COUNTY OF EL DORADO AIR QUALITY MANAGEMENT DISTRICT 330 Fair Ln, Placerville, CA 95667 Ph: (530) 621-6662 FAX: (530) 295-2774 Web: http://www.edcgov.us/AirQualityManagement

> Permit to Operate: 13-1395 Valid from: 07-01-2011 to 06-30-2012 UNLESS RENEWED

AIR POLLUTION PERMIT REVOCABLE AND NON TRANSFERABLE

This PERMIT TO OPERATE is granted to: El Dorado County Environmental Management Department 2850 Fairlane Court Placerville, CA 95667

EQUIPMENT LOCATION:

Union Mine Landfill 5700 Union Mine Road El Dorado

This Permit to Operate is for the equipment described below, as shown on the approved plans and specifications and subject to the conditions listed.

PERMIT TO OPERATE * * * Prime Power < 500 Hp

Equipment Description:

Туре:	Micro Turbines (3)			
Make:	Ingersoll-Rand			
Model:	70LW-64H-212-A			
Serial Number:	PW00245D05145			
	PW00246D05146			
	PW00247D05141			
Capacity (btu/hr):	2,800,000			
Fuel: Landfill Gas				

(See Page Two for Permit to Operate Conditions)

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY FEDERAL, STATE, OR DISTRICT RULES AND REGULATIONS. Air Quality Management District Rules are available at the District Office or www.arb.ca.gov/drdb/ed/cur.htm

BY Dave Johnston

AIR POLLUTION CONTROL OFFICER

ISSUE DATE

Page 1 of 3 Permit 1 12-0434.C.1

PERMIT TO OPERATE CONDITIONS EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT PERMIT NUMBER: 13-1395, EXPIRES: 06-30-2012

All applicant proposals are conditions of approval unless mentioned herein.

GENERAL CONDITIONS

- 1. If any permit condition is found invalid, such finding SHALL NOT affect the remaining permit conditions.
- 2. **PERMIT ACCEPTANCE:** Permit acceptance is deemed acceptance of all conditions specified herein and acceptance of the El Dorado County AQMD (District) Rules and Regulations.
- 3. OPERATION: Equipment operation MUST be conducted in compliance with all data and specifications submitted with the application under which this permit was issued (Rule 501.4 E.).
- 4. **PERMIT AMENDMENT:** The District reserves the right to amend this permit, upon annual renewal, in order to insure facility compliance with District Rules and Regulations (Rule 501.3 F.).
- 5. CHANGE OF OWNERSHIP: The District MUST be notified PRIOR to change of ownership, building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants (Rule 501.3).
- 6. UPSET / BREAKDOWN: The District MUST be notified of any upset or breakdown (Rule 516).
- 7. ADDITIONAL SOURCES: Air Quality Management MUST be notified PRIOR to addition of any air pollution source. (Rule 501.3.A).
- 8. NUISANCE: A person SHALL NOT discharge from any source quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property (Rule 205).
- 9. RIGHT OF ENTRY: To enforce or administer any State or local law, order, regulation, or rule relating to air pollution, the Air Pollution Control Officer and his duly authorized agents SHALL have the right of entry to any premises on which an air pollution emission source is located for the purpose of inspecting such source, including securing samples of emissions there from or any records required to be maintained therewith by the District. The Air Pollution Control Officer or his duly authorized agent SHALL have the right to inspect sampling and monitoring apparatus as deemed necessary (Rule 509).
- 10. **PERMIT ON PREMISES:** The owner or operator **SHALL** maintain a legible copy of said permit on the premises of the subject equipment (Rule 501.4 A.).

PERMIT TO OPERATE CONDITIONS EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT PERMIT NUMBER: 13-1395, EXPIRES: 06-30-2012

OPERATING CONDITIONS

11. Operation of the equipment SHALL be conducted in compliance with all data and specifications submitted with the application under which this permit was issued.

EMISSION LIMITATIONS

12. No source of emissions SHALL be as dark or darker in shade as that designated as No. 1 (20% Opacity) on the Ringlemann Chart for a period or periods aggregating more than three (3) minutes in any one hour (Rule 202).

