

May 2, 2011

Mr. Al Linero, Program Administrator Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

RE:

AIR PERMIT MODIFICATION NO. 0930104-018-AC/PSD-FL-382A

OKEECHOBEE LANDFILL, INC.

LANDFILL GAS TO ENERGY PROJECT

Dear Mr. Linero:

Okeechobee Landfill, Inc. (OLI), a subsidiary of Waste Management (WM), Inc. of Florida, has received a draft of the modified air construction permit for a landfill gas to energy (LFGTE) project at the Okeechobee Landfill in Okeechobee County, Florida. After reviewing the draft permit, OLI has the following comments:

Section III, Subsection A, Condition 3: LFGCS Capacity Comment 1.

OLI requests that a permitting note be added to clarify that the 13,500 standard cubic feet per minute (scfm) of landfill gas flow is the maximum permitted flowrate. The landfill gas collection system (LFGCS) is capable of collecting more than 13,500 scfm of LFG, if available. Instead of the permitting note, the condition may be revised to state "The permitted flowrate of LFG is 13,500 scfm on a 30-day rolling average basis."

Section III, Subsection B, Condition 18: LFG Flow Rate Comment 2.

OLI requests that the reporting frequency of the LFG flow rate and hydrogen sulfide (H₂S) or total sulfur (TS) content results be revised from monthly to quarterly. Condition 9 of Subsection A authorizes reporting of total daily and monthly gas flow rates and average daily and monthly H₂S or TS concentration on a guarterly basis.

Section III, Subsection C, Condition 3: NOx CEMS Comment 3.

OLI requests that the requirements for a 4-hour block average nitrogen oxides (NO_x) emission limit and the installation and operation of a continuous emission monitoring system (CEMS) to continuously monitor NO, be removed. The reasons for this request are stated below:

- The NO_x emission limit of 72 parts per million by volume, dry basis (ppmvd) corrected to 15-percent oxygen reflects the vendor guarantee and the maximum NO_x emissions since no NO_x control devices are applicable for this turbine (e.g., water injection or dry-low NO_x combustion). As such, an annual stack test under actual operating conditions would provide reasonable assurance that the NO, emission limit is being achieved.
- The New Source Performance Standards (NSPS) applicable to the Solar Titan T-130 turbine [Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60) Subpart KKKK] allows annual performance tests to demonstrate continuous compliance for NO_x since water or steam injection is not used. Pursuant to 40 CFR 60.4340(a), continuous compliance can be demonstrated by annual performance testing. Indeed, Subpart KKKK allows continuous compliance to be demonstrated every 2 years if the NO_x emissions are 75 percent or less than the standard. Continuous emission monitoring or continuous parameter monitoring is not required, and instead represent "alternatives" to the annual compliance test. OLI agrees to conduct an annual compliance test regardless of the actual NO_x emission tested (i.e., even if the tested rate is less than 75 percent of the emission limit).

Y:\Projects\2010\103-87579 Okeechobee PSD\Comments\Final\L050211_579 Okeechobee Draft Permit Comments.docx



RECEIVED

MAY 03 2011

AIR BUREAU 103-87579

AIR REGIII ATION

- Research on similar LFGTE project permits reveals that the King George Municipal Solid Waste Landfill in King George, Virginia was permitted to operate four Solar Centaur turbines for a total LFG flow of 13,000 scfm in September 2009. These turbines are subject to 40 CFR 60 Subpart KKKK and the continuous compliance demonstration for NO_x emission is based on annual performance testing with an option to reduce testing frequency to once every two years if the NO_x emission result from the performance test is less than or equal to 75 percent of the emission limit. The King George permit is attached with this letter as a reference.
- There is no requirement within the definition of best available control technology (BACT) in the Department's rules specifying the use of CEMS. Rather, the definition of BACT in Rule 62-210.200(40)(c) states: "Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results." The use of an annual stack test for an emission unit where there is no control device and where the emission limit represents the maximum emissions of the emissions unit would certainly meet the Department's definition of BACT in the rule.
- The comparison of the Solar Titan T-130 turbine to a very different 300-megawatt (MW) project is not appropriate. The Solar turbine will generate only 15 MW of electric power and does not have a control device, unlike the example cited. Moreover, the cited example involves an emissions unit with regulatory requirements that require a NO_x CEMS. A NO_x CEMS will cost \$50,000 or more. In terms of dollar per MW (\$/MW), the cost for OLI of \$3,333/MW is almost 20 times more than the same CEMS for the example 300 MW unit, at a cost of \$167/MW.
- The Solar Titan T-130 turbine is being installed for the purpose of generating useful energy from a waste stream (i.e., LFG) that would otherwise be flared. The environmental advantage of this project outweighs the need for unnecessary monitoring from an emissions unit where there is no control device to monitor.
- There are no examples of a LFG-fired T-130 turbine with a NO, CEMS.
- The reference to new 1-hour average NO₂ National Ambient Air Quality Standards as a justification for CEMS is not appropriate. Any demonstration of compliance with the 1-hour NAAQS must be based on the modeling analysis using the maximum potential/allowable NO_x emission rate from the emissions unit. In this case, the maximum potential/allowable NO_x 1-hour emission rate is 72 ppmvd at 7-percent oxygen.

