

AP-42 Test Data - Submission Checklist		
FACILITY INFORMATION		
Landfill Name: Potrero Hills Landfill		
Location: 3675 Potrero Hills Lane, Suisun, CA		
Owner: Potrero Hills Landfill, Inc.	LFG Operator: Potrero Hills Landfill, Inc.	
Contact Person: Michael O'Connor	Address: 3843 Brickway Blvd, Ste, 208, Santa Rosa, CA	
Email: moconnor@scsengineers.com	Phone: 707-546-9461	Fax:
Year Opened:	Year Gas Collection Started:	
Gas Collection Control Device Description: LFG Flare		
Co disposal: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown		
ADMINISTRATIVE INFORMATION		
Complete test reports must be submitted (see footnote ¹)		
Sampling Date: 8/23/07	Analysis Date: 8/24/07	
Description of sampling site: LFG Flare		
Description of sampling method: Continuous emissions monitoring		
QA/QC data included: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Chain of Custody included: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
DATA SUMMARY		
<i>Type of Data:</i> <input type="checkbox"/> Header Draw <input type="checkbox"/> Punch Probe (this data does not presently meet EPA requirements) <input checked="" type="checkbox"/> Stack Test <input type="checkbox"/> Other:		
<i>Header Draw data:</i> NMOC data: <input type="checkbox"/> Yes <input type="checkbox"/> No NMOC (ppm as hexane):	Raw LFG Constituent data: <input type="checkbox"/> Yes <input type="checkbox"/> No Sulfur Compound data: <input type="checkbox"/> Yes <input type="checkbox"/> No LFG Test Methods:	
NMOC Test Method: <i>Stack Testing data:</i> Device Tested (Flare , IC Engine, Turbine, Boiler): Concentration (ppm) NOx:		
SOx: ND CO: ND PM: NA		
Dioxin/furans: NS Aldehydes/metals: NS		
Was sampling conducted after the control device? (Y/N): Y		
Test Methods: BAAQMD ST-7, EPA Method TO-15, ATSM 5504		

¹ According to USEPA, complete test reports should contain, at a minimum: Landfill name; physical description of the landfill, gas collection system and control device; description of sampling site and methods used to take samples; a sample matrix showing date of test and methods used for analysis; data results tables and discussion of results, identifying any data qualifiers or unusual circumstances affecting results; and QA/QC items such as field notes, laboratory notes, and a test QAPP or documentation of field and laboratory QA/QC procedures, including equipment calibrations and blank or spiked sample results.

COMPLIANCE SOURCE EMISSIONS TEST REPORT

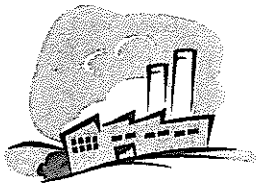
Prepared for

**Republic Services - Potrero Hills Landfill, Inc
Facility A2039**

**Flare (A-2)
NMOC, CO₂ & O₂
LFG analysis**

Test Date(s): August 23rd, 2007
Report Date: September 23rd, 2007

REPORT # 07083



Blue Sky Environmental, LLC

624 San Gabriel Ave

Albany, California 94706

510 525 1261 pb/fax

510 508 3469 cell

blueskyenvironmental@yahoo.com

September 23rd, 2007

Republic Services
Potrero Hills Landfill
PO Box B
Fairfield, CA 94533

Attn: David Zeiger

Subject: Source test emission report for one Flare (A-2) located at Potrero Hills Landfill at 3675 Potrero Hills Lane, Suisun, California. BAAQMD Facility #A2039. Permit Condition 1948, part 11 and 12.

Test Date(s): August 23rd, 2007.

Sampling Location: The flare is equipped with a fixed vertical ladder that was used to access the flare exit. Sampling was conducted using a stainless steel hook-style probe that was placed so that the tip was fixed near the center of the flare.

Sampling Personnel: Sampling was performed by Guy Worthington of Blue Sky Environmental, LLC.

Observing Personnel: The BAAQMD were notified but no representatives from the BAAQMD present during the test program.

Process Description: The flare is used to continuously burn landfill gas generated in the active landfill. The flare was tested at 1550°F. The landfill gas fuel flow and flare temperature are continuously recorded.

Test Program: The test program objective was to comply with the prevailing Permit requirements and Regulation 8 Rule 34 limits that came into effect on July 1, 2002. The flare is only required to meet hydrocarbon emission and or destruction efficiency limits.

Three 30-minute tests were performed on the flare. The continuous emission monitoring system was checked for leaks before testing, and was calibrated before and after each run with EPA protocol calibration gas standards.

One landfill gas sample was collected and analyzed to determine the NMHC, %CH₄, BTU and F-Factors. The LFG flowrate, BTU and F-Factor was used along with the Flare exhaust %O₂ to determine the emission flowrate using EPA Method 19.

One landfill gas sample was collected and analyzed for compounds listed in Item 12 of Condition 1948 of the Permit.

Readings of the flare temperature and LFG flowrate were recorded during each test run. The facility flow monitor values were used in the calculation of the stack flowrate.

Sampling and Analysis Methods: The following BAAQMD and EPA sampling and ASTM analytical methods were used:

BAAQMD ST-7	NMOC
BAAQMD ST-14	O ₂
BAAQMD ST—5	CO ₂
EPA 19	Flare exhaust flowrate by calculation, DSCFM
EPA 25C	NMHC in landfill gas
EPA TO-15	Organics analysis by GCMS
ASTM 5504	Sulfur Species
ASTM 1945/3588	Gas analysis for BTU and F-Factor

Stack gases were sampled continuously via a stainless steel probe, 3/8 inch Teflon sampling line, glass impinger moisture condensers to dry the sample, a particulate filter, and a diaphragm pump. The sample is pumped under pressure (5 PSI) to a manifold where it is distributed to individual analyzers, controlled by rotameters. Calibration gas was introduced to the sample manifold at the same flow rate as the sample, for internal calibrations performed with every run

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
Ratfish, RS-55	THC	FID
Rosemount 755R	O ₂	Paramagnetic
Horiba PIR 2000	CO ₂	Infrared

Test Results: Testing was performed according to the Source Test Plan, and all emissions were in Compliance with the Permit Conditions. The emission results are presented in Tables 1 and 2 on the following pages, and are summarized as follows:

	Flare (A-2) Avg	Permit Limit
NMOC ppm as CH ₄ @ 3% O ₂	<2	30
TNMHC Destruction or Removal Efficiency (DRE)	>99.4%	98%
THC (TOC) Destruction or Removal Efficiency (DRE)	99.998%	98%

The appendices are organized as follows:

Calculations

All the calculations performed on the continuous emissions monitoring (CEM) data and flow rate calculations are presented in this section.

Laboratory Reports

All laboratory reports and chain of custody.

Field Data Sheets

All the CEMS data, any transcribed data from the strip charts.

Strip Chart Records

The strip chart records of all the CEM data.

Calibration Gas Certifications

Certifications for the calibration gas standards.

Stack Diagram

Sketch or photograph of the stack.

Sample System Diagram

Schematic of the sampling system configuration

Permit to Operate / ATC

Permit to Operate / Authority to Construct

Source Test Plan

Sampling protocols submitted to the BAAQMD prior to testing

Comments: The details and results contained within this report are to the best of Blue Sky Environmental, LLC's knowledge an authentic and accurate representation of the test program. If this report is submitted for Compliance purposes, it should be only reproduced in its entirety.

If there are any questions concerning this report, please contact Guy Worthington at 510 525 1261.

Submitted by,



Guy Worthington
Principal

TABLE #1

Potrero Hills Landfill
Flare
Set Point 1550°F

RUN	1	2	3	AVERAGE	LIMITS
Test Date	08/23/07	08/23/07	08/23/07		
Test Time	0827-0857	0910-0940	0948-1018		
Standard Temp., °F	70	70	70		
Flare Temp., °F	1,545	1,561	1,557	1,554	
Fuel Flow Rate, DSCFM	847	812	800	820	
Exhaust Flow Rate, DSCFM (Method 19)	8,133	7,650	7,501	7,761	
Oxygen, O ₂ , %	11.9	11.7	11.7	11.7	
THC, ppm	<1.0	<1.0	<1.0	<1.0	
THC, lbs/hr as CH ₄	<0.02	<0.02	<0.02	<0.02	
CH ₄ , ppm	<1.0	<1.0	<1.0	<1.0	
NMHC, ppm as CH ₄	<1.0	<1.0	<1.0	<1.0	
NMHC, lbs/hr as CH ₄	<0.02	<0.02	<0.02	<0.02	
NMHC, ppm @ 3% O ₂ as CH ₄	<2.0	<1.9	<1.9	<2.0	
INLET CH ₄ , ppm				431,000	
INLET NMHC ppm as CH ₄				1,273	
INLET NMHC lbs/hr as CH ₄				3.0	
NMHC Removal Efficiency				>99.4%	98
INLET THC (TOC) ppm as CH ₄				432,273	
INLET THC (TOC) lbs/hr as CH ₄				1,013.4	
THC (TOC) Removal Efficiency				99.998%	98

WHERE,

ppm = Parts Per Million Concentration

Lbs/hr = Pound Per Hour Emission Rate

Tstd. = Standard Temp. (°R = °F + 460)

MW = Molecular Weight

DSCFM = Dry Standard Cubic Feet Per Minute

TOC = THC = Total Organic Carbon as Methane including CH₄ (MW = 16)

THC = Total Hydrocarbons as Methane (MW = 16)

NMHC = Total Non-Methane Hydrocarbons as Methane (MW = 16)

NO_x = Oxides of Nitrogen as NO₂ (MW = 46)

CO = Carbon Monoxide (MW = 28)

CALCULATIONS,

PPM @ 15% O₂ = ppm * 5.9 / (20.9 - %O₂)PPM @ 3% O₂ = ppm * 17.9 / (20.9 - %O₂)

Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R

Lbs/day = Lbs/hr * 24

THC (TOC) Removal Efficiency = (inlet lbs/hr - outlet lbs/hr) / inlet lbs/hr

NMHC Removal Efficiency = (inlet lbs/hr - outlet lbs/hr) / inlet lbs/hr

TABLE # 2

Landfill Gas Analysis

Constituent	Method	Units	Landfill Gas Samples
			08/23/07 Potrero-Flare
Acrylonitrile	EPA TO-15	ppb	ND<1000
Benzene	EPA TO-15	ppb	ND<1000
Carbon Tetrachloride	EPA TO-15	ppb	ND<1000
Chlorobenzene	EPA TO-15	ppb	ND<1000
Chlorodifluoromethane	EPA TO-15	ppb	1290
Chloroethane	EPA TO-15	ppb	ND<1000
Chloroform	EPA TO-15	ppb	ND<1000
1,1-Dichloroethane	EPA TO-15	ppb	ND<1000
1,1-Dichloroethene	EPA TO-15	ppb	ND<1000
1,2-Dichloroethane (Ethylene Dichloride)	EPA TO-15	ppb	ND<1000
1,4-Dichlorobenzene	EPA TO-15	ppb	ND<1000
Dichlorodifluoromethane	EPA TO-15	ppb	1170
Dichlorofluoromethane	EPA TO-15	ppb	ND<1000
Ethyl Benzene	EPA TO-15	ppb	5,300
1,2 Dibromomethane (Ethylene Dibromide)	EPA TO-15	ppb	ND<1000
Trichlorofluoromethane (Fluorotrichloromethane)	EPA TO-15	ppb	ND<1000
Hexane	EPA TO-15	ppb	ND<1000
2-Propanol (IPA)	EPA TO-15	ppb	22,000
2-Butanone (MEK)	EPA TO-15	ppb	19,400
Dichloromethane (Methylene Chloride)	EPA TO-15	ppb	ND<1000
Tetrachloroethylene (Perchloroethylene)	EPA TO-15	ppb	ND<1000
Toluene	EPA TO-15	ppb	15,600
1,1,1-Trichloroethane	EPA TO-15	ppb	ND<1000
1,1,2,2-Tetrachloroethane	EPA TO-15	ppb	ND<1000
Trichloroethylene	EPA TO-15	ppb	ND<1000
Vinyl Chloride	EPA TO-15	ppb	ND<1000
m,p-Xylene	EPA TO-15	ppb	10,900
o-Xylene	EPA TO-15	ppb	3,160
Hydrogen Sulfide	ASTM 5504	ppm	12.6
Carbon Disulfide	ASTM 5504	ppm	0.02

ND = not detected

APPENDICES

Calculations

Laboratory Reports

Field Data Sheets

Strip Chart Records

QC Calibration Gas Certifications

Stack Diagram

Sample System Diagram

Permit/Authority to Construct

Source Test Plan

Calculations

CEM BIAS CORRECTION SUMMARY

Facility: Potrero Hills Landfill
 Unit: Flare
 Condition: Set Point 1550°F
 Date: 08-23-07

Barometric: _____
 Leak Check: OK
 Strat. Check: _____
 Personnel: gw

	O ₂	CO ₂			THC	CH ₄			
Analyzer	755R	PIR 2000			RS-55	RS-55			
Range	25	15			50	50			r
Units, ppm or %	%	%			ppm	ppm			
Span Gas Value	20.42	12.46			45.0	45.0			Ccal

Run 1	0.00	0.00			0.0	0.0			zero (initial), Cib
Test Time:	20.60	12.60			45.0	45.0			cal (initial), Cib
0827-0857	11.88	7.73			<1.0	<1.0			TEST AVG, Cavg
	0.00	0.00			0.7	0.7			zero (final), Cfb
	20.25	11.94			44.0	44.0			cal (final), Cfb
	0%	0%			1%	1%			% zero drift
	-1%	-4%			-2%	-2%			% cal drift
	11.88	7.85			0.7	0.7	0.0		Cgas

Run 2	0.00	0.00			0.7	0.7			zero (initial), Cib
Test Time:	20.25	11.94			44.0	44.0			cal (initial), Cib
0910-0940	11.50	7.50			<1.0	<1.0			TEST AVG, Cavg
	0.00	0.00			1.3	1.3			zero (final), Cfb
	19.88	11.93			43.5	43.5			cal (final), Cfb
	0%	0%			1%	1%			% zero drift
	-1%	0%			-1%	-1%			% cal drift
	11.70	7.83			0.0	0.0	0.0		Cgas

Run 3	0.00	0.00			1.3	1.3			zero (initial), Cib
Test Time:	19.88	11.93			43.5	43.5			cal (initial), Cib
0948-1018	11.30	7.43			<1.0	<1.0			TEST AVG, Cavg
	0.00	0.00			2.0	2.0			zero (final), Cfb
	19.70	11.85			43.5	43.5			cal (final), Cfb
	0%	0%			2%	2%			% zero drift
	-1%	-1%			0%	0%			% cal drift
	11.66	7.79			-0.7	-0.7	0.0		Cgas

Pollutant Concentration (Cgas) = (Cavg - Co) x Ccal / (Cbc - Co)

Zero and Calibration Drift = 100 x (Cfb - Cib) / r

Co = (Cib + Cfb) / 2 for zero gas

Cbc = (Cif + Cfb) / 2 for cal gas

STACK GAS FLOW RATE DETERMINATION -- Method 19

Facility: Potrero Hills Landfill
Unit: Flare
Condition: Set Point 1550°F
Date: 08/23/07

Time: 0827-0857 0910-0940 0948-1018
Run: 1 2 3

# cubic feet/rev	scfm	847	812	800	ft³
# of seconds/rev		60	60	60	seconds
Gas Line Pressure (PSIG)		0.0	0.0	0.0	PSI Gauge
Gas Line Pressure (PSIA)		14.7	14.7	14.7	PSI Absolute
Gross Calorific Value @ 60°F		436.4	436.4	436.4	Btu / ft³
Stack Oxygen		11.9	11.7	11.7	%
Gas Fd-Factor @ 60°F		9,499.5	9,499.5	9,499.5	DSCF/MMBtu
Gas Temperature (°F)		70	70	70	°F
Standard Temperature (°F) Tstd		70	70	70	°F

Realtime Fuel Rate (CFM)	847.0	812.0	800.0	CFM
Corrected Fuel Rate (SCFM) @ Tstd	847.0	812.0	800.0	SCFM
Fuel Flowrate (SCFH)	50,820	48,720	48,000	SCFH
Million Btu per minute	0.363	0.348	0.343	MMBtu/min
Heat Input (MMBtu/hour)	21.8	20.9	20.6	MMBtu/Hr

Stack Gas Flow Rate @ Tstd	8,133	7,650	7,501	DSCFM
----------------------------	-------	-------	-------	-------

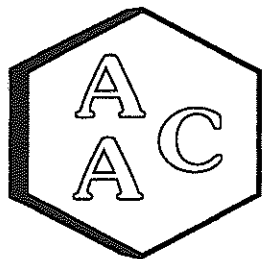
WHERE:

Gas Fd-Factor = Fuel conversion factor (ratio of combustion gas volumes to heat inputs)
MMBtu = Million Btu

CALCULATIONS:

$$\begin{aligned} \text{SCFM} &= \text{CFM} * (460 + \text{Tstd}) * (\text{PSIA}) / 14.7 / (460 + \text{Gas } ^\circ\text{F}) \\ \text{SCFH} &= \text{SCFM} * 60 \\ \text{MMBtu/min} &= \text{SCFM} * (\text{Btu/ft}^3) * (520 / (460 + \text{Tstd})) / 1,000,000 \\ \text{MMBtu/hr Heat Input} &= \text{MMBtu/min} * 60 \\ \text{DSCFM} &= \text{Gas Fd-Factor} * ((460 + \text{Tstd}) / 520) * \text{MMBtu/min} * 20.9 / (20.9 - \text{O}_2\%) \end{aligned}$$

Laboratory Reports



Atmospheric Analysis & Consulting, Inc.

CLIENT : Blue Sky Environmental, LLC
PROJECT NAME : Potrero
AAC PROJECT NO. : 070930
REPORT DATE : 08/30/2007

On August 24, 2007, Atmospheric Analysis & Consulting, Inc. received one (1) Tedlar Bag for non-methane organic compounds analysis by EPA 25C, Sulfur Analysis by ASTM D-5504, fixed gases analysis by EPA 3C and hydrocarbon analysis by EPA 18. Upon receipt the sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab No.
Potrero	070930-28079

EPA 3C - An aliquot of the gaseous sample is injected into the GC/TCD for analysis following EPA 3C as specified in the SOW.

ASTM D-5504 - Up to a 1mL aliquot of sample is injected into the GC/SCD for analysis following ASTM D-5504 as specified in the SOW.

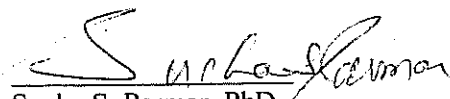
EPA 25C Analysis - Up to a 1mL aliquot of samples is injected into the GC/FID/TCA for analysis following EPA 25C as specified in the SOW.

EPA 18 Analysis - Up to a 1ml aliquot of samples is injected into the GC/FID for analysis following EPA 18 as specified in the SOW.

No problems were encountered during receiving, preparation, and/ or analysis of this sample. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-EPA 25C, M18, D-5504 and EPA 3C.

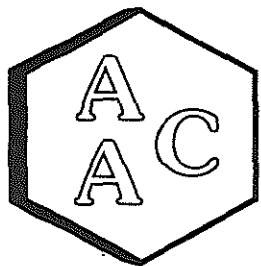
I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. Release of the data contained in this hardcopy data package and its electronic data deliverable submitted on diskette has been authorized by the Laboratory Director or his designee, as verified by the following signature.

If you have any questions or require further explanation of data results, please contact the undersigned.


Sucha S. Parmar, PhD
Technical Director

This report consists of 13 pages.





Atmospheric Analysis & Consulting, Inc.