RECORD KEEPING AND REPORTING

- 13. A record-keeping log SHALL be maintained detailing the hours of operation of the micro turbines.
- 14. All record keeping logs SHALL be retained for no less than 5 years and SHALL be made available to District personnel upon request.

END OF CONDITIONS

Exhibit "A" - AQMD Permits Exhibit "A" - AQMD Permits

COUNTY OF EL DORADO AIR QUALITY MANAGEMENT DISTRICT 330 Fair Ln, Placerville, CA 95667 Ph: (530) 621-6662 FAX: (530) 295-2774 Web: http://www.edcgov.us/AirQualityManagement

> Permit to Operate: 10-625 Valid from: 07-01-2011 to 06-30-2012 UNLESS RENEWED

AIR POLLUTION PERMIT REVOCABLE AND NON TRANSFERABLE

This PERMIT TO OPERATE is granted to: El Dorado County Environmental Management Department 2850 Fairlane Court Placerville, CA 95667



Union Mine Landfill 5700 Union Mine Road El Dorado

This Permit to Operate is for the equipment described below, as shown on the approved plans and specifications and subject to the conditions listed.

* * * PERMIT TO OPERATE * * * Landfill with Collection System

Equipment Description:

Type:	Solid Waste Landfill with Gas Collection
Maximum Capacity:	< 2.5 million megagrams (2.75 million tons)
Nominal Capacity (approx.):	1.70 million megagrams (1.88 million tons)

(See Page Two for Permit to Operate Conditions)

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY FEDERAL, STATE, OR DISTRICT RULES AND REGULATIONS. Air Quality Management District Rules are available at the District Office or www.arb.ca.gov/drdb/ed/cur.htm

BY

Dave Johnston AIR POLLUTION CONTROL OFFICER

ISSUE DATE



Page 1 of 7 Permit 2 12-0434.C.4

Exhibit "A" - AQMD Permits Exhibit "A" - AQMD Permits permit to operate conditions EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT PERMIT NUMBER: 10-625, EXPIRES: 06-30-2012

All applicant proposals are conditions of approval unless mentioned herein.

GENERAL CONDITIONS

- 1. If any permit condition is found invalid, such finding SHALL NOT affect the remaining permit conditions.
- 2. **PERMIT ACCEPTANCE:** Permit acceptance is deemed acceptance of all conditions specified herein and acceptance of the El Dorado County AQMD (District) Rules and Regulations.
- 3. OPERATION: Equipment operation MUST be conducted in compliance with all data and specifications submitted with the application under which this permit was issued (Rule 501.4 E.).
- 4. **PERMIT AMENDMENT:** The District reserves the right to amend this permit, upon annual renewal, in order to insure facility compliance with District Rules and Regulations (Rule 501.3 F.).
- 5. CHANGE OF OWNERSHIP: The District MUST be notified PRIOR to change of ownership, building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants (Rule 501.3).
- 6. UPSET / BREAKDOWN: The District MUST be notified of any upset or breakdown (Rule 516).
- 7. ADDITIONAL SOURCES: Air Quality Management MUST be notified PRIOR to addition of any air pollution source. (Rule 501.3.A).
- 8. NUISANCE: A person SHALL NOT discharge from any source quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property (Rule 205).
- 9. RIGHT OF ENTRY: To enforce or administer any State or local law, order, regulation, or rule relating to air pollution, the Air Pollution Control Officer and his duly authorized agents SHALL have the right of entry to any premises on which an air pollution emission source is located for the purpose of inspecting such source, including securing samples of emissions there from or any records required to be maintained therewith by the District. The Air Pollution Control Officer or his duly authorized agent SHALL have the right to inspect sampling and monitoring apparatus as deemed necessary (Rule 509).
- 10. **PERMIT ON PREMISES:** The owner or operator SHALL maintain a legible copy of said permit on the premises of the subject equipment (Rule 501.4 A.).