OLI proposes to perform initial and annual performance testing for the Solar Titan T-130 turbine to demonstrate continuous compliance with the NO_v standards.

Comment 4. Section III, Subsection C, Condition 9: Emission Limits

OLI requests that the CEMS-based emission limits be removed based on Comment 3. Please also remove footnotes "c" and "g", which are related to the CEMS-based emission limits.

Comment 5. Section III, Subsection C, Condition 12: Excess Emissions Calculation

OLI requests that Condition 12.a., which states that excess NO_x emissions be calculated based on 4-hour block averages, be removed. The 4-hour block average is calculated based on CEMS data.

Comment 6. Section III, Subsection C, Condition 17: CEMS

OLI requests that Condition 17, the continuous emission monitoring requirement, be removed based on Comment 3 above.

Comment 7. <u>Section III, Subsection C, Condition 19:</u> Monitoring of Capacity

OLI requests that the reference to 40 CFR 75 (Acid Rain) be removed since the Solar T-130 turbine is not an acid rain unit. As an alternative, a permitting note may be added clarifying that the unit is not subject to Acid Rain.



Comment 8. Section IV, Subsection D, Condition 3: NO, CEMS or CPMS

OLI requests that the requirements for the installation and operation of CEMS or Continuous Parameter Monitoring System (CPMS) be removed based on the same reasons described in Comment 3 above. OLI proposes to perform initial and annual performance testing for the Solar Titan T-130 turbine to demonstrate continuous compliance with the NO_x standards. OLI agrees to conduct an annual compliance test regardless of the actual NO_x emission tested (i.e., even if the tested rate is less than 75 percent of the emission limit).

Comment 9. Section IV, Subsection D, Condition 9: Emission Limits

OLI requests that the CEMS- or CPMS-based emission limits be removed based on Comment 8. Please also remove footnotes "c" and "g", which are related to the CEM- or CPMS-based emission limits.

Comment 10. Section IV, Subsection D, Condition 12: Excess Emissions Calculation

OLI requests that Condition 12.a., which states that excess NO_x emissions be calculated based on 4-hour block averages, be removed. The 4-hour block average is calculated based on CEMS data.

Comment 11. Section IV, Subsection D, Condition 17: Continuous Monitoring

OLI requests that Condition 17, which is the continuous monitoring (including CEMS and CPMS alternatives) requirement be removed based on Comment 8 above.

Comment 12. Section IV, Subsection D, Condition 18: LFG Flow Measurement

OLI requests that the condition be revised to say "The permittee shall install and maintain a device that measures the total flow of LFG to all three CTGs (EU014, EU015, and EU016). Total LFG flow to the CTGs shall be continuously measured and recorded". As an example, the King George Landfill LFGTE plant is equipped with a device to monitor LFG consumption by the four CTGs. Furthermore, permits issued in Florida to landfill gas fired engines have not required individual flow meter to each engine, instead the permits required a flow meter to the entire plant.

Comment 13. Section IV, Subsection D, Condition 19: Monitoring of Capacity

OLI requests that the reference to 40 CFR 75 (Acid Rain) be removed since the Solar T-130 turbine is not an acid rain unit. As an alternative, a permitting note may be added clarifying that the unit is not subject to Acid Rain.

Thank you for consideration of this information. If you have any questions, please do not hesitate to call me at (352) 336-5600.

Salahuddin Mohammad Senior Project Engineer

Sincerely,

GOLDER ASSOCIATES INC.

David a. Buff David Buff, P.E., Q.E.P.

Principal Engineer

SKM/DB/tz

Enclosures

cc:

D. Thorley, WM

J. Christiansen, WM



APPLICATION INFORMATION

Professional Engineer Certification

	oressional Engineer Certification				
1.	Professional Engineer Name: David A. Buff				
	Registration Number: 19011				
2.	Professional Engineer Mailing Address				
	Organization/Firm: Golder Associates Inc.**				
	Street Address: 6026 NW 1st Place				
	City: Gainesville State: FL Zip Code: 32607				
3.	Professional Engineer Telephone Numbers				
	Telephone: (352) 336-5600 ext. 21145 Fax: (352) 336-6603				
4.	Professional Engineer E-mail Address: dbuff@golder.com				
5.	Professional Engineer Statement:				
	I, the undersigned, hereby certify, except as particularly noted herein*, that:				
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions				
	unit(s) and the air pollution control equipment described in this application for air permit, when				
properly operated and maintained, will comply with all applicable standards for control of pollutant emissions found in the Florida Statutes and rules of the Department of Environme					
	Protection; and				
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application				
	are true, accurate, and complete and are either based upon reasonable techniques available for				
	calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an				
	emissions unit addressed in this application, based solely upon the materials, information and				
	calculations submitted with this application.				
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \square , if so), I further certify that each emissions unit described in this application for air permit, when				
	properly operated and maintained, will comply with the applicable requirements identified in this				
	application to which the unit is subject, except those emissions units for which a compliance plan				
	and schedule is submitted with this application.				
	(4) If the purpose of this application is to obtain an air construction permit (check here \boxtimes , if so)				
	or concurrently process and obtain an air construction permit and a Title V air operation permit				
	revision or renewal for one or more proposed new or modified emissions units (check here \square , if so), I further certify that the engineering features of each such emissions unit described in this				
	application have been designed or examined by me or individuals under my direct supervision and				
	found to be in conformity with sound engineering principles applicable to the control of emissions				
	of the air pollutants characterized in this application.				
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit				
	revision or renewal for one or more newly constructed or modified emissions units (check here [],				
. 25	if so I further certify that, with the exception of any changes detailed as part of this application,				
	each such émissions unit has been constructed or modified in substantial accordance with the Sinformation given in the corresponding application for air construction permit and with all				
N	*provisions contained in such permit.				
:5					
	Signature Date				
	(seal)				
*	Attach any exception to certification statement.				
, ** **********************************	Board of Professional Engineers Certificate of Authorization #00001670.				
	Section 19 19 19 19 19 19 19 19 19 19 19 19 19				

KING GEORGE MUNICIPAL SOLID WASTE LANDFILL PERMIT



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

David K. Paylor Director

Thomas A. Faha Regional Director

September 18, 2009

Mr. D. Richard Guidry Senior District Manager King George Landfill, Inc. 10376 Bullock Drive King George, VA 22485

Registration No. 40903

Dear Mr. Guidry:

L. Preston Bryant, Jr.

Secretary of Natural Resources

Attached is a permit to operate a Municipal Solid Waste facility and construct and operate a landfill gas electrical power generation facility in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Boards Regulations for the Control and Abatement of Air Pollution.

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

In the course of evaluating the application and arriving at a final decision to permit the project, the Department of Environmental Quality (DEQ) deemed the application complete on April 23, 2008.

This approval to construct and operate shall not relieve King George Landfill, Inc. of the responsibility to comply with all other local, state and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code (VAC) 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within thirty days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 also provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

King George Landfill, Inc. King George Landfill Page 2

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty 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 P. O. Box 1105 Richmond, VA 23218

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 contact the regional office at 703.583.3800

Sincerely,

Terry H. Darton
Regional Air Permit Manager

TAF/THD/RDS/09284MNSR

Attachment: Permit

cc: Director, OPATS (electronic file submission)

Director, Data Analysis and Special Studies (electronic file submission) Manager, Air Enforcement and Compliance (electronic file submission)



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

L. Preston Bryant, Jr. Secretary of Natural Resources

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821
www.deg.virginia.gov

David K. Paylor Director

Thomas A. Faha Regional Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE
This permit includes designated equipment subject to New Source
Performance Standards (NSPS) WWW & KKKK, and National Emission Standards
for Hazardous Air Pollutants (NESHAP) AAAA.

This permit supersedes your permit dated July 14, 2005

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

King George Landfill, Inc. 10376 Bullock Lane King George, VA 22485 Registration No. 40903

is authorized to construct and operate a

Municipal Solid Waste Facility with Landfill Gas Collection System And Electrical Power Generation Facility

located at

10376 Bullock Lane King George, VA 22485

in accordance with the conditions of this permit.

Approved on

September 18, 2009

Thomas A. Faha, Regional Director

Permit consists of 19 pages
Permit consists of conditions 1 to 42

INTRODUCTION

This permit approval is based on the permit application dated April 23, 2008; the permit application dated November 3, 2003, including amendment sheets dated December 12, 2003, October 4, 2004, and February 1, 2005; and the permit application dated March 21, 1996 including amendment sheets dated March 25, 1996 and April 11, 2000. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the Department of Environmental Quality (DEQ) or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1. Equipment List - Equipment at this facility consists of the following:

Equipment to be Constructed								
Reference No.	Equipment Description	Rated Capacity	Add-On Control Technology	Federal Requirements				
TG-1 Through TG-4	Solar Centaur Combustion Turbines, Model GSC 4500/4700 (4 Units)	3,330 kW ea. 48.6 MMBtu/hr ea.	None	NSPS Subpart KKKK				

