



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

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[www.deq.virginia.gov](http://www.deq.virginia.gov)

Doug Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

Maria R. Nold  
Regional Director

May 8, 2013

Mr. Harold S. Thacker  
Delmarva Market Area Director of Landfill Operations  
USA Waste of Virginia Landfills, Inc.  
100 North Park Lane  
Hampton, Virginia 23666

Location: Hampton  
**Registration No.: 61291**  
AFS Id. No.: 51-650-00093

Dear Mr. Thacker

Attached is a permit to operate the Bethel Landfill pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the New Source Review State Major permit dated February 28, 2013.

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

In evaluating the application and arriving at a final decision to renew this permit, the Department deemed the application complete on January 31, 2013, and solicited written public comments by placing a newspaper advertisement in the Daily Press on Friday, March 22, 2013 along with EPA comments by submitting the proposed permit to EPA, Region III for review on Wednesday, March 20, 2013. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on Monday, April 22, 2013, with no comments having been received in this office. The EPA forty-five (45) day comment period, provided for in 9 VAC 5-80-210, expired on Monday, May 6, 2013, with no comments having been received by this office.

This approval to operate does not relieve USA Waste of Virginia Landfills, 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, in 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

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

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

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please call James A. White Jr. by phone at (757) 518-2180 or by e-mail at [james.white@deg.virginia.gov](mailto:james.white@deg.virginia.gov).

Sincerely,

Troy D. Breathwaite  
Regional Air Permits Manager

TDB/JIM/61291\_007\_13\_T5RenewalCvrltr#2\_USA Waste of VA\_Bethel Landfill.docx

Attachments: Title V Permit

cc: Manager, Data Analysis (electronic file submission)  
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)  
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: USA Waste of Virginia Landfills, Inc.  
Facility Name: Bethel Landfill  
Facility Location: 100 North Park Lane  
Hampton, Virginia 23666

Registration Number: 61291  
Permit Number: TRO-61291

This permit includes the following programs:

**Federally Enforceable Requirements - Clean Air Act (Pages 4 through 34)**  
**State Only Enforceable Requirements (Page 34)**

**April 28, 2013**  
Effective Date

**April 27, 2018**  
Expiration Date

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Regional Director

**May 8, 2013**  
Signature Date

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## **Facility Information**

### Permittee

USA Waste of Virginia Landfills, Inc.  
100 North Park Lane  
Hampton, Virginia 23666

### Responsible Official

Mr. Harold S. Thacker  
Delmarva Market Area Director of Landfill Operations  
USA Waste of Virginia Landfills, Inc.

### Facility

Bethel Landfill  
100 North Park Lane  
Hampton, Virginia 23666

### Contact Person

Mr. Samuel Nicolai  
Area Engineer  
804-205-0414

### **County-Plant Identification Number: 51-650-00093**

Facility Description: SIC Code 4593/4911, NAICS Code 562212 - The source is a sanitary landfill for the disposal of municipal, commercial, and industrial non-hazardous solid waste refuse. The facility includes a landfill gas collection/control system (GCCS) and a landfill gas-to-energy recovery plant. The landfill gas-to-energy recovery plant consists of six (6) treated landfill gas-fired internal combustion (IC) Caterpillar G3516 turbo-charged engine-generator sets, each rated at a maximum power output of 1,148 brake horsepower (bhp). An on-site pre-treatment system filters, de-waters, and compresses the LFG prior to use in the engines. The six (6) engine-generator sets combined combust approximately 2.8 million cubic feet of treated landfill gas (LFG) per day while producing 4.8 Megawatts of electrical power. The electrical power is transformed and delivered to the local electric power transmission grid for use. An open (candlestick) flare is used to combust any LFG not otherwise utilized by the IC Caterpillar G3516 engines and also serves as a backup combustion device. The open flare has a maximum design capacity of 3,400 standard cubic feet per minute (scfm). The landfill facility has several small emergency generators located on-site that are used to provide emergency power during interruptions in service from the normal power supplier and during testing and operational maintenance of the units. The facility also operates a diesel engine-powered stormwater pump.

## 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
<b>LFG Combustion Equipment</b>							
P001A	V002	Power Strategies Tornado (Parnell) open (candlestick) flare, 1996	103.2 MMBtu/hr (HHV)	No additional devices	P001A	NMOCs	May 16, 2000
EG1	STACK-1	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG1	NMOCs	July 25, 2006
EG2	STACK-2	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG2	NMOCs	July 25, 2006
EG3	STACK-3	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG3	NMOCs	July 25, 2006
EG4	STACK-4	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG4	NMOCs	July 25, 2006
EG5	STACK-5	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG5	NMOCs	July 25, 2006
EG6	STACK-6	Caterpillar generator set G3516	10.1 MMBtu/hr	No additional devices	EG6	NMOCs	July 25, 2006
<b>Emergency Generator Sets / Stormwater Pump Equipment</b>							
F003	STACK-F3	Gasoline emergency generator	0.5 kW	None	N/A	N/A	April 28, 2003
F004	STACK-F3	Diesel emergency generator; Manf'd date 1996	35 kW	None	N/A	N/A	April 28, 2003
F005	STACK-F5	Scale-house diesel emergency generator (inbound); Manf'd date 2003	6.5 kW	None	N/A	N/A	April 28, 2013
F006	STACK-F6	Scale-house diesel emergency generator (outbound); Manf'd date 2003	6.5 kW	None	N/A	N/A	April 28, 2013
F007	STACK-F7	Leachate area diesel emergency generator; Manf'd date 1996	50 kW	None	N/A	N/A	April 28, 2013
F012	STACK-F12	Diesel powered stormwater pump; Manf'd date 2011(non-emergency)	156 HP	None	N/A	N/A	April 28, 2013
<b>Process A: Landfill Operations</b>							
LFO-1	N/A	Landfill Operations	49.5 MM cubic meter landfill volume	4,300 scfm LFG GCCS	GCCS-1	NMOCs	July 25, 2006
<b>Liquid Fuel Storage Tanks</b>							
P004	N/A	AST Gasoline Fuel Storage Tank	280 gallons	No additional devices	N/A	N/A	April 28, 2013