Page 2 of 7

OPERATING CONDITIONS

- 11. Cover integrity SHALL be monitored on a monthly basis and repairs SHALL be implemented as needed.
- 12. All gas collection and control equipment SHALL be maintained in good working order and operated by trained personnel at all times.
- 13. A sampling port and thermometer SHALL be installed at each wellhead (40 CFR 60.756(a)).
- 14. Active collection wells, horizontal collectors, surface collectors, or other extraction devices SHALL be sited at a sufficient density throughout all gas producing areas, except the following:
 - (a) Any segregated area of asbestos or non-degradable material may be excluded from collection if documented as provided within this permit. The documentation SHALL provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and SHALL be provided to the District upon request.
 - (b) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of ROC (NMOC) emissions from the landfill. The amount, location, and age of the material SHALL be documented and provided to the District upon request. A separate ROC (NMOC) emissions estimate SHALL be made for each section proposed for exclusion, and the sum of all such sections SHALL be compare to the ROC (NMOC) emissions estimate for the entire landfill.
- 15. The landfill gas extraction components, including the collection header pipes, SHALL be constructed of polyvinyl chloride (PVC), high-density polyethylene (HDPE), fiberglass, stainless steel, or other nonporous corrosion resistant material. Pipes SHALL be of suitable dimensions to convey projected amounts of gases and withstand planned overburden and traffic loads. The collection system SHALL extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors SHALL be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations SHALL be situated with regard to need to prevent excessive air infiltration.
- 16. Vertical wells SHALL be placed to not endanger underlying liners and SHALL address the occurrence of water within the landfill. Holes and trenches for piped wells and horizontal collectors SHALL be of sufficient cross-section to allow for proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices SHALL be designed to not allow indirect short-circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension to not penetrate or block perforations.

Permit 2 12-0434.C.6

Exhibit "A" - AQMD Permits Exhibit "A" - AQMD Permits permit to operate conditions EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT PERMIT NUMBER: 10-625, EXPIRES: 06-30-2012

- 17. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly SHALL include a closing valve, any necessary seals and couplings, access couplings and at least one sampling port.
- 18. The owner or operator SHALL convey the landfill gas to control system(s) (flare, turbines, etc.) through collection header pipe(s).
- 19. Wells SHALL be added to control new cells of the landfill within five years of any cell being closed. New collection devices SHALL be designed and certified to achieve comprehensive control of surface gas emissions by a professional engineer.
- 20. The owner or operator SHALL operate the landfill gas collection blower(s) and transport landfill gases to the control system whenever there is sufficient landfill gas generation to support the operation of the control system. The owner or operator SHALL only transport landfill gases to a properly operating control system.

MONTHLY MONITORING

- 21. Nitrogen concentrations SHALL be determined on a monthly basis, in accordance with USEPA Method 3C (40 CFR 60.756(a)(2) and 40 CFR 60.753 (c)(1)).
- 22. Oxygen concentrations SHALL be determined on a monthly basis in accordance with EPA Method 3A (40 CFR 60.753(c)(2) and 40 CFR 60.756(a)(2)), except:
 - (a) The span SHALL be set so that the regulatory limit is between 20 and 50 percent of the span,
 - (b) A data recorder is not required,
 - (c) Only two calibration gases are required, a zero and span, and ambient air may be used as the span,
 - (d) A calibration error check is not required,
 - (e) The allowable sample bias, zero drift, and calibration drift are 10 percent.
- 23. The temperature of the landfill gas SHALL be monitored on a monthly basis (40 CFR 60.756(a)(3)).
- 24. Each interior wellhead SHALL have a landfill gas temperature less than 55°C (131°F), with either a nitrogen gas level less than 20 percent or an oxygen gas level less than 5 percent. A higher operating temperature, nitrogen level or oxygen level may be established at a particular well provided that the owner or operator can demonstrate that the higher operating value does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens (40 CFR 60.753.c).
- 25. The gauge pressure in the collection header at each individual well SHALL be measured on a monthly basis (40 CFR 60.756(a)(1)).

- If a well exceeds any of the operating parameters found in LANDFILL 26. GAS COLLECTION, MONTHLY MONITORING or if any points of positive pressure are found, action SHALL be taken to correct the situation within 5 calendar days. If correction cannot be made or negative pressure cannot be achieved within 30 calendar days of the first exceedance, the gas collection system SHALL be expanded within 120 days of the initial exceedance. Within 7 days of the problem being corrected, a report SHALL be submitted to the District detailing the problem, correction activities undertaken, the timeline of events surrounding the problem and correction.
- 27. The collection system SHALL be operated so that the methane concentration is less than 500 ppm (parts per million) above background at the surface of the landfill as determined in accordance with this permit (40 CFR 60.753(d).