Equipment Previously Permitted							
Reference No.	Equipment Description	Rated Capacity	Add-On Control Technology	Federal Requirements			
MSW	Municipal Solid Waste Landfill	34,258,145 cubic yards of municipal solid waste	See Below	NSPS Subpart WWW and NESHAP AAAA			
CF-1 through CF-4	Active Landfill Gas (LFG) Collection and Control System Open Flares (Four Units)	13,000 scfm	N/A	NSPS Subpart WWW and NESHAP AAAA			

Equipment Exempt from Permitting								
Reference No.	Equipment Description	Rated Capacity	Add-On Control Technology	Federal Requirements				
T-1	No. 6 Residual Oil Tank	1,000 Gallons	None	None				
T-2	Organic Phase Condensate Tank	500 Gallons	None	None				

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit unless the specifications are needed to form the basis for one or more of the other terms or conditions in the permit.

(9 VAC 80-1180 D 3)

- 2. **Emission Controls** Emissions from the Solar Centaur Combustion Turbines shall be controlled by the following:
 - a. Nitrogen oxides (as NO₂) emissions shall be controlled by the combustion of treated landfill gas whenever any of the combustion turbines are operated. The facility shall install and operate a flow meter and associated recordkeeping device to determine the flow of treated landfill gas to the combustion turbines. The facility shall operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 4 of 19

- b. Sulfur Dioxide (SO₂) emissions shall be controlled by the firing of treated landfill gas and good combustion practices. The facility shall operate and maintain the stationary combustion turbines and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
- c. Per 40 CFR §60.4333, the facility shall operate and maintain the stationary combustion turbines and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including startup, shutdown and malfunction. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not degrade the air emissions from the combustion turbines.
- d. Any uncontrolled venting of landfill gas from the combustion turbines, the landfill gas treatment system, or the treated landfill gas transport system is prohibited. All atmospheric vents in the treated landfill gas transport system shall be controlled by a lockout-tag-out system or by installing and operating a device to divert the emissions from all vents to an approved landfill gas control system.
- e. All components of the combustion turbine facility's landfill gas treatment system, which consists of the treated landfill gas transport system (blowers and compressors), landfill gas filtration and landfill gas dewatering, shall be in operation whenever the facility is operating the combustion turbines. If any component of the landfill gas treatment system or treated landfill gas transport system malfunctions, the treated landfill gas transport system shall be shut down and all untreated landfill gas shall be diverted to the remaining turbine(s) or to the utility flare(s).

(9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-80-1180, 9 VAC 5-170-160 & 40 CFR §60.4333)

3. Monitoring Devices

- a. The facility shall be equipped with a device to continuously measure and record the consumption of treated landfill gas by the combustion turbines. The 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. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating.
- b. The facility shall be equipped with devices to continuously measure the pressure within the treated landfill gas transport system. At a minimum, devices shall be located just before and just after the 10-micron filter and after the completed treatment process. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall

include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the facility is operating. (9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, 9 VAC 5-50-410 and 40 CFR §60.4340)

- 4. Monitoring Device Observation The facility shall log observations landfill gas flow to the four combustion turbines when operating (combustion turbines noted as "OFF" or "0" when not running). The log shall contain a minimum of hourly observations processed monthly and stored onsite. The log shall be used for emissions calculations during periods where some or all electronic data are not available. In the case where no electronic information or manual records are available, the facility will calculate emissions using worse case scenario.
 (9 VAC 5-50-50 F and 40 CFR §60.4335)
- 5. **Monitoring Device Observation -** The monitoring device used to measure the pressure in the treated landfill gas system shall be observed by the facility whenever treated landfill gas is combusted in the combustion turbines with a frequency of not less than daily (excluding weekends and holidays) to ensure good performance of the treatment system. The facility shall keep a daily log of the observations from the monitoring device, including the change in pressure across the 10-micron filter. (9 VAC 5-50-50 F and 9 VAC 5-50-410)
- 6. Landfill Gas Gross Calorific Value The facility shall determine the heat value of the Treated LFG on a weekly basis, using the following formula:

Heat Value
$$\left(\frac{BTU}{cf}\right) = \left(\frac{\% \text{ Methane}}{100}\right) \times 1012 \frac{BTU}{cf}$$

A log of the measured methane concentration values and the resultant calculated treated landfill gas heating value shall be maintained. The methane-measuring device shall be maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The measuring device shall be provided with adequate access for inspection.