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

## **Landfill Operations and Combustion Equipment Requirements - (emission unit ID# LFO-1, P001A, and EG1 - EG6)**

1. **Landfill Operation Requirements - (emission unit ID# GCCS-1) - Gas Collection and Control System (GCCS)** - The permittee shall operate an active GCCS, approved by the Administrator, that captures the landfill gas (LFG) generated within the landfill. The GCCS installed at the Bethel Landfill location shall be designed in accordance with 40 CFR 60.752(b)(2)(ii)(A). The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the LFG control or treatment system equipment. The system shall collect LFG from each area, cell, or group of cells in the landfill in which solid waste has been placed for a period of five (5) years or more if active, or two (2) years or more if closed or at final grade. The GCCS shall collect LFG at a sufficient extraction rate. Also, the system shall be designed to minimize the off-site migration of subsurface gas. Based on the USA Waste of Virginia Landfills, Inc. Title V application, uncontrolled Non-Methane Organic Compound (NMOC) emission rates are estimated to be more than 50 Megagrams per year (Mg/yr). Therefore, it is the responsibility of USA Waste of Virginia Landfills, Inc. to keep for the life of the GCCS an up-to-date, readily accessible plot map showing each existing and planned collector in the system and provide a unique identification location label for each LFG collector.  
(9 VAC 5-80-110, 40 CFR 60.752(b)(2)(ii)(A), 40 CFR 60.753(a), and 40 CFR 60.758(d))
2. **Landfill Operation Requirements - (emission unit ID# P001A and EG1 - EG6) - NMOC Emission Controls** - The GCCS shall route all collected LFG to one or more of the following combustion devices where it is to be combusted: the utility (open flame) flare P001A and six (6) treated LFG-fired internal combustion (IC) Caterpillar G3516 turbo-charged engine-generator sets EG1 through EG6, each rated at 1,148 brake horsepower (bhp). The utility flare P001A shall be designed and operated in accordance with the provisions in 40 CFR 60.18, except for 40 CFR 60.754(e). A sufficient number of combustion devices shall be operational at all times to combust the entire flow of LFG from the GCCS. Each combustion device shall be provided with adequate access for inspection.  
(9 VAC 5-80-110, 40 CFR 60.752(b)(2)(iii), 40 CFR 60.753(e), 40 CFR 60.756(b)(1), and Conditions 5 and 6 of NSR State Major permit issued February 28, 2013)
3. **Fugitive Dust Emissions** - Fugitive dust and fugitive emission controls shall include as a minimum, the following or equivalent as approved by DEQ:
  - a. All cover material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions as appropriate;
  - b. Weather permitting, 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; and

- c. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance road to the Bethel Landfill facility up to the vicinity of the process areas. Trucks leaving the site shall have clean wheels - achieved by use of a wheel washer or equivalent. Dirt, product or raw material spilled or tracked onto paved surfaces shall be promptly removed or wetted to prevent particulate matter from becoming airborne. (9 VAC 5-80-110, 9 VAC 5-50-90 and Condition 8 of NSR State Major permit issued February 28, 2013)
4. **Landfill Operation Requirements - (emission unit ID# GCCS-1) - Gas Collection and Control System** - The primary purpose of the GCCS is to control the migration of methane gas. The permittee shall operate the collection system such that the surface methane concentration is less than 500 ppm above the methane background level at the surface of the landfill. A negative pressure shall be maintained at each active wellhead tor except in the case of fire, increased well temperature, use of a geo-membrane or synthetic cover if the permittee has developed acceptable pressure limits in the GCCS design plan, or at a decommissioned well. The permittee shall operate each interior, active wellhead in the collection system such that the gas temperature is less than 55 degrees Celsius and with either a nitrogen level of less than 20 percent (20%) or an oxygen level of less than five percent (5%), unless a DEQ approved higher operating value has been established at a particular wellhead.  
(9 VAC 5-80-110 and 40 CFR 60.753(b, c, and d))
5. **Landfill Operation Requirements - (emission unit ID# GCCS-1) - GCCS Operating Parameters** - The provisions of 40 CFR 60.755 shall apply to the operation of the GCCS at all times, except during periods of start-up, shut down, or malfunction, provided that the duration of start-up, shut down, or malfunction does not exceed five (5) calendar days for the GCCS and does not exceed one (1) hour for the LFG treatment system or LFG combustion devices.  
(9 VAC 5-80-110 and 40 CFR 60.755(e))
6. **Landfill Operation Requirements - (emission unit ID# GCCS-1) - GCCS Shutdown -** The permittee shall operate the GCCS such that all collected LFG is routed to one or more of the LFG combustion devices or to a LFG treatment system. In the event that the collection and control system malfunctions, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within one (1) hour.  
(9 VAC 5-80-110 and 40 CFR 60.753(e))
7. **Landfill Operation Requirements - Operational Integrity** - The permittee shall operate the combustion devices and the LFG treatment system at all times that LFG is being collected by the GCCS. LFG control devices include the utility flare P001A and the six (6) treated LFG-fired Caterpillar G3516 engine/generator sets EG1 - EG6.  
(9 VAC 5-80-110 and 40 CFR 60.753(f))

8. **Landfill Operation Requirements - (emission unit ID# GCCS-1) - Placement of New Wells** - The permittee shall place each new well or design component as specified in the GCCS design plan and shall install wells no later than 60 calendar days after the date on which the initial solid waste has been in place in any cell or group of cells for a period of five (5) years or more if active or two (2) years or more if closed or at final grade.  
(9 VAC 5-80-110 and 40 CFR 60.755(b))
9. **Landfill Operation Requirements - NSPS, Subpart WWW** - The solid waste landfill, as well as the GCCS, shall be constructed and operated in accordance with 40 CFR 60, Subpart WWW. When '*The Administrator*' is prescribed as the recipient of reports required by Subpart WWW, it shall be understood to be the Director of the DEQ Tidewater Regional Office.  
(9 VAC 5-80-110, 40 CFR 60.750 - 759 and Condition 13 of NSR State Major permit issued February 28, 2013)
10. **LFG Combustion Equipment Requirements - (emission unit ID# P001A) - Flare Heat Content and Tip Velocity Specifications** - In accordance with 40 CFR 60.18(c)(3), the utility flare P001A shall be operated using either the heat content specifications of 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications of 40 CFR 60.18(c)(4) or by meeting the requirements of 40 CFR 60.18(c)(3)(i).  
(9 VAC 5-80-110, CFR 60.18(c), and Condition 7 of NSR State Major permit issued February 28, 2013)
11. **LFG Combustion Equipment Requirements - (emission unit ID# P001A and EG1 - EG6) - Approved Fuels** - The approved fuel for the six (6) Caterpillar G3516 engine-generator sets EG1 - EG6 is treated LFG and untreated LFG for the utility flare P001A. Any request to add a new fuel type or a new combustion device may require a permit to operate. The pilot light on the utility flare P001A may be fueled with Liquefied Petroleum Gas (LPG).  
(9 VAC 5-80-110, Condition 10 of NSR State Major permit issued February 28, 2013)
12. **LFG Combustion Equipment Requirements - (emission unit ID# EG1 - EG6) - Fuel Throughput Limit** - The throughput of treated LFG fuel to be combusted in the six (6) Caterpillar G3516 engine-generator sets EG1 - EG6 (combined) shall not exceed  $1.04 \times 10^9$  cubic feet per year, on a dry basis, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 11 of NSR State Major permit issued February 28, 2013)
13. **LFG Combustion Equipment Requirements - (emission unit ID# P001A) - Fuel Throughput Limit** - The throughput of untreated LFG to be combusted in the utility flare P001A shall not exceed  $1.79 \times 10^9$  cubic feet per year, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 12 of NSR State Major permit issued February 28, 2013)

14. **LFG Combustion Equipment Requirements - (emission unit ID# EG1 - EG6) - Emission Limits** - Emissions from the operation of the six (6) treated LFG-fired Caterpillar G3516 engine-generator sets EG1 - EG6 shall not exceed the limits specified below:

	<u>Each engine</u>	<u>Combined</u>	
PM-10	0.03 lbs/hr	0.8 tons/yr	(9 VAC 5-50-260)
PM-2.5	0.03 lbs/hr	0.8 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	0.16 lbs/hr	4.1 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	3.8 lbs/hr	99.8 tons/yr	(9 VAC 5-50-260)
VOC (as NMOCs)	0.08 lbs/hr	2.2 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	6.8 lbs/hr	179.7 tons/yr	(9 VAC 5-50-260)

Annual emissions are to be determined for each 12-month consecutive period.  
(9 VAC 5-80-110 and Condition 15 of NSR State Major permit issued February 28, 2013)

15. **LFG Combustion Equipment Requirements - (emission unit ID# P001A) - Emission Limits** - Emissions from the operation of the utility flare P001A shall not exceed the limits specified below:

PM-10	1.7 lbs/hr	7.6 tons/yr
PM-2.5	1.7 lbs/hr	7.6 tons/yr
Sulfur Dioxide	1.6 lbs/hr	7.0 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	6.3 lbs/hr	27.6 tons/yr
VOC (as NMOCs)	0.6 lbs/hr	2.7 tons/yr
Carbon Monoxide	34.3 lbs/hr	150.3 tons/yr

Annual emissions are to be determined for each 12-month consecutive period.  
(9 VAC 5-80-110 and Condition 16 of NSR State Major permit issued February 28, 2013)

16. **LFG Combustion Equipment Requirements - (emission unit ID# EG1 - EG6) - Visible Emissions Limit** - Visible emissions from any of the exhaust stacks for the six (6) treated LFG-fired Caterpillar G3516 engine-generator sets shall not exceed 10 percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent (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 18 of NSR State Major permit issued February 28, 2013)

17. **LFG Combustion Equipment Requirements - (emission unit ID# P001A) - Visible Emissions Limit** - The utility flare P001A shall be operated with no visible emissions, as determined by EPA Method 22 (reference 40 CFR 60, Appendix A), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. This condition applies at all times except for start-up, shutdown, and malfunction.  
(9 VAC 5-80-110, 40 CFR 60.18, and Condition 19 of NSR State Major permit issued February 28, 2013)
18. **LFG Combustion Emissions Requirement - (emission unit ID# P001A and EG1 - EG6)** - Combustion equipment emissions shall be controlled by proper operation and maintenance of the equipment. Equipment operators shall be trained in the proper operation of all such devices. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum, for each equipment type.  
(9 VAC 5-80-110 and Condition 4 of NSR State Major permit issued February 28, 2013)
19. **Landfill Operation Requirements - Start-up, Shutdown, and Malfunction Plan** - As an affected source, the Bethel Landfill is categorized as an 'existing landfill' in 40 CFR Part 63, Subpart AAAA. The additional requirements beyond those imposed in the NSPS include development of the 'SSM' plan and the start of semi-annual reporting for the GCCS, beginning January 16, 2004.  
(9 VAC 5-80-110, 40 CFR 63.1930 - 1990, and Condition 22 of NSR State Major permit issued February 28, 2013)
20. **Landfill Operation Requirements - Wellhead Pressure Monitoring** - The permittee shall measure the gauge pressure in the header at each individual active well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five (5) calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. Exceptions to this requirement are listed under 40 CFR 60.753 (b)(1 - 3). If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.  
(9 VAC 5-80-110, 40 CFR 60.753(g), and 40 CFR 60.755(a)(3))
21. **Landfill Operation Requirements - Wellhead Parameters Monitoring** - The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen. If a well exceeds one of these operating parameters (see 40 CFR 60.753(c) for parameters and higher operating values), action shall be initiated to correct the exceedance within five (5) calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the LFG collection system shall be expanded to correct the exceedance within 120 calendar days of the initial exceedance. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.  
(9 VAC 5-80-110, 40 CFR 60.753(g), and 40 CFR 60.755(a)(5))

22. **Landfill Operation Requirements - Surface Methane Monitoring** - The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that transverses the landfill at 30 meter intervals for each collection area for which waste has been in place for two (2) or more years if closed or at final grade or for which waste has been in place for five (5) or more years if active. This surface methane monitoring shall take place on a quarterly schedule and using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. Areas with steep slopes, the active working face or other dangerous areas may be excluded from this monitoring as approved by the Director of the DEQ Tidewater Regional Office.  
(9 VAC 5-80-110 and 40 CFR 60.755(c)(1))
23. **Landfill Operation Requirements - Surface Methane Monitoring** - The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60, Appendix A-7, Method 21, Section 8.3.1, except that the probe inlet shall be placed within five (5) to ten (10) centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.  
(9 VAC 5-80-110 and 40 CFR 60.755(c)(2 and 3))
24. **Landfill Operation Requirements - Surface Methane Monitoring Method of Operation** - The portable analyzer used to determine surface methane concentrations shall meet the instrument specifications provided in 40 CFR 60, Appendix A-7, Method 21, Section 6.0, except that methane shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To meet the performance evaluation requirements in Section 6.0 of Method 21, the instrument evaluation procedures in Section 8.0 of Method 21, of Appendix A-7 shall be used. The calibration procedures in Section 8.0 of Method 21 shall be followed immediately before commencing a surface monitoring survey.  
(9 VAC 5-80-110 and 40 CFR 60.755(d))
25. **Landfill Operation Requirements - Surface Methane Exceedances** - Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.
- a. The location of the exceedance shall be marked and recorded;
  - b. The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be re-monitored within 10 calendar days of detecting the exceedance;

- c. If the re-monitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within ten (10) calendar days of the second exceedance. If the re-monitoring shows a third exceedance for the location, the permittee shall install a new well or other collection device within 120 calendar days after the initial exceedance;
- d. Any location that initially showed an exceedance but has methane concentration less than 500 ppm above background at the 10-day re-monitoring shall be re-monitored one (1) month from the initial exceedance. If the one-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring. If the one-month re-monitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (c) or (e) of this condition; and
- e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background three (3) times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director of the DEQ Tidewater Regional Office.  
(9 VAC 5-80-110 and 40 CFR 60.755(c)(4)(I - v))

26. **Landfill Operation Requirements - Surface Cover Integrity Monitoring** - The permittee shall implement a program to monitor for surface cover integrity and accomplish cover repairs as necessary on a monthly basis.  
(9 VAC 5-80-110 and 40 CFR 60.755(c)(5))
27. **Landfill Operation Requirements - Sampling Ports for Parametric Monitoring** - The permittee shall install a sampling port and a port for temperature measurements at each wellhead. The permittee shall measure the gauge pressure in the LFG collection header on a monthly schedule. The permittee shall monitor the temperature and nitrogen or oxygen concentrations in the LFG at each wellhead on a monthly schedule.  
(9 VAC 5-80-110 and 40 CFR 60.756(a))
28. **Landfill Operation Requirements - Monitoring Devices** - The GCCS shall be equipped with a gas flow measuring device that records the untreated volume of LFG to the utility flare P001A. The LFG treatment system shall be equipped with a gas flow measuring device that records the treated volume of LFG to the six (6) Caterpillar G3516 engine-generator sets EG1 - EG6. The utility flare P001A shall be equipped with a heat-sensing device to ensure the presence of a continuous flame at the flare tip. 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 whenever LFG is being supplied to the appropriate combustion devices. Any periods of malfunction of these monitoring devices shall be recorded as defined in Condition 38 of this permit.  
(9 VAC 5-80-110, 9 VAC 5-50-20 C, 40 CFR 60.756(b)(1 and 2), and Condition 9 of NSR State Major permit issued February 28, 2013)

