

Section II: Other LAER/BACT Determinations

Application No.: 9788

Equipment Category – Flare - Landfill Gas from Non-Hazardous Waste Landfill

1. GENERAL INFORMATION		DATE: 9/8/2004
A. MANUFACTURER: LFG Specialties		
B. TYPE: Enclosed	C. MODEL:	
D. STYLE: Low-Flow/High-Flow		
E. APPLICABLE AQMD RULES:		
F. COST: \$ (NA)	SOURCE OF COST DATA:	
G. OPERATING SCHEDULE:	24 HRS/DAY	7 DAYS/WK
		52 WKS/YR

2. EQUIPMENT INFORMATION		APP. NO.: 9788
A. FUNCTION: Incinerates waste gas from class III municipal solid waste landfill. This flare is used as a supplement or alternative to an existing I.C. engine, which is the primary means of disposal of the waste gas. The flare may also be used to evaporate/incinerate up to 0.5 gpm landfill gas condensate.		
B. MAXIMUM HEAT INPUT: 63.68 MMBtu/hr	C. MAXIMUM THROUGHPUT: 2000 scfm	
D. BURNER INFORMATION: NO.: 2	TYPE: Tip (low-flow, up to 300 scfm) and Ring (high-flow)	
E. PRIMARY FUEL: Landfill Gas	F. OTHER FUEL: None	
G. OPERATING CONDITIONS: Two modes: low-flow (when engine is running) and high-flow (engine shut down)		

3. COMPANY INFORMATION		APP. NO.: 9788
A. NAME: NEO Tajiguas Energy LLC	B. SIC CODE: 4953	
C. ADDRESS: Tajiguas Landfill, 14470 Calle Real		
CITY: Goleta	STATE: CA	ZIP:
D. CONTACT PERSON: Dan Kelly	E. PHONE NO.: 805-968-7594	

4. PERMIT INFORMATION		APP. NO.: 9788
A. AGENCY: SBCAPCD	B. APPLICATION TYPE: new construction	
C. AGENCY CONTACT PERSON: Mike Goldman	D. PHONE NO.: 805-961-8821	
E. PERMIT TO CONSTRUCT/OPERATE INFORMATION: <input type="checkbox"/> CHECK IF NO P/C	P/C NO.: 9788-04 P/O NO.: 9788	ISSUANCE DATE: 11/30/2001 ISSUANCE DATE: 2/20/2002
F. START-UP DATE: Prior to May 2002		

5. EMISSION INFORMATION

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A. PERMIT

- A1. PERMIT LIMIT: Minimum 1.25 second residence time and 1500F temperature (1400F in low-flow mode). NOx: 35 ppmv@3%O2 and .048 lb/MMBtu. VOC: 15 ppmvd@3%O2 as hexane and .038 lb/MMBtu. Initial and annual source test for NOx. Annual source test for VOC. Heat input to flare (MMBtu) not to exceed the following (high-flow burner/low-flow burner): 54.6/8.19 per hr, 1310.4/196.56 per day, 119,574/17,936 per quarter, 478,296/71,744 per year. Landfill condensate injected into flare not to exceed 0.5 gpm.
- A2. BACT/LAER DETERMINATION: NOx: 35 ppmvd@3%O2 (.048 lb/MMBtu). VOC: 1.25 seconds residence time and 1500F minimum temperature and 15 ppmvd@3%O2 as hexane (.038 lb/MMBtu). PM10: .066 g/bhp-hr.
- A3. BASIS OF THE BACT/LAER DETERMINATION: SCAQMD, BAAQMD and SJVUAPCD BACT data bases

B. CONTROL TECHNOLOGY

- B1. MANUFACTURER/SUPPLIER: LFG Specialties
- B2. TYPE: Low-NOx burners--low-flow and high-flow
- B3. DESCRIPTION: EF945110 (low-flow) and ERA84018 (high-flow)
- B4. CONTROL EQUIPMENT PERMIT APPLICATION DATA: P/C NO.: ISSUANCE DATE:
P/O NO.: ISSUANCE DATE:
- B5. WASTE AIR FLOW TO CONTROL EQUIPMENT: FLOW RATE:
ACTUAL CONTAMINANT LOADING: BLOWER HP:
- B6. WARRANTY:
- B7. PRIMARY POLLUTANTS: NOx, CO, VOC, PM10, SOx
- B8. SECONDARY POLLUTANTS:
- B9. SPACE REQUIREMENT:
- B10. LIMITATIONS: B11. UNUSED
- B12. OPERATING HISTORY: Flare has been in regular use since startup.
- B13. UNUSED B14. UNUSED

C. CONTROL EQUIPMENT COSTS

- C1. CAPITAL COST: CHECK IF INSTALLATION COST IS INCLUDED IN EQUIPMENT COST
EQUIPMENT: \$ INSTALLATION: \$ (NA) SOURCE OF COST DATA:
- C2. ANNUAL OPERATING COST: \$ (NA) SOURCE OF COST DATA:

D. DEMONSTRATION OF COMPLIANCE

- D1. STAFF PERFORMING FIELD EVALUATION:
ENGINEER'S NAME: INSPECTOR'S NAME: DATE:
- D2. COMPLIANCE DEMONSTRATION:
- D3. VARIANCE: NO. OF VARIANCES: None DATES:
CAUSES:
- D4. VIOLATION: NO. OF VIOLATIONS: None DATES:
CAUSES:
- D5. MAINTENANCE REQUIREMENTS: D6. UNUSED

5. EMISSION INFORMATION

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D7. SOURCE TEST/PERFORMANCE DATA RESULTS AND ANALYSIS:

DATE OF SOURCE TEST: May 2002, May 2003

CAPTURE EFFICIENCY:

DESTRUCTION EFFICIENCY:

OVERALL EFFICIENCY:

SOURCE TEST/PERFORMANCE DATA:

Date	5/9/02	5/9/02	5/1/03	5/28/03
Mode	High-Flow	Low-Flow	High-Flow	Low-Flow
Heat Input, MMBtu/hr	38.97	No Data	39.16	7.6
NO _x , ppmvd@3% O ₂	27	26	28	28
NO _x , lb/hr	1.37	0.27	1.46	0.28
CO, lb/hr	5.3	0.12	3.05	.06
NMOC, ppmvd@3% O ₂ as hexane	1.25	3	1	3
NMOC, lb/hr	0.134	.068	.09	.07
NMOC Destruction Effic., %	98.9	97.7	98.9	97.5

OPERATING CONDITIONS:

TEST METHODS: NO_x-USEPA Method 7E, CO-USEPA Method 10, NMOC-USEPA Method 25.3. Test report approved by SBCAPCD.**6. COMMENTS**

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