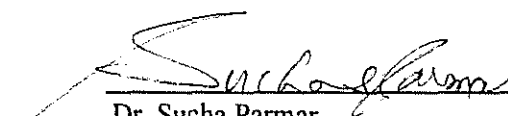
Laboratory Analysis Report

Client: : Blue Sky Environmental, LLC
Project No. : 070930
Matrix : Air
Units : %

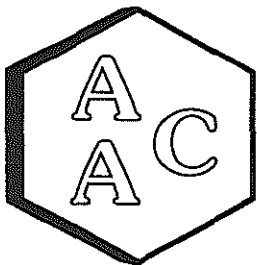
Sampling Date : 08/23/2007
Receiving Date : 08/24/2007
Analysis Date : 08/24/2007
Report Date : 08/30/2007

EPA Method 3C

Detection Limit: 0.1 %			Analyte				
Client ID	AAC ID	Hydrogen	Oxygen	Nitrogen	CO	Methane	CO2
Potrero	070930-28079	<PQL	2.7	21.2	<PQL	43.1	33.1


Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report


CLIENT: : Blue Sky Environmental, LLC
PROJECT NO. : 070930
MATRIX : Air
UNITS : %

SAMPLING DATE : 08/23/2007
RECEIVING DATE : 08/24/2007
ANALYSIS DATE : 08/24/2007
REPORT DATE : 08/30/2007

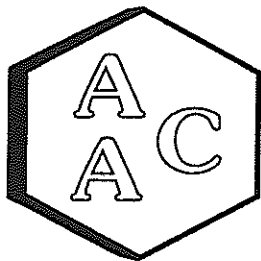
Client ID	AAC ID	ANALYSIS METHOD		EPA Method 18				
		PQL		0.3 ppmv				
		C1*	C2**	C3	C4	C5	C6	C6+
Potrero	070930-28079	NA	<15	13.8	11.8	25.5	34.5	205.0

* C1 reported off of the EPA 3C report

** Due to the extremely high C1 concentration, the C2 concentration could not be measured below this PQL due to matrix interference.


Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Blue Sky Environmental, LLC
PROJECT NO. : 070930
Matrix : Air
UNITS : PPMV

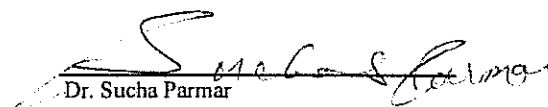
SAMPLING DATE : 08/23/2007
RECEIVING DATE : 08/24/2007
ANALYSIS DATE : 08/23/2007
REPORT DATE : 08/30/2007

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

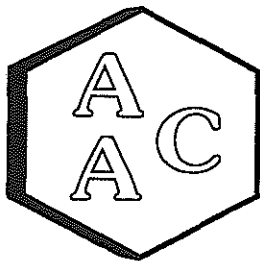
Client ID.	Potrero	Detection Limit
AAC ID	070930-28079	
Analysis Dilution Factor	10, 250	
Units	ppmv	
H ₂ S	12.6	0.01
Carbonyl Sulfide	<PQL	0.01
SO ₂	<PQL	0.01
Methyl Mercaptan	0.68	0.01
Ethyl Mercaptan	0.60	0.01
Dimethyl Sulfide	<PQL	0.01
n-Butyl mercaptan	<PQL	0.01
Carbon Disulfide	0.02	0.01
Allyl Sulfide	<PQL	0.01
Propyl Sulfide	<PQL	0.01
Allyl disulfide	<PQL	0.01
Isopropyl Mercaptan	0.09	0.01
t-Butyl mercaptan	0.06	0.01
Propyl Mercaptan	<PQL	0.01
Butyl Sulfide	<PQL	0.01
Ethyl methyl sulfide	<PQL	0.01
Thiophene	<PQL	0.01
Isobutyl mercaptan	<PQL	0.01
Dimethyl disulfide	<PQL	0.01
Allyl mercaptan	<PQL	0.01
3-Methylthiophene	<PQL	0.01
Tetrahydrothiophene	<PQL	0.01
Diethyl sulfide	<PQL	0.01
2-Ethylthiophene	<PQL	0.01
2,5-Dimethylthiophene	<PQL	0.01
Diethyl disulfide	<PQL	0.01
Total Unidentified Sulfurs as H ₂ S	0.14	0.01
Total Sulfurs as H ₂ S	14.21	0.01

PQL = Practical Quantitation Limit (MDL x Analysis Dilution factor)

All compounds concentrations expressed in terms of H₂S.


Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report


Client : Blue Sky Environmental, LLC
Project No. : 070930
Matrix : Air
Units : ppmv

Sampling Date : 08/23/2007
Receiving Date : 08/24/2007
Analysis Date : 08/24/2007
Report Date : 08/30/2007

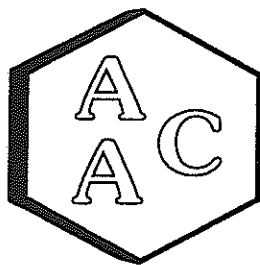
EPA Method 25C

<i>Detection Limit:</i>		0.3 ppmv
Client Sample ID	AAC ID	NMHC**
Potrero	070930-28079	1273

**Non-Methane Hydrocarbons as methane


Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 8/24/2007

Analyst: TT

Instrument ID: TCD#1

Units: %

I - Method Blank-EPA Method 3C

AAC ID	Analyte	MB Concentration
Method Blank	Hydrogen	ND
	Oxygen	ND
	Nitrogen	ND
	CO	ND
	Methane	ND
	CO2	ND

II-Laboratory Control Spike & Duplicate - EPA Method 3C

AAC ID	Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
Lab Control Standards	Hydrogen	20.0	20.2	20.5	101	103	1.7
	Nitrogen	20.0	21.2	21.4	106	107	0.9
	CO	20.0	19.5	19.7	97	98	0.8
	Methane	20.0	20.3	20.5	101	102	1.0
	CO2	20.0	19.9	20.1	100	101	1.1

III - Duplicate Analysis - EPA Method 3C

AAC ID	Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
070927-28072	Hydrogen	0.00	0.00	0.0	0.0
	Oxygen	1.00	1.03	1.0	3.0
	Nitrogen	19.09	19.24	19.2	0.8
	CO	0.00	0.00	0.0	0.0
	Methane	44.69	45.08	44.9	0.9
	CO2	34.40	34.65	34.5	0.7

IV-Matrix Spike & Duplicate- EPA Method 3C

AAC ID	Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
070927-28072	Hydrogen	0.00	10.0	9.5	9.0	95	90	5.0
	Nitrogen	9.58	10.0	21.5	20.3	119	107	10.3
	CO	0.00	10.0	10.1	9.7	101	97	4.4
	Methane	22.44	10.0	32.6	33.5	102	111	8.1
	CO2	17.26	10.0	27.2	27.8	100	106	5.8

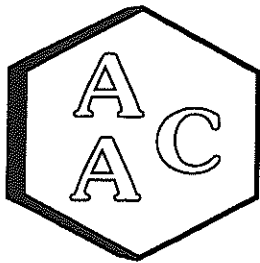
* Must be 85-115%

** Must be 75-125%

*** Must be < 25%

Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 8/24/2007

Instrument ID: TCD#1

Analyst: TT

Calibration Date: 08/21/07

Opening Calibration Verification Standard

Analyte	xLR**	LR	%RPD*
Hydrogen	2127	2130	0.1
Oxygen***	56490	54804	3.0
Nitrogen	59782	62739	4.8
Carbon Monoxide	65600	63436	3.4
Methane	53998	54363	0.7
Carbon Dioxide	88017	87067	1.1

Closing Calibration Verification Standard

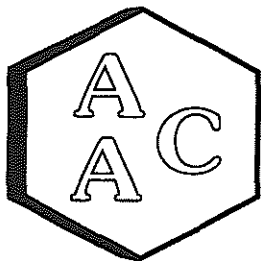
Analyte	xLR**	LR	%RPD*
Hydrogen	2127	2156	1.3
Nitrogen	59782	64410	7.5
Carbon Monoxide	65600	64423	1.8
Methane	53998	53479	1.0
Carbon Dioxide	88017	88528	0.6

* Must be <15%

** Linear Response Factor from Initial Calibration Curve

*** Oxygen from Lab Air





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 08/24/07
Analyst: TT

Instrument ID: SCD#2
Units: PPMV

I - Method Blank - ASTM D-5504

AAC ID	Analyte	MB Conc.
Method Blank	H2S	ND

II-Laboratory Control Spike & Duplicate - ASTM D-5504

Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
H2S	0.050	0.047	0.047	94	94	0.0

III-Matrix Spike & Duplicate- ASTM D-5504

Sample ID 070928-28073

Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
H2S	0.000	0.050	0.045	0.046	90	92	2.2

IV - Duplicate Analysis - ASTM D-5504

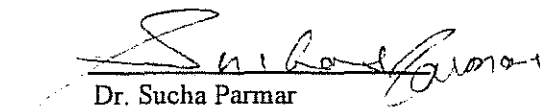
Sample ID 070928-28073

Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
H2S	0.000	0.000	0.000	NA

* Must be 90-110%

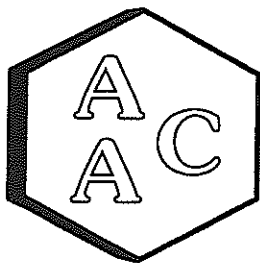
** Must be 85-115%

*** Must be < 10%


Dr. Sucha Parmar

Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 8/24/2007
Analyst: TT
Calibration Date: 8/7/2007

Instrument ID: SCD#2
Units: PPMV

Opening Calibration Verification Standard

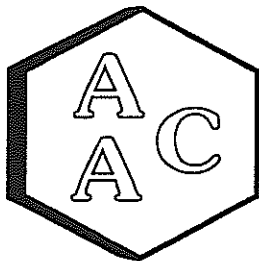
Analyte	Std. Conc.	Result	%Recovery*
H2S	0.050	0.047	94

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	%Recovery*
H2S	0.050	0.047	94