29. **LFG Combustion Equipment Requirements - (emission unit ID# EG1 - EG6) - Periodic Monitoring** - The permittee shall perform periodic visual emission evaluations (VEE) on the exhaust stack of each of the six (6) treated LFG-fired Caterpillar G3516 engine-generator sets EG1 - EG6 at least once per calendar week. The observations shall be conducted during daylight hours and under normal operating conditions, for at least a one-minute period to determine compliance with the opacity standards for the engines. If no visible emissions are observed, no further action shall be required. However, if visible emissions are noted, the permittee shall take appropriate action immediately to return the unit to normal operations such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee shall conduct a VEE for a period of six (6) minutes (24 consecutive observations at 15-second intervals) using Method 9 (40 CFR 60, Appendix A). If the six-minute VEE opacity average exceeds ten percent (10%), the VEE shall continue for an additional 12 minutes. If any of the six-minute averages exceeds 20 percent (20%) opacity during the 18 minutes, the VEE shall continue for one (1) hour from initiation, to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations and any corrective actions taken. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five (5) year period.  
(9 VAC 5-80-110 E)
30. **LFG Combustion Equipment Requirements - (emission unit ID# P001A) - Periodic Monitoring** - The permittee shall perform periodic visual emission evaluations (VEE) on the utility flare P001A, at least once per calendar week, when operating. The observations shall be conducted during daylight hours and under normal operating conditions, for at least a one-minute period to determine compliance with the opacity standards for the utility flare P001A. If no visible emissions are observed, no further action shall be required. However, if such periodic evaluations indicate any visible emissions, the permittee shall take appropriate action immediately, to return the unit to normal operation 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 22 (reference 40 CFR 60, Appendix A). If a Method 22 evaluation and/or corrective action become necessary, the permittee shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five (5) year period.  
(9 VAC 5-80-110 E)
31. **Landfill Operation Requirements - Monitoring for NSPS Compliance** - The permittee shall demonstrate compliance with operational standards for the GCCS required by Subpart WWW (40 CFR 60.753) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). The permittee shall demonstrate compliance of the GCCS requirements of Subpart WWW (40 CFR 60.752) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). All reports required to demonstrate compliance with the compliance requirements of Subpart WWW (40 CFR 60.755) shall be prepared and submitted to the Tidewater Regional Office as required by 40 CFR 60.757(f)(1 - 6).  
(9 VAC 5-80-110, 40 CFR 60.753 - 757, and Condition 13 of NSR State Major permit issued February 28, 2013)

32. **Landfill Operation Recordkeeping - Wellhead Inspections** - The permittee shall record and maintain a logbook of wellhead inspections that indicates a positive pressure had existed and the corrective action taken to alleviate the abnormal condition at the wellhead. Exceptions to this requirement include; a fire or increased well temperature, use of a geomembrane or synthetic cover, or a decommissioned well.  
(9 VAC 5-80-110 and 40 CFR 60.753(b)(1 - 3))
33. **Landfill Operation Recordkeeping - Surface Monitoring Design Plan** - The permittee shall maintain an updated Surface Monitoring Design Plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Under a Consent Order signed with EPA Region III on December 4, 2004, the Bethel Landfill facility is required to show compliance with this updated plan in future records and reports of surface monitoring.  
(9 VAC 5-80-110 and 40 CFR 60.753(d))
34. **Landfill Operation Recordkeeping - Landfill Design Capacity** - The permittee shall keep for at least five (5) years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b); the current amount of solid waste in-place; and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats, approved by the DEQ, are acceptable.  
(9 VAC 5-80-110 and 40 CFR 60.758(a))
35. **Landfill Operation Recordkeeping - Operating Parameters** - The permittee shall maintain for five (5) years, readily accessible records of the following monitoring observations:
- Wellhead gauge pressures measured monthly;
  - Wellhead temperatures measured monthly;
  - Wellhead nitrogen or oxygen concentrations measured monthly;
  - Volume of the untreated LFG to the utility flare P001A and to the LFG treatment system for combustion in the six (6) Caterpillar G3516 engine-generator sets EG1 - EG6;
  - Results of the quarterly surface methane monitoring information on exceedances; and
  - Malfunction reports for LFG combustion or collection devices.
- (9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.753(c and d), and 40 CFR 60.758(c))
36. **Landfill Operation Recordkeeping - (emission unit ID# GCCS-1)** - The permittee shall keep for the life of the GCCS an up-to-date, readily accessible plot map showing each existing and planned gas collector in the system. The map shall also provide a unique identification location label for each gas collector. Additionally, each owner or operator shall keep up-to-date, readily accessible records of the installation date and location of all newly installed gas collectors specified under 40 CFR 60.755(b).  
(9 VAC 5-80-110 and 40 CFR 60.758(d))

37. **Landfill Operation Recordkeeping - (emission unit ID# GCCS-1)** - The permittee shall maintain for five (5) years, readily accessible records of all GCCS exceedances of the operational standards, including the readings taken in subsequent months showing a return to compliance, and the location where the exceedance occurred.  
(9 VAC 5-80-110 and 40 CFR 60.758(e))
38. **Landfill Operation Recordkeeping - Equipment Malfunctions** - The permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the GCCS, any malfunction of the on-site combustion devices, or any periods during which a continuous monitoring system or monitoring device is inoperative for more than one (1) hour.  
(9 VAC 5-80-110 and 40 CFR 60.758(c)(1))
39. **Landfill Operation Recordkeeping - Compliance** - All records, reports, and measurements required to demonstrate compliance with NSPS, Subpart WWW shall be prepared and submitted to the Director of the DEQ Tidewater Regional Office, as listed in 40 CFR 60.755.  
(9 VAC 5-80-110, 9 VAC 5-50-50 and 40 CFR 60.755)
40. **LFG Combustion Equipment Recordkeeping - (emission unit ID# GCCS-1, P001A, and EG1 - EG6) - Training Records** - The permittee shall maintain records for any required training deemed necessary to ensure proper operation of the equipment at the permitted facility. The records shall include a statement of the time, place and nature of the training provided. All records required by this condition shall be kept on site for a five (5) year period and made available for inspection by the DEQ.  
(9 VAC 5-80-110)
41. **Landfill Operation Testing - (emission unit ID# GCCS-1) - Nitrogen Testing** - If measured, the nitrogen level at each LFG wellhead shall be determined by using EPA Method 3C.  
(9 VAC 5-80-110 and 40 CFR 60.753(c)(1))
42. **Landfill Operation Testing - (emission unit ID# GCCS-1) - Oxygen Testing** - Unless an alternative test method is established as allowed for by 40 CFR 60.753(2)(i), the oxygen level at each wellhead shall be determined by an oxygen meter using EPA Method 3A or 3C, except for the following:
- The span be set so that the regulatory limit is between 20 and 50 percent (%) of the span;
  - A data recorder is not required;
  - Only two (2) calibration gases are required; a zero and span, and ambient air may be used as the span;
  - A calibration error check is not required; and
  - The allowable sample bias, zero drift, and calibration drift are plus-or-minus ( $\pm$ ) ten percent (10%).
- (9 VAC 5-80-110 and 40 CFR 60.753(c)(2))

