period.
(9 VAC 5-80-110 E)
89. **Lime Silo, Ash Handling and Truck Traffic - (Units 111, 112 and 113) - Reporting** - 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 Director, Tidewater Regional Office. These records shall include, but are not limited to:
- Monthly and annual throughput of lime to the storage silo. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - Records of visible emissions checks, visible emission evaluations and any corrective action taken.
- Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available on site for inspection by the DEQ and shall be current for the most recent 5 years.
(9 VAC 5-80-110 and Condition 42 of the 8/20/03 Permit)

C. Testing

90. **Ash Handling Equipment - (Unit 111) - Testing** - The permitted facility shall conduct a Method 22 observation test annually (no more than 12 months following the previous test) on the ash conveying system. The standard for this is 5 % of the observation period (i.e., 9 minutes per 3-hour period), as determined by Reference Method 22. The testing shall take place in accordance with 9 VAC 5-40-8070 and 8140 H. All compliance determinations shall be performed in accordance with 9 VAC 5-40-8140 and 9 VAC 5-40-8150.
(9 VAC 5-80-110, 9 VAC 5-40-8140, 9 VAC 5-40-8150 and 40 CFR Part 62.11640)

X. Facility-Wide Conditions

A. Testing

91. **Facility-Wide Requirements - (Units 044, 045, 046, 047, 049, 100, 111, 112, 128, 200, 201, 202, and 207) - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports shall be provided when requested in accordance with the applicable performance specification (ref. 40 CFR Part 60, Appendix B) at the appropriate locations. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110 and Condition 47 of the 8/20/03 Permit)

XI. Insignificant Emission Units

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

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
114	Turbine Generator Lube Oil Storage Reservoir No. 1	9 VAC 5-80-720 B	VOC	1700 gallons
115	Turbine Generator Lube Oil Storage Reservoir No. 2	9 VAC 5-80-720 B	VOC	1700 gallons
116	Turbine Generator Lube Oil Storage Reservoir No. 3	9 VAC 5-80-720 B	VOC	1700 gallons
117	Diesel Generator Lube Oil Reservoir	9 VAC 5-80-720 C	-	250 gallons
119	Diesel Fuel Tank	9 VAC 5-80-720 B	VOC	300 gallons
120	Diesel Fuel Tank	9 VAC 5-80-720 B	VOC	275 gallons
122	Lube Oil Tank	9 VAC 5-80-720 B	VOC	275 gallons
123	Lube Oil Tank	9 VAC 5-80-720 B	VOC	275 gallons
124	TG Hydraulic Lube Oil Tank	9 VAC 5-80-720 B	VOC	80 gallons
125	TG Hydraulic Lube Oil Tank	9 VAC 5-80-720 B	VOC	80 gallons
126	TG Hydraulic Lube Oil Tank	9 VAC 5-80-720 B	VOC	80 gallons
129	WTE Fire Pump Fuel Oil Tank	9 VAC 5-80-720 B	VOC	275 gallons
130	Liquid Waste Tank	9 VAC 5-80-720 B	VOC	8500 gallons
131	Liquid Waste Tank	9 VAC 5-80-720 B	VOC	8500 gallons
132	Liquid Waste Tank	9 VAC 5-80-720 B	VOC	1500 gallons
211	Fire Pump Fuel Oil Storage Tank	9 VAC 5-80-720 B	VOC	275 gallons
212	Hydraulic Oil Storage Tank	9 VAC 5-80-720 B	VOC	250 gallons
213	Hydraulic Oil Storage Tank	9 VAC 5-80-720 B	VOC	500 gallons
214-219	RDF Roof Top Building Air Heaters	9 VAC 5-80-720 B	VOC	1.4 MMBtu/hr
220	RDF Roof Top Building Air Heater	9 VAC 5-80-720 B	VOC	0.7 MMBtu/hr
221	RDF Water Heater	9 VAC 5-80-720 B	VOC	0.2 MMBtu/hr
222	RDF Boiler	9 VAC 5-80-720 B	VOC	0.9 MMBtu/hr
251	RDF ULSD Tank	9 VAC 5-80-720 B	VOC	3,000 gallons
252	RDF Lubricating Oil Tank	9 VAC 5-80-720 B	VOC	120 gallons
253	RDF Conveyor Baghouse	9 VAC 5-80-720 A	PM	Not Vented Outside
254	WTE Roof Baghouse Vents	9 VAC 5-80-720.A	PM	Vented to boiler

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

XII. Permit Shield & Inapplicable Requirements

93. **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 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	For the RDF boilers (044, 045, 046 and 047) - The auxiliary burners used to fire fuel oil are rated at 87 mmBtu/hr and do not meet the applicability criteria in 60.40b(3).). When operating under 9 VAC 5-40 Article 54, the boilers are exempt (40 CFR 60.40b(k).
40 CFR Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	This regulation does not apply to units 109 and 110 because they store No. 2 fuel oil which has a vapor pressure less than 3.5 kPa (0.5 psi).
40 CFR Part 64	Compliance Assurance Monitoring	64.2(b)(i) exempts emission units with emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. Article 54 meets this definition for both operating scenarios, therefore, the WTE boilers are not subject to CAM. No other units on site are CAM applicable.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9 VAC 5-80-140)

XIII. General Conditions

94. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)
95. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- a. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- b. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- c. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- d. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- e. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
96. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements.
- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement.
(9 VAC 5-80-110 F)

97. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
98. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement (unless otherwise specified) to DEQ no later than **March 1 and September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, or periodic monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
(9 VAC 5-80-110 F)
99. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
 - f. Such other facts as the permit may require to determine the compliance status of the source.

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

R3_APD_Permits@epa.gov

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

100. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, TRO 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. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 98 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)
101. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, TRO Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, TRO Regional Office.
(9 VAC 5-20-180 C)
102. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-50-50 C are not subject to the 14 day written notification.
(9 VAC 5-20-180 C and 9 VAC 5-50-50)
103. **General Conditions - Failure/Malfunction Reporting** - The emission units subject to the reporting and the procedure requirements of 9 VAC 5-50-50 C are the WTE boilers (Units 044, 045, 046, and 047).
(9 VAC 5-20-180 C and 9 VAC 5-50-50)
104. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

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

105. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
106. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)
107. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
108. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
109. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)
110. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
111. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
112. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

113. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-50-90)
114. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- (9 VAC 5-50-20 E)
115. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
- (9 VAC 5-80-110 J)
116. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (9 VAC 5-80-110 K.2)

117. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
(9 VAC 5-80-110 L)
118. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)
119. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
120. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
121. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
122. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 123 are met.
(9 VAC 5-80-250)
123. **General Conditions - Malfunction as an Affirmative Defense** - 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:
- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

- d. 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 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
(9 VAC 5-80-250)
124. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-250)
125. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)
126. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)
127. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)
128. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F) Asbestos Requirements
129. **General Condition – Asbestos** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490 A)
130. **General Condition - 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 under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

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

XIV. State-Only Enforceable Requirements

132. **State-Only Enforceable Requirements** - The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.
- a. Odor - 9 VAC 5 Chapter 40, Article 2 and 9 VAC 5 Chapter 50, Article 2.
 - b. State toxics rule - 9 VAC 5 Chapter 40, Article 3 and 9 VAC 5 Chapter 50, Article 3.
(9 VAC 5-80-110 N and 9 VAC 5-80-300)