* Must be 90-110%





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Analysis Date: 8/24/2007

Analyst: TT

Units: ppmv

Instrument ID: FID#9

Calibration Date: 8/24/2007

I - Opening Calibration Verification Standard - Method 25C

Analyte	xCF	dCF	%RPD*
CO	11024	10012	9.6
CH4	10130	10109	0.2
CO2	10049	9950	1.0
Propane	26546	25961	2.2

II - Method Blank - Method 25C

AAC ID	Analyte	Sample Result
MB	NMEHC	ND

III - Laboratory Control Spike & Duplicate - Method 25C

AAC ID	Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec **	LCSD % Rec **	% RPD***
LCS/LCSD	NMEHC	50.0	50.5	51.5	101.0	103.0	2.0

IV - Closing Calibration Verification Standard - Method 25C

Analyte	xCF	dCF	%RPD*
CO	11024	10024	9.5
CH4	10130	9921	2.1
CO2	10049	9303	7.7
Propane	26546	24604	7.6

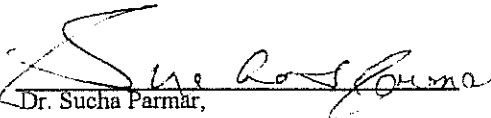
xCF - Average Calibration Factor from Initial Calibration Curve

dCF - Daily Calibration Factor

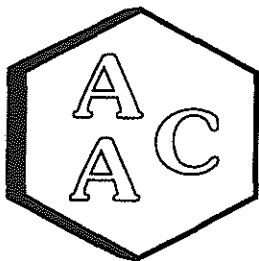
* Must be <15%

** Must be 90-110 %

*** Must be <20%


Dr. Sucha Parmar,
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 8/24/2007

Analyst: TT

Instrument ID: FID#3

Units: PPMV

I - Method Blank-EPA Method 18

AAC ID	Analyte	MB Concentration
Method Blank	Methane	ND
	Ethane	ND
	Propane	ND
	Butane	ND
	Pentane	ND
	Hexane	ND

II-Laboratory Control Spike & Duplicate - EPA Method 18

AAC ID	Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
Lab Control Standards	Methane	100.4	97.3	96.2	96.9	95.9	1.0
	Ethane	100.2	99.0	99.5	98.8	99.3	0.5
	Propane	100.2	98.2	95.0	98.0	94.8	3.3
	Butane	100.4	97.7	96.4	97.4	96.0	1.4
	Pentane	100.0	101.7	100.4	101.7	100.4	1.3
	Hexane	99.4	110.1	110.4	110.7	111.1	0.3

III - Duplicate Analysis - EPA Method 18

AAC ID	Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
070930-28079	Methane	NA	NA	NA	NA
	Ethane	NA	NA	NA	NA
	Propane	18.0	18.9	18.4	4.9
	Butane	3.7	3.5	3.6	5.6
	Pentane	2.0	2.0	2.0	0.0
	Hexane	1.1	0.9	1.0	13.3

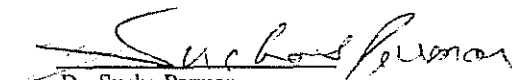
IV-Matrix Spike & Duplicate- EPA Method 18

AAC ID	Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
070930-28079	Methane	NA	NA	NA	NA	NA	NA	NA
	Ethane	NA	NA	NA	NA	NA	NA	NA
	Propane	9.2	50.0	54.5	52.2	91	86	5.1
	Butane	1.8	50.0	46.6	47.1	90	91	1.2
	Pentane	1.0	50.0	48.5	50.5	95	99	4.2
	Hexane	0.5	50.0	48.6	52.0	96	103	6.8

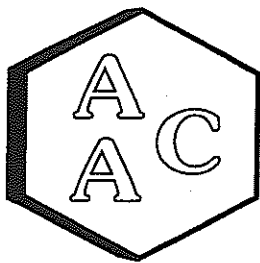
* Must be 85-115%

** Must be 75-125%

*** Must be < 25%


Dr. Sucha Parmar
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 8/24/2007

Instrument ID: FID#3

Analyst: TT

Calibration Date: 07/09/07

Opening Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
C1	794	740	7.1
C2	1554	1520	2.3
C3	2377	2228	6.5
C4	3164	2971	6.3
C5	3809	3695	3.0
C6	4307	4463	3.6

Closing Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
C1	794	774	2.6
C2	1554	1525	1.9
C3	2377	2348	1.2
C4	3164	3123	1.3
C5	3809	3929	3.1
C6	4307	4752	9.8

* Must be <15%

** Average Calibration Factor from Initial Calibration Curve





BLUE SKY ENVIRONMENTAL, LLC

624 San Gabriel Avenue

Albany, CA 94706

510.525.1261 ph/fax

Contact: Guy Worthington 510 508 3469

E-Mail blueskyenvironmental@yahoo.com

LAB:

ADDRESS:

ph/fax

Contact:

Page ___ of ___

ATAC

700/30

CHAIN OF CUSTODY RECORD

Analysis Requested

Project Name:

POTRERO

Project #:

SAMPLE Date	SAMPLE Time	grab or comp	Sample ID (Method-Run-Fraction)
-------------	-------------	--------------	---------------------------------

8/23/07

Potrero

Type/Size of container

12.5L
10.5L

945

250

10.5

5504

25070

All samples submitted to laboratories for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the sample. Samples should be held for 90+ days. The laboratory reserves the right to return unused sample portions.

COMMENTS:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

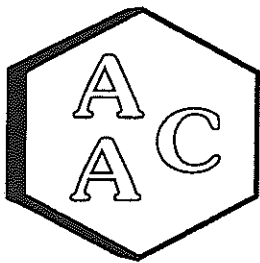
Date:

Time:

Received by:

Date:

Time:



Atmospheric Analysis & Consulting, Inc.

CLIENT : Blue Sky Environmental
PROJECT NAME : Potrero
AAC PROJECT NO. : 070930
REPORT DATE : 08/27/07

On August 24, 2007, Atmospheric Analysis & Consulting, Inc. received one (1) Tedlar Bag for Volatile Organic Compounds analysis by EPA method TO-15. Upon receipt each sample was assigned a unique Laboratory ID number as follows:

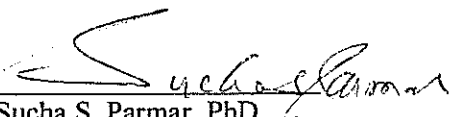
Client ID	Lab No.
Potrero	070930-28079

TO-15 Analysis - Up to a 500 ml aliquot of sample is concentrated, put through a water and CO2 management system, cryofocused and injected into the GC/MS (full scan mode) for analysis following EPA Method TO-15 as specified in the SOW.

No problems were encountered during receiving, preparation and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-TO-15. Estimated uncertainty of the test results will be provided upon request.

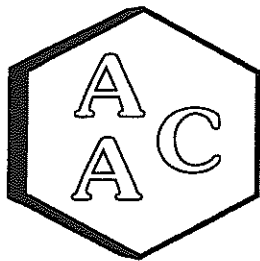
I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.


Sucha S. Parmar, PhD
Technical Director

This report consists of 11 pages.





Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

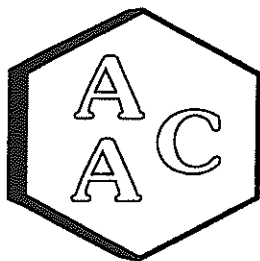
CLIENT : Blue Sky Environmental
PROJECT NO : 070930
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 08/24/2007
DATE REPORTED : 08/27/2007

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	Potrero			Sample Reporting Limit (RLxDF's)	Method Reporting Limit
AAC ID	070930-28079				
Date Sampled	8/23/2007				
Date Analyzed	8/24/2007				
Can Dilution Factor	1.00				
	Result	Qualifier	Dil. Fac.		
Chlorodifluoromethane	1290		1000	1000	1.0
Propylene	9330		1000	1000	1.0
Dichlorodifluoromethane	1170		1000	1000	1.0
Chloromethane	ND	U	1000	1000	1.0
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	U	1000	1000	1.0
Vinyl Chloride	ND	U	1000	1000	1.0
Methanol	13400		1000	5000	5.0
1,3-Butadiene	ND	U	1000	1000	1.0
Bromomethane	ND	U	1000	1000	1.0
Chloroethane	ND	U	1000	1000	1.0
Dichlorofluoromethane	ND	U	1000	1000	1.0
Ethanol	59600		2000	4000	2.0
Vinyl Bromide	ND	U	1000	1000	1.0
Acetone	15000		1000	2000	2.0
Trichlorofluoromethane	ND	U	1000	1000	1.0
Isopropyl Alcohol	22000		1000	2000	2.0
Acrylonitrile	ND	U	1000	1000	1.0
1,1-Dichloroethylene	ND	U	1000	1000	1.0
Methylene Chloride	ND	U	1000	1000	1.0
Allyl Chloride (Chloroprene)	ND	U	1000	1000	1.0
Carbon Disulfide	ND	U	1000	1000	1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	1000	1000	1.0
1,2-Dichloroethylene	ND	U	1000	1000	1.0
1,1-Dichloroethane	ND	U	1000	1000	1.0
MTBE	ND	U	1000	1000	1.0
Vinyl Acetate	ND	U	1000	1000	1.0
2-Butanone (MEK)	19400		1000	1000	1.0
cis-1,2- Dichloroethene	ND	U	1000	1000	1.0
Hexane	ND	U	1000	1000	1.0
Chloroform	ND	U	1000	1000	1.0
Ethyl Acetate	3040		1000	1000	1.0
Tetrahydrofuran	5410		1000	1000	1.0
1,2-Dichloroethane	ND	U	1000	1000	1.0
1,1,1-Trichloroethane	ND	U	1000	1000	1.0





Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : Blue Sky Environmental
PROJECT NO : 070930
MATRIX : AIR
UNITS : PPB (v/v)