43. **Emissions Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.  
(9 VAC 5-80-110)
44. **LFG Combustion Equipment Testing - (emission unit ID# EG1 - EG6) - Performance Testing** - Upon request by the DEQ, the permittee shall conduct performance tests on the LFG-fired Caterpillar G3516 engine-generator sets EG1 - EG6 for emissions of NOx and CO to determine compliance with the allowable emission limits for these pollutants listed in this permit. The details of the performance tests shall be arranged with the DEQ Tidewater Regional Office.  
(9 VAC 5-80-110, 9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410)
45. **Landfill Operation Reporting - NSPS, Subpart WWW and MACT, Subpart AAAA** - On March 1<sup>st</sup> and September 1<sup>st</sup> of each calendar year, routine reports required by the Landfill MACT and the NSPS for the operation of the GCCS shall be submitted to the DEQ. The Table below outlines the reports required by the NSPS and Landfill MACT.

Report Name	Periods Covered	Report Due Dates	Permit Condition Number	Regulation Citations
NSPS and MACT Compliance	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	Conditions 9, 19, and 31	40 CFR 60.753 to 60.757 and 40 CFR 63.1980 (a)
Landfill MACT SSM Report	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	Condition 19	40 CFR 63.1980
GCCS Design Plan	None specified	As required by GCCS construction activities	Condition 1	40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 60.755
Semi-annual Monitoring	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	March 1 <sup>st</sup> & Sept. 1 <sup>st</sup>	Condition 84	9 VAC 5-80-110

(9 VAC 5-80-110)

46. **Landfill Operation Reporting - (emission unit ID# GCCS-1) - NSPS Compliance Report Details:**
- Instances when positive pressure at a wellhead occurred due to efforts to avoid a landfill fire. These records shall be submitted with the annual reports pursuant to 40 CFR 60.757(f)(1);
  - Values and length of time of exceedances for applicable parameters monitored pursuant to 40 CFR 60.756(a through d). Exceptions exist for pressure where a geomembrane or synthetic cover is used, if the owner has developed acceptable pressure limits in the GCCS design plan and for decommissioned wells;
  - Any periods of GCCS equipment malfunction or diversion of the LFG stream exceeding one (1) hour, including dates and duration of the equipment outage;
  - All instances when the GCCS was not operating for more than five (5) consecutive days;

- e. The location of each 500 ppm surface methane concentration exceedance, pursuant to 40 CFR 60.753(d), and the methane concentration recorded at each location for which an exceedance occurred;
- f. Records of the installation date and location of each LFG well or GCCS expansion added, pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4); and
- g. Start-up, shutdown and malfunction (SSM) plan activity reports.  
(9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR 60.757(f), 40 CFR 60.753(b)(1) and 40 CFR 63.1980)

47. **Landfill Operation and LFG Combustion Equipment Reporting - Performance Tests** - The permittee shall submit written notification to the Director of the DEQ Tidewater Regional Office of the anticipated dates of performance tests, postmarked at least 30 calendar days prior to the date of the tests. Copies of these written notifications shall be sent to:

Chief, Air Enforcement Branch (3AT20)  
U.S. Environmental Protection Agency  
Region III, 1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.7(a))

## Landfill GCCS Closure Requirements

48. **Landfill GCCS Closure Requirements** - The GCCS may be capped in-place or removed provided that all of the following conditions have been satisfied:

- a. The landfill shall be a closed landfill. A closed landfill is defined as a landfill in which solid waste is no longer being placed and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed in the General Provisions of 40 CFR 60. A closure report shall be submitted to the DEQ as provided in 40 CFR 60.757(d);
- b. The GCCS shall have been operating for at least 15 years from installation; and
- c. The calculated NMOC gas production shall be less than 50 Mg per year on three (3) successive test dates. The test dates shall be no less than 90 calendar days apart and no more than 180 calendar days apart.  
(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.752(b)(2)(v) and 40 CFR 60.757(d))

49. **Landfill GCCS Closure Requirements - NMOC Emission Rate** - The permittee shall calculate the NMOC emission rate for purposes of determining when the GCCS can be removed using the following equation:

$$\text{MNMOC} = 1.89 \times 10^{-3} \times \text{QLFG} \times \text{CNMOC} \quad \text{where:}$$

MNMOC = mass emission rate of NMOC, Megagrams per year;

QLFG = flow rate of landfill gas, cubic meters per minute; and

CNMOC = NMOC concentration, ppmvd as hexane.

- a. QLFG shall be determined by measuring the total LFG flow rate at the common header pipe to the control device using a gas flow measuring device calibrated according to the provisions of 40 CFR 60, Appendix A, Method 2E, Section 4, or other methods approved by the Administrator; and
- b. CNMOC shall be determined by collecting and analyzing LFG sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in EPA Method 25C or EPA Method 18 or any other method approved by the Administrator. If using EPA Method 18, the minimum list of compounds to be tested shall be those published in the most recent version of AP-42. The sample location on the common header shall be located upstream of any condensate removal or other refining units. The permittee shall divide the NMOC concentration (as methane) from EPA Method 25C by the number six (6) to obtain the NMOC concentration as hexane.

(9 VAC 5-80-110, 9 VAC 5-50-410 and 40 CFR 60.754(b))

50. **Landfill GCCS Closure Requirements - Closure Report** - The permittee shall submit a closure report to the DEQ and the Administrator within 30 calendar days of waste acceptance cessation. The DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E and F, and 40 CFR 258.60. If a closure report has been submitted, no additional wastes may be placed in the landfill without filing a notification of modification.