QUARTERLY SURFACE MONTIORING

- The owner or operator SHALL monitor surface concentrations of 28. methane along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (or an equivalent pattern approved by the District) for each collection area once per calendar quarter using an organic vapor analyzer or flame ionization The probe inlet SHALL be moved upwind and downwind detector. outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells (40 CFR 60.753(d)).
- Surface emission monitoring SHALL be performed in accordance with 29. section 4.3.1 of EPA Method 21, except the probe inlet SHALL be placed within 5 to 10 centimeters of the ground.
- The following instrumentation specifications and procedures for 30. surface emission monitoring devices SHALL be adhered to:
 - portable analyzer SHALL meet the instrumentation (a) The specifications provided in section 3 of EPA Method 21, except "methane" SHALL replace all references to VOC,
 - The calibration gas SHALL be methane, diluted to a nominal (b) concentration of 500 ppm in air,
 - To meet the performance evaluation requirements in section (C) 3.1.3 of EPA Method 21, the instrument evaluation procedures of section 4.4 of EPA Method 21 SHALL be used,
 - The calibration procedures provided in section 4.2 of EPA (d) Method 21 SHALL be followed immediately before commencing a surface monitoring survey.

Page 5 of 7

- During surface emission monitoring, a reading of 500 ppm or more above background is detected the following actions SHALL be taken:
 - The location of each exceedance SHALL be marked and recorded, (a)
 - Cover maintenance or adjustments to the vacuum of adjacent (b) wells to increase gas collection SHALL be made and the location SHALL be re-monitored within 10 calendar days of initial detection,
 - the re-monitoring of the location shows a second (c) Ιf exceedance, additional corrective action SHALL be taken and monitored again within 10 days. If the re-monitoring shows a third exceedance for the same location, the action specified in part (e) of this condition SHALL be taken.
 - Any location that initially showed an exceedance but has a (d) methane concentration less than 500 ppm methane above background at the 10-day re-monitoring SHALL be re-monitored If the 1-month re-monitoring shows a after 1 month. concentration less than 500 ppm above background no further monitoring of that location is required until the next regularly scheduled monitoring. If the 1-month re-monitoring shows an exceedance, the actions specified in part (e) of this condition SHALL be taken.
 - For any location where monitored methane concentration equals (e) or exceeds 500 ppm above background concentration three times within a quarterly period, a new well or other collection device SHALL be installed within 60 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the District as part of an Authority to Construct application.
- Any corrective action on the gas collection and control system SHALL 32. NOT cause exceedances of other operational or performance standards.

EMISSION LIMITATIONS

33. No source of emissions SHALL be as dark or darker in shade as that designated as No. 1 (20% Opacity) on the Ringlemann Chart for a period or periods aggregating more than three (3) minutes in any one hour (Rule 202).

RECORD KEEPING AND REPORTING

- A log SHALL be maintained detailing the landfill maximum design 34. capacity, the current amount of solid waste in-place, the year-byyear waste accumulation rate and the date/time and amount of waste (tons) added to the landfill.
- The following records SHALL be maintained for the life of the 35. control equipment.
 - The maximum expected gas generation flow rate, using a method (a) approved by the District in writing
 - A map showing the location of well horizontal collectors, (b) surface collectors, or other gas extraction devices

Permit 2 12-0434.C.9

31.

- 36. The owner or operator SHALL keep up-to-date and readily accessible continuous records of the indication of flow to the control device.
- 37. All record keeping logs SHALL be retained at the facility for no less than 5 years and SHALL be made available to District personnel upon request.

END OF CONDITIONS

EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT 330 Fair Lane, Placerville, CA 95667 Ph: (530) 621-6662 FAX: (530) 295-2774 Web: http://www.edcgov.us/AirQualityManagement/

> Permit to Operate: <u>10-1400</u> Valid from: <u>07-01-2011 to 06-30-2012</u> **UNLESS RENEWED**

AIR POLLUTION PERMIT REVOCABLE AND NON TRANSFERABLE

This **PERMIT TO OPERATE** is granted to:

El Dorado County Environmental Management Department 2850 Fairlane Court Placerville, CA 95667

EQUIPMENT LOCATION:

Union Mine Landfill 5700 Union Mine Road El Dorado



This Permit to Operate is for the equipment described below, as shown on the approved plans and specifications and subject to the conditions listed.