DATE RECEIVED : 08/24/2007
DATE REPORTED : 08/27/2007

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

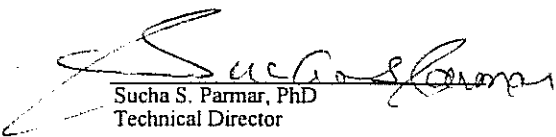
Client ID	Potrero			Sample Reporting Limit (RLxDf's)	Method Reporting Limit
AAC ID	070930-28079				
Date Sampled	8/23/2007				
Date Analyzed	8/24/2007				
Can Dilution Factor	1.00				
	Result	Qualifier	Dil. Fac.		
Benzene	ND	U	1000	1000	1.0
Carbon Tetrachloride	ND	U	1000	1000	1.0
Cyclohexane	ND	U	1000	1000	1.0
1,2-Dichloropropane	ND	U	1000	1000	1.0
Bromodichloromethane	ND	U	1000	1000	1.0
1,4-Dioxane	ND	U	1000	1000	1.0
Trichloroethene	ND	U	1000	1000	1.0
2,2,4-Trimethylpentane	ND	U	1000	1000	1.0
Heptane	1670		1000	1000	1.0
cis-1,3-Dichloropropene	ND	U	1000	1000	1.0
4-Methyl-2-Pentanone (MiBK)	1420		1000	1000	1.0
trans-1,3-Dichloropropene	ND	U	1000	1000	1.0
1,1,2-Trichloroethane	ND	U	1000	1000	1.0
Toluene	15600		1000	1000	1.0
2-Hexanone	ND	U	1000	1000	1.0
Dibromochloromethane	ND	U	1000	1000	1.0
1,2-Dibromoethane	ND	U	1000	1000	1.0
Tetrachloroethylene	ND	U	1000	1000	1.0
Chlorobenzene	ND	U	1000	1000	1.0
Ethylbenzene	5300		1000	1000	1.0
m- & p-Xylenes	10900		1000	2000	2.0
Bromoform	ND	U	1000	3000	3.0
Styrene	ND	U	1000	1000	1.0
1,1,2,2-Tetrachloroethane	ND	U	1000	1000	1.0
o-Xylene	3160		1000	1000	1.0
4-Ethyltoluene	ND	U	1000	1000	1.0
1,3,5-Trimethylbenzene	1330		1000	1000	1.0
1,2,4-Trimethylbenzene	1760		1000	1000	1.0
Benzyl Chloride	ND	U	1000	5000	5.0
1,3-Dichlorobenzene	ND	U	1000	1000	1.0
1,4-Dichlorobenzene	ND	U	1000	1000	1.0
1,2-Dichlorobenzene	ND	U	1000	1000	1.0
1,2,4-Trichlorobenzene	ND	U	1000	1000	1.0
Hexachlorobutadiene	ND	U	1000	1000	1.0
BFB-Surrogate Std. % Recovery	104%			70-130%	

J- Analyte was detected. However the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Reporting Limit (RL).

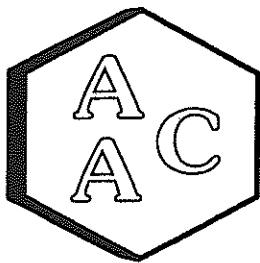
E - Estimated value, result outside linear range of instrument.

U - Compound was analyzed for, but was not detected.

!! - Estimated


Sucha S. Parmar, PhD
Technical Director





Atmospheric Analysis & Consulting, Inc.

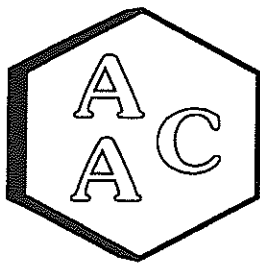
ANALYSIS DATE : 08/24/07
ANALYST : JJG

INSTRUMENT ID : GC/MS-03
STD ID : PS081707-04

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 Continuing Calibration Verification of the 08/20/07 Calibration

Compounds	Conc	Daily Conc	%REC
4-BFB (surrogate standard)***	10	10.30	103
Chlorodifluoromethane*	10	11.21	112
Propylene*	10	11.27	113
DiChloroMethane*	10	11.10	111
CHLOROMETHANE*	10	11.09	111
1,2 DiCl-1,1,2,2-TetraFEthane*	10	10.90	109
VINYL CHLORIDE*	10	11.06	111
Methanol*	10	9.03	90
1,3-Butadiene*	10	10.49	105
BROMOMETHANE*	10	12.74	127
CHLOROETHANE*	10	10.91	109
Dichlorofluoromethane*	10	11.15	112
Ethanol*	10	10.06	101
Vinyl Bromide*	10	10.89	109
Acetone*	10	10.61	106
TRICHLOROFLUOROMETHANE*	10	10.08	101
Isopropanol*	10	10.84	108
Acrylonitrile*	10	9.53	95
1,1 DICHLOROETHENE*	10	11.04	110
METHYLENE CHLORIDE*	10	11.06	111
Allyl CHLORIDE*	10	11.37	114
Carbon disulfide*	10	11.22	112
1,1,2-TRICHLORO-1,2,2-TRIFLUO	10	11.15	112
trans-1,2- DICHLOROETHYLENE*	10	11.08	111
1,1- DICHLOROETHANE*	10	10.86	109
MTBE*	10	10.08	101
Vinyl Acetate*	10	10.79	108
MEK*	10	10.37	104
cis-1,2- DICHLOROETHYLENE*	10	11.06	111
Hexane*	10	11.19	112
CHLOROFORM*	10	10.80	108
Ethyl Acetate*	10	11.06	111
Tetrahydrofuran*	10	11.24	112
1,2-DICHLOROETHANE*	10	11.00	110
1,1,1-TRICHLOROETHANE*	10	10.93	109





Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 08/24/07
ANALYST : JIG

INSTRUMENT ID : GC/MS-03
STD ID : PS081707-04

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-15 Continuing Calibration Verification of the 08/20/07 Calibration

Compounds	Conc	Daily Conc	%REC
BENZENE**	10	11.09	111
CARBON TETRACHLORIDE**	10	11.50	115
Cyclohexane**	10	11.37	114
1,2-DICHLOROPROPANE**	10	11.36	114
Bromodichloromethane**	10	12.59	126
1,4-Dioxane**	10	11.83	118
TRICHLOROETHENE**	10	12.30	123
2,2,4-Trimethylpentane**	10	12.89	129
Heptane**	10	11.56	116
cis- 1,3 DICHLOROPROPENE**	10	11.64	116
MiBK**	10	11.63	116
trans 1,3 DICHLOROPROPENE**	10	11.41	114
1,1,2-TRICHLOROETHANE**	10	11.22	112
TOLUENE**	10	11.10	111
2-Hexanone**	10	11.68	117
Dibromochloromethane**	10	11.57	116
1,2 DIBROMOETHANE**	10	11.32	113
TETRACHLOROETHYLENE**	10	11.09	111
CHLOROBENZENE***	10	11.12	111
ETHYLBENZENE***	10	11.21	112
m-, & p- XYLENES***	20	23.75	119
Bromoform***	10	11.38	114
STYRENE***	10	9.80	98
1,1, 2,2- TETRACHLORETHANE**	10	11.99	120
o- XYLENE***	10	11.77	118
Ethyltoluene***	10	11.39	114
1,3,5- TRIMETHYLBENZENE***	10	10.04	100
1,2,4- TRIMETHYLBENZENE***	10	10.31	103
Benzyl Chloride***	10	10.16	102
1,3- DICHLOROBENZENE***	10	10.91	109
1,4- DICHLOROBENZENE***	10	10.93	109
1,2-DICHLOROBENZENE***	10	11.02	110
1,2,4-TRICHLOROBENZENE***	10	8.04	80
HEXACHLOROBUTADIENE***	10	9.65	97

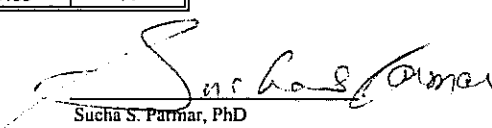
* Internal std calculation IS1 : Bromochloromethane

** Internal std calculation IS2 : 1,4-Difluorobenzene

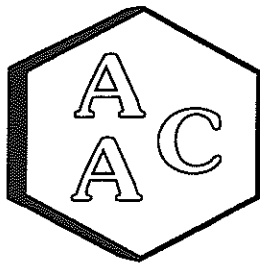
*** Internal std calculation IS3 : Chlorobenzene-d5

%REC should be 70-130%

!! Compound failed criteria and results should be considered estimated.


Sucha S. Parmar, PhD
Technical Director





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

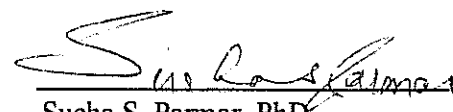
CLIENT ID : Laboratory Control Spike DATE ANALYZED : 08/24/07
AAC ID : LCS/LCSD DATE REPORTED : 08/24/07
MEDIA : Air UNITS : ppbv

TO-15 Laboratory Control Spike Recovery

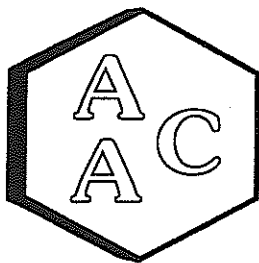
Compound	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
1,1-DICHLOROETHYLENE	0.0	10.00	11.04	11.16	110	112	1.1
METHYLENE CHLORIDE	0.0	10.00	11.06	11.05	111	110	0.1
BENZENE	0.0	10.00	11.09	11.13	111	111	0.4
TRICHLOROETHENE	0.0	10.00	12.30	12.34	123	123	0.3
TOLUENE	0.0	10.00	11.10	11.24	111	112	1.3
TETRACHLOROETHYLENE	0.0	10.00	11.09	11.13	111	111	0.4
CHLOROBENZENE	0.0	10.00	11.12	11.19	111	112	0.6
ETHYLBENZENE	0.0	10.00	11.21	11.30	112	113	0.8
m-, & p- XYLENES	0.0	20.00	23.75	23.94	119	120	0.8
o- XYLENE	0.0	10.00	11.77	11.81	118	118	0.3

* Must be 70-130%

** Must be < 25%


Sucha S. Parmar, PhD
Technical Director





Atmospheric Analysis & Consulting, Inc.