(9 VAC 5-80-1180, 9 VAC 5-50-20 C and 9 VAC 5-50-260)

7. Landfill Gas Sulfur Content - The facility shall monitor the total sulfur content of the treated landfill gas fuel being fired in the combustion turbines using the approved custom schedule in 40 CFR §60.4370(c)(1)(i-iv) or other approved custom schedule. The facility, when using this pre-approved method shall monitor total sulfur content of the landfill gas measured as Hydrogen Sulfide (H2S) for thirty consecutive unit operating days. If all the sulfur content results are less than half the standard in

Condition 18, then the facility shall monitor total sulfur content at twelve month intervals until the result exceeds half the standard (see 40 CFR §60.4370(c)(1)(i-iv) for custom schedule). The facility shall report any missed sulfur content test or results above the sulfur content standard as required in 40 CFR §60.4385(c). The sulfur content of the landfill gas fuel shall be determined using the total sulfur method described in Gas Processors Association (GPA) Standard 2377 (see 40 CFR §60.17), which measures the major sulfur compound (Hydrogen Sulfide) using a "Length of Stain" Detector Tube or other approved method.

(9 VAC 5-50-20, 9 VAC 5-50-260, 40 CFR §60.17 40 CFR §60.4360, 40 CFR §60.4370 and 40 CFR §60.4385(c))

8. Landfill Gas Treatment Equipment - The entire landfill gas treatment system as specified in Condition 16 is required to comply with 40 CFR 60.752 (b)(2)(iii) and shall be installed and operational whenever landfill gas is being transferred to any of the four combustion turbines. Verification of satisfactory operation of treatment equipment shall, at a minimum, include certification that the manufacturer's written requirements or recommendations for installation, operation, and maintenance of the devices shall be followed.

(9 VAC 5-50-20, 9 VAC 5-50-260 and 9 VAC 5-50-410)

OPERATIONAL AND EMISSIONS LIMITATIONS

- 9. **Design Capacity** The design capacity of the MSW landfill is 34,258,145 cubic yards. A change in the design capacity may require a State Air Pollution Control Board permit to construct and operate.
 - (9 VAC 5-40-420 and 9 VAC 5-50-390)
- 10. Landfill Gas Collection and Control The active landfill gas (LFG) collection and control system shall be designed to handle the maximum gas flow produced by the entire landfill as required under 40 CFR 60.752.

Non-Methane Organic Compounds (NMOC) collected with the LFG Collection and Control System shall be controlled by an open flare system. The open flare system shall be provided with adequate access for inspection:

OR

Collected gas shall be routed to a treatment system that processes the gas for subsequent sale or use in energy recovery devices including off-site electric power generation. The gas treatment system and all associated atmospheric vents must comply with 40 CFR 60.752(b)(iii)(C).

(9 VAC 5-50-410 and 9 VAC 5-80-850F)

- 11. LFG Collection and Control System: Design Plan The permittee shall maintain onsite a current landfill gas collection and control system design plan in accordance with the requirements of 40 CFR Part 60, Subpart WWW.

 (9 VAC 5-50-410)
- 12. **Test/Monitoring Ports** The gas collection and control system shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate test methods specified in 40 CFR 60 Subpart WWW, as applicable, 40 CFR Part 60 Appendix A, as applicable, or as determined by the Air Compliance Manager, Northern Regional Office, in consultation with the operator of the MSW Landfill Facility, owner or permittee. Test ports shall be provided at the appropriate locations. (9 VAC 5-50-30 F)
- 13. **Approved Fuel** The approved fuel for the open flares is landfill gas. Natural gas or LP gas may be used as fuel for the pilot. The approved fuels for the four combustion turbines is treated landfill gas. A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-850 F and 9 VAC 5-170-160)

- 14. Fuel Throughput The facility shall consume no more than 6.833 x 10⁹ cubic feet of LFG per year, calculated monthly as the sum of each consecutive twelve month period. (9 VAC 5-80-850F)
- 15. Fuel Specifications The treated landfill gas used in the four combustion turbines shall meet the specifications below:

Minimum heat content: 300 BTU/scf

The higher heating value (HHV) of the treated landfill gas shall be determined using methods outline in Permit Condition 6.

The net heating value of gas being routed to the open flares shall be at least 200 Btu/standard cubic foot.