(9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.757(d))

51. **Landfill GCCS Closure Requirements - Equipment Removal Report** - The permittee shall submit an equipment removal report to the DEQ at least 30 calendar days prior to removal or cessation of operation of the control equipment. The report shall contain the following:
- a. A copy of the landfill closure report;
  - b. A copy of the GCCS start-up report demonstrating that the 15-year minimum control period has expired;
  - c. Dated copies of three (3) successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year;
  - d. DEQ may request additional information to verify that all conditions for removal have been met.
- (9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.757(e))

## **Internal Combustion Engine Requirements for Emergency Generator Sets and Stormwater Pump - (emission unit ID# F003 - F007 and F012)**

52. **Emergency Generator Sets and Stormwater Pump Requirements - (emission unit ID# F003 - F007 and F012) - Approved Fuels** - The approved fuel for the stationary reciprocating internal combustion engines (RICEs) used by the emergency generator sets F004, F005, F006, F007, and the stormwater pump F012 is Ultra Low Sulfur Diesel (ULSD) fuel oil that meets the requirements of 40 CFR 80.510(b) for non-road RICEs. (9 VAC 5-80-110 and 40 CFR 60.4207)
53. **Stormwater Pump Requirements - (emission unit ID# F012) - NSPS Subpart IIII** - The permittee shall comply with all applicable provisions of 40 CFR 60, Subpart IIII (New Source Performance Standards for Stationary Combustion Ignition Internal Combustion Engines) for the operation of the 156 horsepower stationary compression-ignition (CI) RICE used by the stormwater pump F012. The permittee shall refer to the most current version of this applicable Federal regulation for additional or revised requirements not included in this permit. (9 VAC 5-80-100 and 40 CFR 60, Subpart IIII)
54. **Stormwater Pump Requirements - (emission unit ID# F012) - NSPS Subpart IIII** - Operation of the 156 horsepower stationary CI RICE used by the stormwater pump F012 shall comply with the applicable emission standards for 2011 model year non-road CI engines as listed in Table 2 of 40 CFR 60, Subpart IIII. (9 VAC 5-80-100 and 40 CFR 60.4201)
55. **Stormwater Pump Requirements - (emission unit ID# F012) - NSPS Subpart IIII** - The stationary CI RICE used by the stormwater pump F012 shall be certified as meeting the engine manufacturer emission standards and maximum engine power for that particular model year engine (2011). The CI RICE must be installed and configured according to the engine manufacturer's emission-related specifications. (9 VAC 5-80-100 and 40 CFR 60.4211(c))
56. **Stormwater Pump Requirements - (emission unit ID# F012) - NSPS Subpart IIII** - The permittee shall comply with the following requirements, as applicable, for the stationary CI RICE used by the stormwater pump F012:
- a. Operate and maintain the CI RICE and control device(s), if any, in accordance with the engine manufacturer's emission-related written instructions;
  - b. Change only those emission-related settings that are permitted by the manufacturer;
  - c. Meet the requirements of 40 CFR 89, 94, and/or 1068, as applicable;
  - d. If the CI RICE is equipped with a diesel particulate filter, the filter must be installed with a backpressure monitor that notifies the owner/operator when the high backpressure limit of the RICE is being approached.
- (9 VAC 5-80-100 and 40 CFR 60.4211(a))

57. **Emergency Generators and Stormwater Pump Requirements - (emission unit ID# F003 - F007 and F012) - MACT Subpart ZZZZ** - The permittee shall comply with all applicable provisions of 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) for the operation of the stationary CI RICEs and the stationary SI RICE. The permittee shall refer to the most current version of this applicable Federal regulation for additional or revised requirements not included in this permit.  
(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63, Subpart ZZZZ)
58. **Emergency Generators and Stormwater Pump Requirements - (emission unit ID# F003 - F007 and F012) - MACT Subpart ZZZZ** - The permittee shall comply with the applicable emission and operating limitations of 40 CFR 63, Subpart ZZZZ for the CI RICEs no later than May 3, 2013 and for the SI RICE, no later than October 13, 2013.  
(9 VAC 5-80-100, 9 VAC 5-80-110, and 40 CFR 63.6595(a)(1))
59. **Stormwater Pump Requirements - (emission unit ID# F012) - MACT Subpart ZZZZ**  
The permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ for the CI RICE used by the stormwater pump F012 by satisfying all applicable requirements of NSPS, Subpart IIII for the CI RICE. No further applicable requirements to 40 CFR 63, Subpart ZZZZ applies to this CI RICE.  
(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63.6590(c))
60. **Emergency Generators - (emission unit ID# F003 - F007) - MACT Subpart ZZZZ** - The permittee shall operate and maintain the stationary RICEs and associated after-treatment control devices (if any) used by the emergency generator sets F003 - F007 in accordance with the engine manufacturer's emission-related written instructions or develop a maintenance plan that provides for the maintenance and operation of the RICEs in a manner consistent with good air pollution control practice for minimizing emissions.  
(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63.6640(a))
61. **Emergency Generator Requirements - (emission unit ID# F003 - F007) - MACT Subpart ZZZZ** - The stationary RICEs used by the emergency generator sets F003 - F007 may be operated for the purpose of maintenance and readiness testing, provided that they are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator (if applicable to the generators), or the insurance company, for up to 100 hours per year. Additionally, as part of the 100 hours per year, the stationary emergency generator sets may be used for the purposes of emergency demand response (declared Energy Emergency Alert Level 2 conditions) and for situations where there is a five percent (5%) or greater deviation in the power voltage or frequency below the standard power level. For stationary emergency RICEs located at area sources of HAPs, up to 50 hours per year may be used for non-emergency situations in accordance with 40 CFR 63.6640(f)(4). These non-emergency hours are counted as part of the 100 hours per year provided for maintenance, readiness testing, and emergency demand response.  
**Prior to May 3, 2014**, the 50 hours per year allocated for non-emergency situations may be used for peak shaving or non-emergency demand response to generate income for the facility, or to otherwise supply power as part of a financial arrangement with another entity if the RICE is operated as part of a peak shaving (load management program) with

the local distribution system operator and the power is provided only to the facility itself or to support the local transmission and distribution system. After May 3, 2014, the 50 hours per year shall not be used for any peak shaving or non-emergency demand response situations, except as provided under the provisions of 40 CFR 63.6640(f)(4)(ii).

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.6640(f))

62. **Emergency Generator Requirements - (emission unit ID# F003 - F007) - MACT**

**Subpart ZZZZ** - For the stationary RICEs used by the emergency generator sets F003 - F007, the permittee shall comply with the following requirements in Table 2d of 40 CFR 63, Subpart ZZZZ:

- a. Change the oil and filter every 500 hours of operation or annually, whichever comes first
- b. Inspect the spark plugs for the SI RICE every 1,000 hours of operation or annually, whichever comes first;
- c. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
- d. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63.6603(a))

63. **Emergency Generator Requirements - (emission unit ID# F003 - F007) - MACT**

**Subpart ZZZZ** - For the stationary RICEs used by the emergency generator sets F003 - F007, the permittee shall install a non-resettable hour meter, if not so already installed.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.25(f))

64. **Emergency Generator Requirements - (emission unit ID# F003 - F007) - MACT**

**Subpart ZZZZ** - The following recordkeeping shall be maintained on the stationary RICEs used by the emergency generator sets F003 - F007:

- a. For each RICE, the permittee shall keep records of the operating hours recorded by a non-resettable hour meter and documentation as to the number of hours spent for emergency operations (including documentation as to what classified the operation as emergency) and the number of hours spent for non-emergency operation;
- b. If an emergency generator is used for emergency demand response purposes, periods of voltage or frequency deviations, or to supply power as part of a financial arrangement with another entity (in accordance with 40 CFR 63.6640(f)(2)(ii), (f)(2)(iii) or (f)(4)(ii), respectively), the permittee shall keep records of the notification of the emergency situation, and the date, start time and end time the generator was operated for these purposes;
- c. If an emergency generator operates or is contractually obligated to be available to operate for more than 15 hours per calendar year for emergency demand response purposes, periods of voltage or frequency deviations, or to supply power as part of a financial arrangement with another entity (in accordance with 40 CFR 63.6640(f)(2)(ii), (f)(2)(iii) or (f)(4)(ii), respectively), the permittee shall submit an annual report to the EPA in accordance with the requirements listed in (h)(1 - 3) of 40 CFR 63.6650; and

- d. Records of the hours for maintenance conducted on the RICEs and after-treatment control devices (if any) in order to demonstrate that the engines were operated and maintained according to the permittee's own maintenance plan.