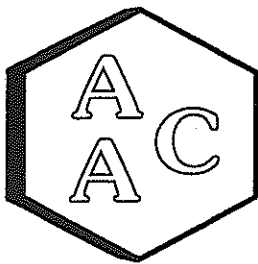
Method Blank Analysis Report

MATRIX : AIR ANALYSIS DATE : 08/24/07
UNITS : ppbv REPORT DATE : 08/24/07

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID	Method Blank MB 082407	RL
Chlorodifluoromethane*	<RL	1.0
Propylene*	<RL	1.0
DICIDIFMethane*	<RL	1.0
CHLOROMETHANE*	<RL	1.0
1,2 DiCl-1,1,2,2-TetraFEthane*	<RL	1.0
VINYL CHLORIDE*	<RL	1.0
Methanol*	<RL	5.0
1,3-Butadiene*	<RL	1.0
BROMOMETHANE*	<RL	1.0
CHLOROETHANE*	<RL	1.0
Dichlorofluoromethane	<RL	1.0
Ethanol*	<RL	2.0
Vinyl Bromide*	<RL	1.0
Acetone*	<RL	2.0
TRICHLOROFLUOROMETHANE*	<RL	1.0
Isopropyl Alcohol*	<RL	2.0
Acrylonitrile*	<RL	1.0
1,1 DICHLOROETHENE*	<RL	1.0
METHYLENE CHLORIDE*	<RL	1.0
Allyl CHLORIDE*	<RL	1.0
Carbon disulfide*	<RL	1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE*	<RL	1.0
trans-1,2- DICHLOROETHYLENE*	<RL	1.0
1,1- DICHLOROETHANE*	<RL	1.0
MTBE*	<RL	1.0
Vinyl Acetate*	<RL	1.0
MEK*	<RL	1.0
cis-1,2- DICHLOROETHYLENE*	<RL	1.0
Hexane*	<RL	1.0
CHLOROFORM*	<RL	1.0
Ethyl Acetate*	<RL	1.0
Tetrahydrofuran*	<RL	1.0
1,2-DICHLOROETHANE*	<RL	1.0
1,1,1-TRICHLOROETHANE*	<RL	1.0
BENZENE**	<RL	1.0
CARBON TETRACHLORIDE**	<RL	1.0
Cyclohexane**	<RL	1.0
1,2-DICHLOROPROPANE**	<RL	1.0
Bromodichloromethane**	<RL	1.0
1,4-Dioxane**	<RL	1.0
TRICHLOROETHENE**	<RL	1.0
2,2,4-Trimethylpentane**	<RL	1.0
Heptane**	<RL	1.0





Atmospheric Analysis & Consulting, Inc.

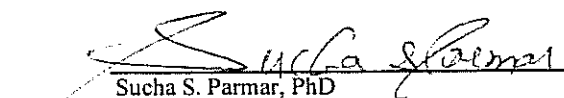
Method Blank Analysis Report

MATRIX : AIR ANALYSIS DATE : 08/24/07
UNITS : ppbv REPORT DATE : 08/24/07

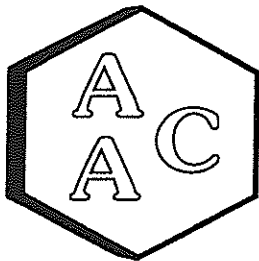
VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	Method Blank	RL
AAC ID	MB 082407	
cis- 1,3 DICHLOROPROPENE**	<RL	1.0
MIBK**	<RL	1.0
trans 1,3 DICHLOROPROPENE**	<RL	1.0
1,1,2-TRICHLOROETHANE**	<RL	1.0
TOLUENE**	<RL	1.0
2-Hexanone**	<RL	1.0
Dibromochloromethane**	<RL	1.0
1,2 DIBROMOETHANE**	<RL	1.0
TETRACHLOROETHYLENE**	<RL	1.0
CHLOROBENZENE***	<RL	1.0
ETHYLBENZENE***	<RL	1.0
m-, & p- XYLENES***	<RL	2.0
Bromoform***	<RL	3.0
STYRENE***	<RL	1.0
1,1, 2,2- TETRACHLORETHANE***	<RL	1.0
o- XYLENE***	<RL	1.0
Ethyltoluene***	<RL	1.0
1,3,5- TRIMETHYLBENZENE***	<RL	1.0
1,2,4- TRIMETHYLBENZENE***	<RL	1.0
Benzyl Chloride***	<RL	5.0
1,3- DICHLOROBENZENE***	<RL	1.0
1,4- DICHLOROBENZENE***	<RL	1.0
1,2-DICHLOROBENZENE***	<RL	1.0
1,2,4 TRICHLOROBENZENE***	<RL	1.0
HEXACHLOROBUTADIENE***	<RL	1.0
System Monitoring Compounds		
BFB-Surrogate Std. % Recovery	101%	--

RL - Reporting Limit


Sucha S. Parmar, PhD
Technical Director





Atmospheric Analysis & Consulting, Inc.

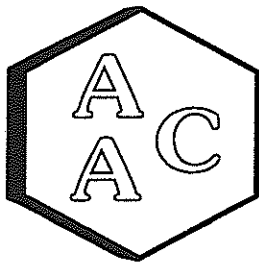
Quality Control/Quality Assurance Report

AAC ID : 070930-28079 DATE ANALYZED : 08/24/07
 MATRIX : Air DATE REPORTED : 08/24/07
 UNITS : ppbv

TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Chlorodifluoromethane*	1290	1330	3.1
Propylene*	9330	9620	3.1
DiCIDIFMethane*	1170	1210	3.4
CHLOROMETHANE*	<RL	<RL	0.0
1,2 DiCl-1,1,2,2-TetraFEthane*	<RL	<RL	0.0
VINYL CHLORIDE*	<RL	<RL	0.0
Methanol*	13400	14200	5.8
1,3-Butadiene*	<RL	<RL	0.0
BROMOMETHANE*	<RL	<RL	0.0
CHLOROETHANE*	<RL	<RL	0.0
Dichlorofluoromethane	<RL	<RL	0.0
Ethanol* "E"	60500	61600	1.8
Vinyl Bromide*	<RL	<RL	0.0
Acetone*	15000	15100	0.7
TRICHLOROFLUOROMETHANE*	<RL	<RL	0.0
Isopropyl Alcohol*	22000	22000	0.0
Acrylonitrile*	<RL	<RL	0.0
1,1 DICHLOROETHENE*	<RL	<RL	0.0
METHYLENE CHLORIDE*	<RL	<RL	0.0
Allyl CHLORIDE*	<RL	<RL	0.0
Carbon disulfide*	<RL	<RL	0.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE*	<RL	<RL	0.0
trans-1,2- DICHLOROETHYLENE*	<RL	<RL	0.0
1,1- DICHLOROETHANE*	<RL	<RL	0.0
MTBE*	<RL	<RL	0.0
Vinyl Acetate*	<RL	<RL	0.0
MEK*	19400	19600	1.0
cis-1,2- DICHLOROETHYLENE*	<RL	<RL	0.0
Hexane*	<RL	<RL	0.0
CHLOROFORM*	<RL	<RL	0.0
Ethyl Acetate*	3040	3060	0.7
Tetrahydrofuran*	5410	5470	1.1
1,2-DICHLOROETHANE*	<RL	<RL	0.0
1,1,1- TRICHLOROETHANE*	<RL	<RL	0.0
BENZENE** "J"	989	1020	3.1
CARBON TETRACHLORIDE**	<RL	<RL	0.0





Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

AAC ID : 070930-28079
MATRIX : Air

DATE ANALYZED : 08/24/07
DATE REPORTED : 08/24/07
UNITS : ppbv

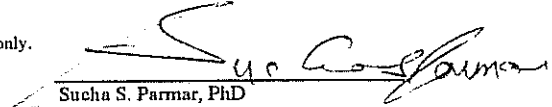
TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Cyclohexane**	<RL	<RL	0.0
1,2-DICHLOROPROPANE**	<RL	<RL	0.0
Bromodichloromethane**	<RL	<RL	0.0
1,4-Dioxane**	<RL	<RL	0.0
TRICHLOROETHENE**	<RL	<RL	0.0
2,2,4-Trimethylpentane**	<RL	<RL	0.0
Heptane**	1670	1700	1.8
cis- 1,3 DICHLOROPROPENE**	<RL	<RL	0.0
MIBK**	1420	1460	2.8
trans 1,3 DICHLOROPROPENE**	<RL	<RL	0.0
1,1,2-TRICHLOROETHANE**	<RL	<RL	0.0
TOLUENE**	15600	16200	3.8
2-Hexanone**	<RL	<RL	0.0
Dibromochloromethane**	<RL	<RL	0.0
1,2 DIBROMOETHANE**	<RL	<RL	0.0
TETRACHLOROETHYLENE**	<RL	<RL	0.0
CHLORO BENZENE***	<RL	<RL	0.0
ETHYL BENZENE***	5300	5400	1.9
m-, & p- XYLENES***	10900	11200	2.7
Bromofom***	<RL	<RL	0.0
STYRENE***	<RL	<RL	0.0
1,1,2,2-TETRACHLOROETHANE***	<RL	<RL	0.0
o- XYLENE***	3160	3210	1.6
Ethyltoluene***	<RL	<RL	0.0
1,3,5- TRIMETHYLBENZENE***	1330	1330	0.0
1,2,4- TRIMETHYLBENZENE***	1760	1790	1.7
Benzyl Chloride***	<RL	<RL	0.0
1,3- DICHLORO BENZENE***	<RL	<RL	0.0
1,4- DICHLORO BENZENE***	<RL	<RL	0.0
1,2-DICHLORO BENZENE***	<RL	<RL	0.0
1,2,4 TRICHLORO BENZENE***	<RL	<RL	0.0
Hexachlorobutadiene***	<RL	<RL	0.0
System Monitoring Compounds			
BFB-Surrogate Std. % Recovery	104%	105%	0.7

RL - Reporting Limit

E - Estimated results shown for duplicate purposes only.