(9 VAC 5-50-410, 9 VAC 5-80-1180 and 40 CFR §60.4330)

16. Fuel Specifications - Treated landfill gas shall be that which is produced by the King George Landfill as that facility is permitted by the Virginia Department of Environmental Quality and has been processed in accordance with 40 CFR 60.752 (b)(2)(iii)(C). The landfill gas treatment system, at a minimum, shall be composed of a de-watering process, filtration through a 10-micron filter, and compression. The primary and secondary knockout tanks are located at the King George Landfill. All treated landfill gas consumed by the combustion turbines shall pass through each component of the landfill gas treatment process prior to use in the combustion process. (9 VAC 5-80-1180)

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 8 of 19

- 17. **Dust Emission Control** Unless otherwise specified, dust emission controls shall include the following or equivalent as a minimum:
 - a. Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ) control measures.
 - b. All material being stockpiled shall be kept moist to control dust during storage and handling, or covered to minimize emissions.
 - c. Dust from haul roads shall be controlled by wet suppression and the prompt removal of dried sediment resulting from soil erosion and dirt spilled or tracked onto paved surfaces within the landfill.
 - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne. (9 VAC 5-50-90)
- 18. **Emissions Limitations** Emissions from the combined operation of the open flare system and the four LFG combustion turbines shall not exceed the limits specified below:

Sulfur Dioxide 240.0 tons/yr
Nitrogen Oxides (as NO₂) 170.0 tons/yr
Carbon Monoxide 225.0 tons/yr
NMOC as Hexane 25.0 tons/yr
PM-10 40.0 tons/yr

Emissions from the operation of each of the combustion turbines shall not exceed the limits specified below:

Nitrogen Oxides (as NO₂) 96 ppm at 15 percent O2 or 700 ng/J of useful output

(5.5 lb/MWh)

Sulfur Dioxide 65 ng SO2/J (0.15 lb SO2/MMBtu) heat input

Compliance with the NSPS Subpart KKKK Standards for NOx shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Annual emissions shall be

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 9 of 19

calculated monthly as the sum of each consecutive twelve-month period. Compliance with these emission limits may be determined as stated in Condition numbers 2, 9, 10 and 13 through 16.

(9 VAC 5-80-850F, 9 VAC 5-80-880, 9 VAC 5-50-260, 9 VAC 5-50-180, 40 CFR $\S60.4320$ and 40 CFR $\S60.4330$)

19. Visible Emissions Limit - Each open flare 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 minutes during any two consecutive hours.

Visible emissions from the four combustion turbines stacks shall not exceed 10% opacity whenever the combustion turbines are operated except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity. All visible emissions rates shall be 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 5-80-850F)

20. Requirements by Reference - Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 60, Subpart WWW and KKKK, and 40 CFR 63, Subpart AAAA.

(9 VAC 5-50-400 and 9 VAC 5-50-410)

INITIAL COMPLIANCE DETERMINATION

21. Stack Test - Initial performance tests shall be conducted for NOx pollutant emissions from each of the four combustion turbines to determine compliance with the NOx emission limits contained in Condition 18. The tests shall be performed while operating on Landfill Gas fuel using the maximum landfill gas rate achieved during testing. The landfill gas fuel tests shall be performed at plus or minus 25% of 100% peak load on each of the four combustion turbines. The tests shall be performed, and demonstrate compliance within sixty days after achieving the maximum production rate at which each turbine engine will be operated, but in no event later than 180 days after start-up of each turbine engine tested. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO). The facility shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within sixty days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-80-1200, 40 CFR §60.4340 and 40 CFR §60.4400)

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 10 of 19

22. Initial Performance Test - Concurrently with the initial performance test as required in Condition 21, the facility shall determine the total sulfur content (as H2S in ppmv using detector tubes) of the treated landfill gas, as sampled, just prior to combustion in the combustion turbines. Each test shall be reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO. The facility shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within sixty days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-20 and 9 VAC 5-50-30, 9 VAC 5-50-410 and 9 VAC 5-80-1200)

23. Visible Emissions Evaluation - Concurrently with the initial performance tests required in Conditions 21 and 22, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the facility on each turbine tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO. The facility shall submit a test protocol at least thirty days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within sixty days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Regional Air Compliance Manager of the DEQ's NRO shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within thirty days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within sixty days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410 and 9 VAC 5-80-1200)

CONTINUING COMPLIANCE DETERMINATION

24. Performance Validation Testing - The facility shall perform an annual performance test in accordance with 40 CFR §60.4400 to demonstrate continuous compliance for the NOx emission limit. If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit standard for the turbine in 40 CFR §60.4320, the facility may reduce the frequency of subsequent performance tests to once every two years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit standard for the turbines, the facility must resume annual performance tests. The NOx performance tests required in Condition 21 shall at a minimum be conducted once every

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 11 of 19

two years on all stacks and before the operating permit renewal application for NOx, starting from the completion date of the testing as required in Condition 21. The tests shall be performed at plus or minus 25% of 100% peak load on each of the four combustion turbines. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO. The facility shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within sixty days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, 9 VAC 5-80-1200, 40 CFR §60.4340 and 40 CFR §60.4400)

- 25. **Visible Emissions Evaluation** Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations of the combustion turbines to demonstrate compliance with the visible emission limits contained in this permit. The details of the VEE shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 27. (9 VAC 5-80-1200 and 9 VAC 5-50-30 G)
- 26. **Test/Monitoring Ports** The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided at the appropriate locations and safe sampling platforms and access shall be provided.