These records shall be kept at the facility and be made available for inspection by the DEQ for the most recent five (5) year period.

(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63.6655)

65. **Emergency Generators and Stormwater Pump Requirements - (emission unit ID# F003 - F007 and F012) - MACT Subpart ZZZZ** - Records for the stationary emergency RICEs shall be kept in accordance with the requirements listed in 40 CFR 63.6660.  
(9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63.6660)

## **Liquid Fuel Storage Tank Requirements - (emission unit ID# P004)**

66. **Gasoline Storage Tank Requirements - (emission unit ID# P004) – MACT Subpart CCCCCC** - The 280 gallon gasoline storage tank P004 shall comply with the provisions of 40 CFR 63, Subpart CCCCCC (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities). The specific applicable requirements of the MACT are based on the monthly gasoline throughput from the gasoline storage tank at the affected source:
- a. For a monthly throughput of less than 10,000 gallons of gasoline, comply with the requirements in 40 CFR 63.11116;
  - b. For a monthly throughput between 10,000 gallons and less than 100,000 gallons of gasoline, comply with the requirements in 40 CFR 63.11117;
  - c. For a monthly throughput of 100,000 gallons or more of gasoline, comply with the requirements in 40 CFR 63.11118 e; and
  - d. Portable gasoline containers shall comply with the requirements contained in 40 CFR 59, Subpart F.

The monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from storage tank P004 during the current day, plus the total volume of gasoline loaded into, or dispensed from the tank during the previous 364 days, and then dividing that sum by 12. If the monthly gasoline throughput ever exceeds an applicable throughput threshold, the source shall remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable monthly gasoline throughput threshold. Records documenting the combined monthly throughput of gasoline for the storage tank P004 shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 40 CFR 63, Subpart CCCCCC, and Condition 14 of NSR State Major permit issued February 28, 2013)

## Facility Wide Conditions

67. **Facility Wide Conditions - Limitations** - The opacity standards (visible emission standards) shall apply at all times except during periods of start-up, shutdown, and malfunction.  
(9 VAC 5-80-110 and 9 VAC 5-50-20 A)
68. **Facility Wide Conditions - Limitations** - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the 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 DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of the source.  
(9 VAC 5-80-110, 9 VAC 5-50-20 E, 9 VAC 5-50-380, and 9 VAC 5-20-180 A)
69. **Facility Wide Conditions - Limitations** - In case of a shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one (1) hour, the intent to shut down such equipment shall be reported to the DEQ, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:
- a. Identification of the specific air pollution control equipment to be taken out of service as well as its location and permit or registration number;
  - b. The expected length of time the air pollution control equipment will be out of service;
  - c. The expected length of time the air pollution control equipment will be out of service;
  - d. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
  - e. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.
- (9 VAC 5-80-110, 9 VAC 5-50-380, and 9 VAC 5-20-180 C)
70. **Facility Wide Conditions - Limitations** - In the event that any affected facility or related air pollution equipment fails or malfunctions in such a manner that may cause excess emissions for more than one (1) hour, the owner shall, as soon as is practicable but no later than four (4) daytime business hours, notify the DEQ by facsimile transmission, telephone, or electronic mail (e-mail) of such failure or malfunction and shall within two (2) weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the DEQ.  
(9 VAC 5-80-110, 9 VAC 5-50-380, and 9 VAC 5-20-180 C)

71. **Facility Wide Conditions - Emission Limits** - Emissions from the operation of the landfill facility shall not exceed the limits specified below:

PM-10	8.4 tons/yr
PM-2.5	8.4 tons/yr
Sulfur Dioxide	11.1 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	127.4 tons/yr
Volatile Organic Compounds (as NMOCs)	5.0 tons/yr
Carbon Monoxide	330.0 tons/yr

Annual emissions are to be determined for each 12-month consecutive period.  
(9 VAC 5-80-110 and Condition 17 of NSR State Major permit issued February 28, 2013)

72. **Facility Wide Conditions - Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit and 40 CFR 60.758. The content and format of such records shall be arranged with the Tidewater Regional Office. These records shall include, but are not limited to:
- Annual throughput of untreated LFG (in million cubic feet) combusted by the utility flare P001A, 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;
  - Annual throughput of treated LFG (in million cubic feet, on a dry basis) combusted by the six (6) Caterpillar G3516 engine-generator sets EG1 - EG6, 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;
  - Annual acceptance of solid waste by the landfill (per 40 CFR 60.758(a)), 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;
  - Annual throughput of gasoline (in gallons) for the gasoline storage tank P004, calculated, monthly as the sum of each consecutive 12-month period, pursuant to the requirements of 40 CFR 63.11116. 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;
  - All visual emissions observations and evaluations for the utility (open) flare and LFG-fired Caterpillar G3516 engine-generator sets including the date and time of the observations, whether or not visible emissions were noted, the results of any Method 9 or Method 22 VEEs and any corrective action taken;
  - Any monitoring data records as required by this permit for the GCCS;

- g. All monitoring, certifications, reporting, and recordkeeping documentation required to demonstrate compliance with the applicable requirements of 40 CFR 60, Subpart III and 40 CFR 63, Subpart ZZZZ for the affected stationary RICEs;
- h. The content and format of any such additional records shall be arranged with the DEQ Tidewater Regional Office. All records required by this condition and Subpart WWW (40 CFR 60.758) shall be available for inspection by the DEQ and shall be current for the most recent five (5) years; and
- i. A copy of the most current NSR State Major permit shall be maintained on the premises of the facility to which it applies.