J - Results shown below the reporting limit for duplicate purposes only.


Sucha S. Parmar, PhD
Technical Director



Field Data Sheets

CONTINUOUS EMISSION MONITORING SUMMARY DATA SHEET

Facility: REPUBLIC- POTRERO HILLS LANDFILL

Test #: 1, 2, 3

Date: 8-23-07

Location: A-2 Flare

Personnel:

GW

Leak Check: ☒

Stratification Check:

Parameter	O ₂	CO ₂	NO _x	CO	THC	CH ₄	SO ₂		Unit Description/Serial #:
Analyzer	755R	PIR 2000	42	48C	RS-55	RS-55	721 AT		
Range	25	15			50				Operating Conditions:
Span Value(s)	20.42	12.46			45.0				1530
Span Value(s)									Fuel: LFG
Span Value(s)									
CAL	20.6	12.6			45.0				NOTES:
ZERO	0	0			0				
① 0827	11.88	7.88			<1				847 scfm
↓	11.88	7.88			<1				1545 scfm
↓	11.88	7.65			<1				
↓	11.88	7.65			<1				
↓	11.88	7.65			<1				
0857	11.88	7.65			<1				
ZERO	0	0			0.7				
CAL	20.25	11.94			44.0				
AVG	11.88	7.73			<1				
② 0910	11.50	7.5			1.0				1561 °F
↓	11.50	7.5			1.0				812 scfm
↓	11.50	7.5			1.0				
↓	11.50	7.5			1.1				
↓	11.50	7.5			1.1				
0940	11.50	7.5			1.1				
ZERO	0	0			1.25				
CAL	19.88	11.93			43.5				
AVG	11.50	7.5			<1				
③ 0948	11.3	7.43			1.5				1557 °F
↓	11.3	7.43			1.5				800 scfm
↓	11.3	7.43			1.5				
↓	11.3	7.43			1.7				
↓	11.3	7.43			1.7				
1018	11.3	7.43			1.9				
ZERO	0	0			2.0				
CAL	19.7	11.85			43.5				
AVG	11.3	7.43			<1				

Strip Chart Records

0776

45 bag sample

02
11.5

02
11.5

1551
812

744

44.0 740

2025
11.94
8

0910
6

4

3

2

1

20.7

0

765
02

11.88
02

1550
847

Run #1

05/24

0827

02
7.98

15.5
744

02
20.0

02
12.16
8

LFs quality
4513 CH4
3813 CO2
11.8 02

847 SCFM
1545°F

1550SP

9

45.0 740/50
20.42 02/25
12.46 02/15

761620

8-23-07

43.5
19.7
11.85

5 6 7

RUN#3

1557
500

7.43
COR

11.3

02

0948

3 HX

7 HX

7 HX - 43.5
19.88
11.93

7 02
COR

0940

USING SAMPLE

RUN#2

1351
812

202
COR

7.5

02
11.5

2 HX

44.0 HX
20.25
11.94
8

0910

4

3

2

1

0.10

QC Calibration Gas Certifications



07

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER BLUE SKY ENVIROMENTAL

P.O NUMBER

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
CARBON DIOXIDE GMIS	vs. SRM82745	SA 18273	15.04 %
OXYGEN GMIS	vsSRM#2659a	CC 76878	20.98 %

ANALYZER READINGS

R=REFERENCE STANDARD

Z=ZERO GAS

C=GAS CANDIDATE

1. COMPONENT	CARBON DIOXIDE GMIS	ANALYZER MAKE-MODEL-S/N	Siemens Ultramat 5E S/N A12-736
ANALYTICAL PRINCIPLE	NDIR	LAST CALIBRATION DATE	06/02/07
FIRST ANALYSIS DATE	06/08/08	SECOND ANALYSIS DATE	
Z 0.00 R 15.04 C 12.60 CONC. 12.60		Z R C CONC.	
R 15.04 Z 0.00 C 12.60 CONC. 12.60		R Z C CONC.	
Z 0.00 C 12.60 R 15.04 CONC. 12.60		Z C R CONC.	
U/M %	MEAN TEST ASSAY 12.60	U/M %	MEAN TEST ASSAY
2. COMPONENT	OXYGEN GMIS	ANALYZER MAKE-MODEL-S/N	Siemens Oxymat 5E S/N A12-839
ANALYTICAL PRINCIPLE	Paramagnetic	LAST CALIBRATION DATE	06/02/07
FIRST ANALYSIS DATE	06/08/08	SECOND ANALYSIS DATE	
Z 0.00 R 20.98 C 20.42 CONC. 20.42		Z R C CONC.	
R 20.98 Z 0.00 C 20.42 CONC. 20.42		R Z C CONC.	
Z 0.00 C 20.42 R 20.98 CONC. 20.42		Z C R CONC.	
U/M %	MEAN TEST ASSAY 20.42	U/M %	MEAN TEST ASSAY

Values not valid below 150 psig

O2 concentration is corrected for CO2 interference.

THIS CYLINDER NO.	CC 246150	CERTIFIED CONCENTRATION	
HAS BEEN CERTIFIED ACCORDING TO SECTION	EPA-600/R97/121	CARBON DIOXIDE	12.60 %
OF TRACEABILITY PROTOCOL NO.	Rev. 9/97	OXYGEN	20.42 %
PROCEDURE	G1	NITROGEN	BALANCE
CERTIFIED ACCURACY	± 1 % NIST TRACEABLE		
CYLINDER PRESSURE	2000 PSIG		
CERTIFICATION DATE	06/08/08		
EXPIRATION DATE	06/08/11 TERM 36 MONTHS		

ANALYZED BY

PABLO REYES

CERTIFIED BY

ERIC YOUNG

IMPORTANT
Information contained herein has been prepared at your request by qualified experts within Praxair Distribution, Inc. While we believe that the information is accurate within the limits of the analytical methods employed and is complete to the extent of the specific analyses performed, we make no warranty or representation as to the suitability of the use of the information for any particular purpose. The information is offered with the understanding that any use of the information is at the sole discretion and risk of the user. In no event shall liability of Praxair Distribution, Inc. arising out of the use of the information contained herein exceed the fee established for providing such information.

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER BLUE SKY

P.O NUMBER

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
PROPANE GMIS	vs. SRM#1666	SA 9503	10.1 ppm

ANALYZER READINGS

R=REFERENCE STANDARD

Z=ZERO GAS

C=GAS CANDIDATE

1. COMPONENT	PROPANE	GMIS	ANALYZER MAKE-MODEL-S/N	HORIBA, FID-510, 851135122
ANALYTICAL PRINCIPLE	Flame Ionization Detector		LAST CALIBRATION DATE	06/02/07
FIRST ANALYSIS DATE	06/19/07		SECOND ANALYSIS DATE	
Z 0.00	R 27.16	C 40.30	CONC. 15.0	Z R C CONC.
R 27.11	Z 0.00	C 40.22	CONC. 15.0	R Z C CONC.
Z 0.00	C 40.33	R 27.18	CONC. 15.0	Z C R CONC.
U/M ppm	MEAN TEST ASSAY	15.0	U/M ppm	MEAN TEST ASSAY

Values not valid below 150 psig

THIS CYLINDER NO.	CC 238669	CERTIFIED CONCENTRATION	
HAS BEEN CERTIFIED ACCORDING TO SECTION	EPA-600/R97/121	PROPANE	15.0 ppm
OF TRACEABILITY PROTOCOL NO.	Rev. 9/97	AIR	BALANCE
PROCEDURE	G1		
CERTIFIED ACCURACY	± 1	% NIST TRACEABLE	
CYLINDER PRESSURE	2000	PSIG	
CERTIFICATION DATE	06/19/07		
EXPIRATION DATE	06/19/10	TERM	36 MONTHS