 (9 VAC 5-50-30 F and 9 VAC 5-80-1180)

RECORDS AND NOTIFICATIONS

27. All correspondence concerning this permit should be submitted to the following address -

Regional Air Compliance Manager Department of Environmental Quality Northern Regional Office 13901 Crown Court Woodbridge, VA 22193 (9 VAC 5-50-50)

28. Landfill Gas Collection and Control System - The operator of the MSW Landfill Facility, owner or permittee shall demonstrate compliance with operational standards for the LFG Collection and Control System required by Subpart WWW (40 CFR 60.753) in accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). The operator of the MSW Landfill Facility, owner or permittee shall demonstrate compliance with the LFG Collection and Control System requirements of Subpart WWW (40 CFR 60.752) in

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 12 of 19

accordance with appropriate subsection(s) of Subpart WWW (40 CFR 60.755). All reports required to demonstrate compliance with the requirements of Subpart WWW (40 CFR 60.755) shall be prepared and submitted to the Air Compliance Manager, NVRO (as referenced in condition 27), as required by Subpart WWW (40 CFR 60.755). (9 VAC 5-80-1200, 9 VAC 5-80-880, and 9 VAC 5-80-900)

- 29. Landfill Gas Collection and Control System Monitoring The LFG Collection and Control System and flare system shall be monitored and all appropriate data recorded as required in Subpart WWW (Subsection 60.756). Surface monitoring shall be performed in accordance with the Updated Surface Monitoring Design Plan dated March 3, 2005. (9 VAC 5-80-900)
- 30. Initial Notification The permittee shall submit written notification to the Regional Air Compliance Manager of the DEQ's NRO, at the address listed in Condition 27, and the US EPA, at the address listed below, of the following:
 - a. The actual date on which the installation of each of the combustion turbines are installed within thirty days after such date.
 - b. The anticipated start-up date of each of the combustion turbines postmarked not more than sixty days nor less than thirty days prior to such date.
 - c. The actual start-up date of each of the combustion turbines within fifteen days after such date.
 - d. The anticipated date of performance tests of each turbine engine postmarked at least thirty days prior to such date.

Copies of the written notification referenced in terms a. through d. are to be sent to:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029
(9 VAC 5-50-50 and 9 VAC 5-80-1180)

31. Records & Reports - The facility shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. These records shall include, but are not limited to:

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 13 of 19

- a. The yearly throughput of LFG to the flares, calculated monthly as the sum of each consecutive twelve month period.
- b. The yearly throughput of treated LFG to the combustion turbines, calculated monthly as the sum of each consecutive twelve month period.
- c. The yearly accumulation of MSW, calculated monthly as the sum of each consecutive twelve month period.
- d. Monthly and annual emission (in tons) using calculation methods approved by the Regional Air Compliance Manager of the DEQ's NRO to verify compliance with emission limitations in Condition 18. Annual emissions shall be calculated monthly as the sum of each consecutive twelve month period;
- e. Treated landfill gas transport system pressure readings to verify compliance with Condition 5:
- f. Weekly landfill gas gross calorific value determination results, including % methane readings as described in Condition 6;
- g. Results of all stack tests, visible emission evaluations, monthly visible emission evaluations log and performance evaluations;
- h. All treated landfill gas sulfur content results and reports of excess emissions required by 40 CFR §60.4385(c);
- i. Scheduled and unscheduled maintenance on the combustion turbines;
- j. Operating procedures and operator training records for the combustion turbines;

The content and format of such additional records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. All records required by this Condition and by Subparts WWW, KKKK and AAAA shall be available on site for inspection by the DEQ and shall be kept current for the most recent five years. (9 VAC 5-80-900)

LANDFILL MACT

32. National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

As used in this section, all terms shall have the meaning as defined in 40 CFR 63.2 of *Subpart A*, and 40 CFR 63.1990 of *Subpart AAAA*. A copy of sections of 40 CFR Part 63 Subpart A and 40 CFR Part 63 Subpart AAAA are attached.

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 14 of 19

The Landfill 'MACT' (40 CFR 63 Subpart AAAA), published January 16, 2003, includes the following additional requirements for affected MSW landfills.