* * * PERMIT TO OPERATE * * * Gas Flare

Equipment Description:

Туре:	Landfill Gas Flare				
Make:	John Zink Enclosed Flare				
Model:	ZTOF, 6' OD X 40' High				
Capacity (cfm):	400 Max.				

(See Page Two for Permit to Operate Conditions)

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY FEDERAL, STATE, OR DISTRICT RULES AND REGULATIONS. Air Quality Management District Rules are available at the District Office or www.arb.ca.gov/drdb/ed/cur.htm

BY Dave Johnston

AIR POLLUTION CONTROL OFFICER

ISSUE DATE

Page 1 of 5

Permit 3 12-0434.C.11

PERMIT TO OPERATE CONDITIONS UNION MINE LANDFILL GAS FLARE PERMIT NUMBER: 10-1400, EXPIRES: 06-30-2012

All proposals of the applicant are conditions of approval unless mentioned herein.

GENERAL CONDITIONS

- 1. If any permit condition is found invalid, such finding **SHALL NOT** affect the remaining permit conditions.
- 2. **PERMIT ACCEPTANCE:** Permit acceptance is deemed acceptance of all conditions specified herein and acceptance of the El Dorado County AQMD (District) Rules and Regulations.
- 3. **OPERATION:** Equipment operation **MUST** be conducted in compliance with all data and specifications submitted with the application under which this permit was issued (Rule 501.4 E.).
- 4. **PERMIT AMENDMENT:** The District reserves the right to amend this permit, upon annual renewal, in order to insure facility compliance with District Rules and Regulations (Rule 501.3 F.).
- 5. CHANGE OF OWNERSHIP: The District MUST be notified PRIOR to change of ownership, building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants (Rule 501.3).
- 6. **UPSET / BREAKDOWN:** The District **MUST** be notified of any upset or breakdown (Rule 516).
- 7. **ADDITIONAL SOURCES:** Air Quality Management **MUST** be notified **PRIOR** to addition of any air pollution source. (Rule 501.3.A).
- 8. NUISANCE: A person SHALL NOT discharge from any source quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property (Rule 205).
- 9. **RIGHT OF ENTRY:** To enforce or administer any State or local law, order, regulation, or rule relating to air pollution, the Air Pollution Control Officer and his duly authorized agents **SHALL** have the right of entry to any premises on which an air pollution emission source is located for the purpose of inspecting such source, including securing samples of emissions there from or any records required to be maintained therewith by the District. The Air Pollution Control Officer or his duly authorized agent **SHALL** have the right to inspect sampling and monitoring apparatus as deemed necessary (Rule 509).
- 10. **PERMIT ON PREMISES:** The owner or operator **SHALL** maintain a legible copy of said permit on the premises of the subject equipment (Rule 501.4 A.).

Page 2 of 5

Permit 3 12-0434.C.12

PERMIT TO OPERATE CONDITIONS UNION MINE LANDFILL GAS FLARE PERMIT NUMBER: 10-1400, EXPIRES: 06-30-2012

OPERATING CONDITIONS

- 11. FUEL: With the exception of fuel for the pilot light, the owner or operator SHALL NOT use any fuel other than landfill gas in the control system.
- 12. The owner or operator **SHALL** operate and maintain:
 - a. A gas flow meter and flow recorder on the landfill gas inlet line that **SHALL** record the flow to the control device at least every 15 minutes. The flare **SHALL NOT** have any mechanism, which allows landfill gas to bypass either the flare or the gas measurement system,
 - b. A temperature controller on the exhaust that automatically controls the air admitted at the aspirated air louvers to maintain a preset flare exhaust temperature,
 - c. A continuous temperature recorder, with an accuracy of 1 percent of the temperature being measured expressed in degrees Celsius or 0.5°C (0.9°F), whichever is greater, to record the flare exhaust temperature versus time,
 - d. A fixed temperature monitor that displays the exhaust temperature,
 - e. An oxygen analyzer/monitor on the landfill gas control system inlet line,
 - f. A high-oxygen shutoff on the landfill gas blower drivers,
 - g. Low temperature, flame-out, and high temperature flare-feed shutoffs.
- 13. The owner or operator **SHALL**:
 - a. Set the flare low and high temperature shutoffs to activate at temperatures specified by the manufacturer,
 - b. Set the control system high oxygen shut-off to activate at a level specified by the equipment manufacturer,
 - c. Inspect, repair and calibrate the safety/control instruments in accordance with manufacturer's recommendations,
 - d. Maintain the records of calibration and repair and present them to District upon request.
- 14. ALARM: Alarm setting SHALL be set at the manufacturer's default settings unless approved by the District to alter the settings.
- 15. **EFFICIENCY:** The flare **SHALL** have a (ROC) NMOC destruction efficiency of 98% and TOC destruction efficiency of 99%.
- 16. SOURCE TESTING: The owner or operator SHALL perform compliance testing, no less than once in every 5 year period. The tests SHALL be conducted at the maximum firing capacity achievable for the landfill gas generation rate at the time of testing. The following tests SHALL be conducted:

Compound	Control System Inlet	Control System Outlet	USEPA Test Methods	
Methane	Yes	Yes	18 or 25A	
Non-methane Organic Compounds	Yes	Yes	18, 25 or 25A	

Permit 3 12-0434.C.13

PERMIT TO OPERATE CONDITIONS UNION MINE LANDFILL GAS FLARE PERMIT NUMBER: 10-1400, EXPIRES: 06-30-2012

Compound	Control Cor System Sy Inlet Ou		USEPA Test Methods
Reactive Organic Compounds	Yes	Yes	18 or 25A
Nitrogen Oxides	No	Yes	7E
Sulfur Oxides	No	Yes	6C
Carbon Monoxide	No	Yes	10
Total Particulate	No	Yes	1-5
Carbon Dioxide	Yes	Yes	3 or 3A

- 17. SOURCE TEST PROTOCOL: The owner or operator SHALL submit a protocol to the District for review and approval for the compliance test prior to testing. At a minimum, the protocol SHALL include the date and time of testing, testing contractors contact information, test methods and the type of testing equipment to be used. The source test protocol SHALL be approved by the District prior to any testing.
- 18. SOURCE TEST RESULTS: The owner or operator SHALL furnish the District with a written report of the results of the compliance tests within 60 days after completion of the testing. At a minimum the report SHALL include the date and time of testing, testing contractors contact information, test methods utilized, pollutant concentrations on a dry basis in pounds per hour, and the NMOC destruction efficiency.

EMISSION LIMITATIONS

- 19. VISIBLE EMISSIONS: No source of emissions SHALL be as dark or darker in shade as that designated as No. 1 (20% Opacity) on the Ringlemann Chart for a period or periods aggregating more than three (3) minutes in any one hour (Rule 202).
- 20. EMISSIONS LIMITATION: Emissions from the flare SHALL NOT exceed the following:

Pollutant	Emission Limits				
	(lb/day)	(lb/qtr)	(tons/yr)	(gr/dscf)	ppmv
NO_x (as NO_2)	27.2	2,482	4.96	NA	NA
CO	70	6,387.5	12:78	NA	NA
PM10	27.2	2,482	4.96	NA	NA
PM	NA	NA	NA	0.10	NA
ROC (as CH_4)	1.36	124.5	0.25	NA	NA
SO_x (as SO_2)	10.4	949	1.90	NA	2,000

RECORD KEEPING AND REPORTING

- 21. CONTROL EQUIPMENT RECORDS: The following records SHALL be maintained for the life of the control equipment.
 - a. Records of the control device vendor specifications
 - b. The average combustion temperature measured at least every 15 minutes and averaged during the flare performance tests

PERMIT TO OPERATE CONDITIONS UNION MINE LANDFILL GAS FLARE PERMIT NUMBER: 10-1400, EXPIRES: 06-30-2012

- c. The percent reduction of ROC (NMOC), achieved by the control device as recorded during the flare performance tests
- 22. FLOW CONTROL RECORDS: The owner or operator SHALL keep up-to-date and readily accessible continuous records of the indication of flow to the control device.
- 23. **RECORDS RETENTION:** All record keeping logs **SHALL** be retained for no less than 5 years and **SHALL** be made available to District personnel upon request.

END OF CONDITIONS