All records required by this condition and Subpart WWW (40 CFR 60.758) shall be made available for inspection by the DEQ and shall be current for the most recent five (5) years, unless a different timeframe is mandated by an applicable regulation (9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR 60.758, and Conditions 13 and 23 of NSR State Major permit issued February 28, 2013)

## Insignificant Emission Units

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

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
P003	Diesel Fuel Storage Tank	9 VAC 5-80-720 B	VOC	10,000 gallons
P006	Hydraulic Fluid Storage Tank	9 VAC 5-80-720 B	VOC	300 gallons
P007	Transmission Fluid Storage Tank	9 VAC 5-80-720 B	VOC	350 gallons
P009	Leachate Storage Tank	9 VAC 5-80-720 B	VOC and HAPs	120,000 gallons
P010	Used Oil Tank	9 VAC 5-80-720 B	VOC	500 gallons
P011	On-road Diesel Fuel Tank	9 VAC 5-80-720 B	VOC	550 gallons
P012	Motor Oil Tank	9 VAC 5-80-720 B	VOC	300 gallons
P013	Transmission Fluid Tank	9 VAC 5-80-720 B	VOC	350 gallons
P014	Used Oil Tank	9 VAC 5-80-720 B	VOC	400 gallons
P015	Leachate Storage Tank	9 VAC 5-80-720 B	VOC and HAPs	250,000 gallons
F010	Propane-fired Comfort Heater	9 VAC 5-80-720 C	PM-10, PM-2.5, NO <sub>x</sub> , SO <sub>2</sub> , CO, and VOC	0.25 MMBtu/hr
F011	Propane-fired Comfort Heater	9 VAC 5-80-720 C	PM-10, PM-2.5, NO <sub>x</sub> , SO <sub>2</sub> , CO, and VOC	0.25 MMBtu/hr
PW-1	Parts Washing Station	9 VAC 5-80-720 B	N/A (water-based cleaning solvents)	16 - 20 gallons
T1 – T6	Engine Oil Day Tanks	9 VAC 5-80-720 B	VOC	25 gallons (each)
T7	Engine Oil Tank	9 VAC 5-80-720 B	VOC	1,500 gallons
T8	Used Oil Tank	9 VAC 5-80-720 B	VOC	1,500 gallons
T9	Engine Antifreeze/Coolant Fluid	9 VAC 5-80-720 B	VOC	750 gallons
CBV-1	Crankcase Breather Vents	9 VAC 5-80-720 C	PM-10 and PM-2.5	N/A

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

(9 VAC 5-80-720)

## Permit Shield & Inapplicable Requirements

74. **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 60, Subpart Kb	Volatile Organic Liquid Storage Vessels	The leachate storage tanks have vapor pressures less than the NSPS Kb specified threshold limits.
40 CFR 60, Subpart WWW	Landfill NSPS	Engines combusting “treated” LFG are not subject to the cited NSPS testing, monitoring, recording, and reporting requirements (six IC Caterpillar G3516 engine-generator sets).
40 CFR 60, Subparts Cb - VVV, and AAAA - MMMM	Multiple NSPSs	The source categories cited in these regulations do not exist at the landfill facility.
40 CFR 63, Subparts B - L, N - Z, and AA - FF	Multiple NESHAPs	The source categories cited in these regulations do not exist at the landfill facility.
40 CFR 63, Subpart AAAA	Landfill MACT	Recordkeeping and reporting requirements of the MACT are not applicable combustion devices that use “treated” LFG (Caterpillar G3516 engines)..
40 CFR 63, Subpart ZZZZ	RICE MACT	Stationary engines that combust LFG equivalent to ten percent or more of the gross heat inputs on an annual basis are not subject to the MACT (Caterpillar G3516 engines).
40 CFR 63, Subparts B - U, AA - ZZ, AAA - XXX, CCCC - YYYY, AAAAA - UUUUU, WWWW - ZZZZZ, BBBB, DDDDD - ZZZZZ, AAAAAA - HHHHHH	Multiple MACTs	The source categories cited in these regulations do not exist at the landfill facility.
40 CFR 64	Compliance Assurance Monitoring	The landfill is subject to an NSPS that was proposed after 11/15/1990; therefore the regulation is not applicable.
40 CFR 72	Acid Rain Regulations	The landfill gas to energy plant is not considered a “qualifying facility”.

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)

## General Conditions

75. **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)
76. **General Conditions - Permit Expiration** - This permit has a fixed term of five (5) years. The expiration date shall be the date five (5) years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the DEQ consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
77. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six (6) months but no earlier than 18 months prior to the date of permit expiration.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
78. **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 DEQ takes final action on the application under 9 VAC 5-80-150.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
79. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
80. **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 DEQ fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.  
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
81. **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 DEQ 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)

82. **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 analytical techniques or methods used;
  - f. The results of such analyses; and
  - g. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)
83. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five (5) 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)
84. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to the DEQ no later than **March 1<sup>st</sup>** and **September 1<sup>st</sup>** 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<sup>st</sup> to June 30<sup>th</sup> and July 1<sup>st</sup> to December 31<sup>st</sup>;
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emission limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM), which indicates an exceedance of emission limitations or operational restrictions; or
    - (3) 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)

85. **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<sup>st</sup> 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<sup>st</sup>. 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:
- The time period included in the certification. The time period to be addressed is January 1<sup>st</sup> to December 31<sup>st</sup>;
  - The identification of each term or condition of the permit that is the basis of the certification;
  - The compliance status;
  - Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
  - 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;
  - Such other facts as the permit may require to determine the compliance status of the source;
  - 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)

86. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director of the DEQ Tidewater Regional Office within four (4) daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one (1) hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 calendar 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 occurrences should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 84 of this permit.
- (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

87. **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 (1) hour, the owner shall, as soon as practicable but no later than four (4) daytime business hours after the malfunction is discovered, notify the Director of the DEQ Tidewater Regional Office by facsimile transmission, telephone, or electronic mail (e-mail) of such failure or malfunction and shall within 14 calendar 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 of the DEQ Tidewater Regional Office.  
(9 VAC 5-20-180 C)
88. **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)
89. **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)
90. **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)
91. **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)
92. **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)

93. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ 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 DEQ 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 DEQ along with a claim of confidentiality.  
(9 VAC 5-80-110 G.6)
94. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the DEQ 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)
95. **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 DEQ by April 15<sup>th</sup> of each year. The calculations and final amount of emissions are subject to verification and final determination by the DEQ.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)
96. **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 5-40-90 and 9 VAC 5-50-90)

97. **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 DEQ, 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)
98. **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)
99. **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; and
  - 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)
100. **General Conditions - Reopening For Cause** - The permit shall be reopened by the DEQ if additional federal requirements become applicable to a major source with a remaining permit term of three (3) 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 DEQ 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 DEQ determines that the permit must be revised or revoked to assure compliance with the applicable requirements; and
  - c. The permit shall not be reopened by the DEQ 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)
101. **General Conditions - Permit Availability** - Within five (5) 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 the DEQ upon request.  
(9 VAC 5-80-150 E)
102. **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)
103. **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 DEQ of the change in ownership within 30 calendar days from the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
104. **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 DEQ of the change in source name within 30 calendar days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
105. **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 90 in this permit are met.  
(9 VAC 5-80-250)
106. **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; and
  - d. The permittee notified the DEQ of the malfunction within two (2) 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)
107. **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)
108. **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)
109. **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 DEQ may suspend, under such conditions and for such period of time as the DEQ 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)
110. **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)

111. **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)
112. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
113. **General Conditions – Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 60)
114. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)
115. **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; and
  - 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)

## **State-Only Enforceable Requirements**

116. **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.

9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions.

9 VAC Chapter 50, Part II, Article 3: Standards of Performance for Toxic Pollutants.

(9 VAC 5-80-110 N and 9 VAC 5-80-300)