The compliance date with respect to the requirements of 40 CFR Part 63, Subpart AAAA is January 16, 2004. (40 CFR 63.1945(f))

A "Startup, Shutdown and Malfunction" (SSM) Plan shall be developed and implemented for the facility according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. (40 CFR 63.1960)

Annual reports of the operation of the GCCS as required by §60.757(f) of NSPS Subpart WWW will be required semi-annually beginning with the first report after the compliance date of January 16, 2004. These reports are due on or before March 1st and September 1st. (40 CFR 63.1980)

Records and reports required by 40 CFR 63, Subpart AAAA, with respect to the SSM plan should include:

Actions taken during a SSM event that are consistent with the SSM plan shall be recorded as required by §63.6(e)(3)(iii) and §63.10(b) and reported in the semi-annual SSM reports submit as required by §63.6(e)(3)(iii) and §63.10(d)(5). These reports are due on or before March 1st and September 1st.

Actions taken during a SSM event that are inconsistent with the SSM plan must be recorded, as required by §63.6(e)(3)(iv), and reported within 2 working days of the event, followed by a letter to the Administrator within 7 working days after the end of the event, in accordance with §63.10(d)(5). Any new actions that are indicated as appropriate during an SSM event shall be incorporated in a new SSM Plan.

(40 CFR 63.1930 through 63.1990, 63.6(e)(3), 40 CFR 63.10(b) & (d))

GENERAL CONDITIONS

33. Certification of Documents

- a. The following documents submitted to the Board shall be signed by a responsible official: (i) any emission statement, application, form, report, or compliance certification; (ii) any document required to be signed by any provision of the regulations of the Board; or (iii) any other document containing emissions data or compliance information the owner wishes the Board to consider in the administration of its air quality programs. A responsible official is defined as follows:
 - For a business entity, such as a corporation, association or cooperative, a responsible official is either:

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 15 of 19

- A) The president, secretary, treasurer, or a vice president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or
- B) A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars) or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.

For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.

For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of the principal geographic unit of the agency.

b. Any person signing a document under subsection a. above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

c. Subsection b. shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing the document (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same line of authority as the preparers, nor do the persons gathering the data and preparing the form need to be employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate document.

- d. Any person who fails to submit any relevant facts or who has submitted incorrect information in a document shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
- (9 VAC 5-20-230)
- 34. **Permit Invalidation** This permit to construct combustion turbines (Unit Reference No.'s TG-1 through TG-4) shall become invalid, unless an extension is granted by the DEQ, if:
 - a. A program of continuous construction is not commenced within the latest of the following:
 - i. Eighteen months from [the date of this permit;
 - ii. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;
 - iii. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or
 - b. A program of construction is discontinued for a period of eighteen months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.
 (9 VAC 5-80-1210)
- 35. **Permit Suspension/Revocation** The Board may suspend or revoke any permit if the permittee:
 - a. Knowingly makes material misstatements in the permit application or any amendments to it;
 - b. Fails to comply with the terms or conditions of this permit;
 - c. Fails to comply with any emission standards applicable to an emissions unit included in this permit;
 - d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the implementation plan in effect at the time that an application is submitted; or
 - e. Fails to comply with the applicable provisions of 9 VAC 5-80-1100 et seq. (9 VAC 5-80-1210 F and 9 VAC 5-80-1210 G)

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 17 of 19

- 36. **Right of Entry** The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
 - To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency. (9 VAC 5-170-130 and 9 VAC 5-80-1180)

37. Maintenance/Operating Procedures - At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 27, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices, and process equipment which affects such emissions

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

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 18 of 19

such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

- 38. Record of Malfunctions The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shut-down or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of occurrence. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause of malfunction), corrective action, preventive measures taken and name of person generating the record.
 - (9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)
- 39. Notification for Facility or Control Equipment Malfunction In the event that any affected facility fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 27 by facsimile transmission, telephone, email, or telegraph of such failure or malfunction and shall within two 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 facility or control equipment is again in operation, the owner shall notify the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 27. (9 VAC 5-20-180 C and 9 VAC 5-80-1180)
- 40. Violation of Ambient Air Quality Standard Regardless of any other provision of this permit, the permittee shall, upon request of the DEQ, reduce the level of operation of the facility if the DEQ determines that is necessary to prevent a violation of any primary ambient air quality standard. Under worst case conditions, the DEQ may order that the permittee shut down the facility, if there is no other method of operation to avoid a violation of the ambient air quality standard. The DEQ reserves the right to prescribe the method of determining if a facility will cause such a violation. In such cases, the facility shall not be returned to operation until it and the associated air pollution control equipment are able to operate without violation of any primary ambient air quality standard. (9 VAC 5-20-180 I)

King George Landfill, Inc. Registration No: 40903 September 18, 2009 Page 19 of 19

- 41. Change of Ownership In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 27 of the change of ownership within thirty days of the transfer.

 (9 VAC 5-80-1240 B)
- 42. **Permit Copy** The permittee shall keep a copy of this permit on the premises of the facility to which it applies. (9 VAC 5-80-1180)