ANALYZED BY

ERIC YOUNG

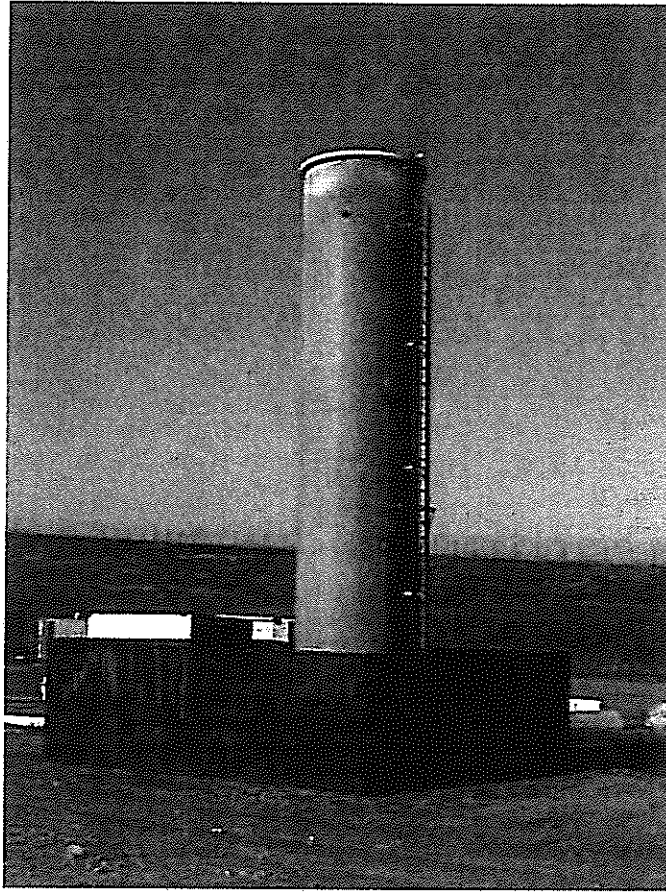
CERTIFIED BY

PABLO REYES

IMPORTANT

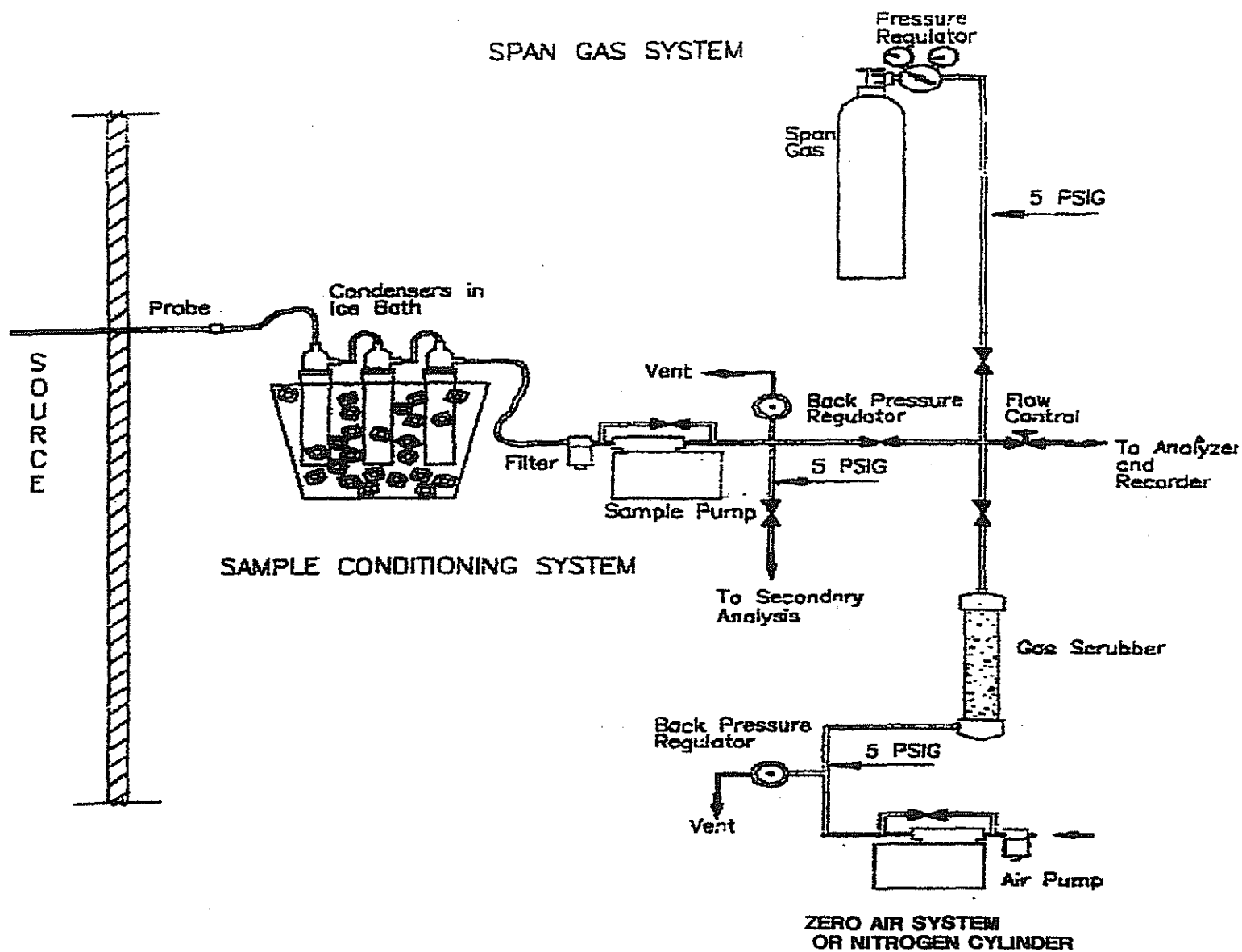
Information contained herein has been prepared at your request by qualified experts within Praxair Distribution, Inc. While we believe that the information is accurate within the limits of the analytical methods employed and is complete to the extent of the specific analyses performed, we make no warranty or representation as to the suitability of the use of the information for any particular purpose. The information is offered with the understanding that any use of the information is at the sole discretion and risk of the user. In no event shall liability of Praxair Distribution, Inc. arising out of the use of the information contained herein exceed the fee established for providing such information.

Stack Diagram



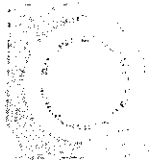
Potrero Landfill Gas Flare
Ladder Access

Sample System Diagram



BAAQMD ST-5 (CO₂)
 BAAQMD ST-6 (CO)
 BAAQMD ST-7 (THC by FID)
 BAAQMD ST-13A (NO_x)
 BAAQMD ST-14 (O₂)
 BAAQMD ST-19A (SO₂)

Permit/Authority to Construct



SAN FRANCISCO AIR QUALITY
MANAGEMENT DISTRICT
900 LINS E ST
SAN FRANCISCO, CALIFORNIA 94102
(415) 774-6000

PERMIT
TO
OPERATE

Plant# 2039

Page 1

Expires DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law.

Dave Meyer
Potrero Hills Landfill, Inc
3260 Blume Dr, Suite 200
Richmond, CA 94806

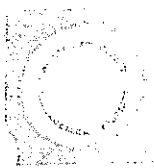
Location: 3675 Potrero Hills Lane
Suisun City, CA 94585

S#	DESCRIPTION	[Schedule]	PAID
1	CHEM> Landfill with gas collection system, Multi-material Solid Waste Landfill with GAS COLLECTION SYSTEM (18 WELLS)	[K]	1582
12	Reciprocating Engine, Elect Gen, 496 in3 displ, 225 hp IC Engine for Power Generation Emissions at: P12 Stack	[B]	144
13	Reciprocating Engine, Elect Gen, 496 in3 displ, 225 hp IC Engine for Power Generation Emissions at: P13 Stack	[B]	144
14	Service Station G11138, 1 gasoline nozzles, Vehicle Non Retail Gasoline Dispensing Facility	[D]	42

4 Permit Sources, 0 Exempt Sources

*** See attached Permit Conditions ***

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.



SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH
400 LEWIS STREET
SAN FRANCISCO, CALIFORNIA 94102
(415) 776-0000

PERMIT
TO
OPERATE

Plant# 2039

Page: 2

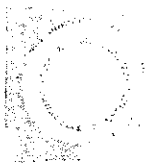
Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law.

*** PERMIT CONDITIONS ***

=====

Source# 1	subject to Condition ID# 1948
Source# 12	subject to Condition ID# 18996
Source# 13	" " " ID# 18996
Source# 14	subject to Condition ID# 14098



CITY OF LOS ANGELES
SANTO DOMINGO DISTRICT
433 GIL STREET
DOWNTOWN, CALIFORNIA 90013
(213) 475-5200

PERMIT
TO OPERATE

Plant# 2039

Page 3

Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law.

*** PERMIT CONDITIONS ***

=====

CONDITION ID #1948

S-1: Solid Waste Landfill With Gas Collection System;
Abated By Landfill Gas Flare A-2

1. The Permit Holder shall comply with the following waste acceptance and disposal limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
 - a. Total waste accepted and placed at the landfill shall not exceed 4430 tons in any day. (Basis: Regulation 2-1-301)
 - b. The total cumulative amount of all waste placed in the landfill shall not exceed 13.1 million tons. Exceedance of the cumulative tonnage limit is not a violation of the permit and does not trigger the requirement to obtain a New Source review permit, if the operator can, within 30 days of the date of discovery of the exceedance, provide documentation to the District demonstrating that a higher limit will not result in an increase of any daily or annual emission level. (Basis: Regulation 2-1-301 and 2-1-234)
 - c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 21.8 million cubic yards. (Basis: Regulation 2-1-301)
2. This facility is not subject to Regulation 8, Rule 40 because the landfill does not accept contaminated soil (soil containing more than 50 ppmw of volatile organic compounds, VOCs). The following types of materials may be accepted:
 - a. Materials for which the Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211).
 - b. Materials for which the Permit Holder lacks documentation to prove that the soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might



BAY AREA APPLICABILITY
CALIFORNIA INDUSTRIAL HYGIENE

908 CLAY STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

PERMIT
TO OPERATE

Plant# 2039

Page 4

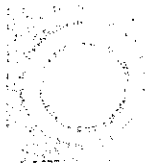
Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law.

*** PERMIT CONDITIONS ***

=====

- contain organic compounds.
- c. Materials which the Permit Holder plans to test in order to determine the VOC contamination level in the soil, provided that the material is sampled within 24 hours of receipt by this site and is handled as if the soil were contaminated until the Permit Holder receives the test results. The Permit Holder shall collect soil samples in accordance with Regulation 8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.
 - i. If the test results indicate that the soil is contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site or has completed treatment. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.
 - ii. If the test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil need not be handled in accordance with Regulation 8, Rule 40 any longer. (basis: Regulation 8-40-301)
- 3. The Permit Holder shall limit the quantity of low VOC soil (soil that contains 50 ppmw or less of VOCs) disposed of per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.
 - a. Record on a daily basis the amount of low VOC soil disposed of in the landfill or used as cover material in the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c. below.
 - b. Record on a daily basis the VOC content of all low VOC soils disposed of or used as cover material. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon.
 - c. Calculate and record on a daily basis the VOC



ALAMEDA COUNTY AIR QUALITY
MANAGEMENT DISTRICT
839 GILES STREET
OAKLAND, CALIFORNIA 94612
(415) 771-6500

PERMIT
TO OPERATE

Plant# 2039

Page 5

Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or state law.

*** PERMIT CONDITIONS ***

=====

Emission Rate (E) using the following equation:

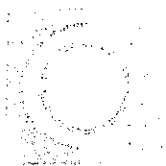
$$E = Q * C / 106$$

(basis: Regulation 8-2-301)

4. Water and/or dust suppressants shall be applied to all unpaved roadways and active soil removal and fill areas associated with this landfill as necessary to prevent visible particulate emissions. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions from vehicle traffic or wind.
(basis: Regulations 2-1-403, 6-301, and 6-305)
5. All collected landfill gas shall be vented to properly operating Landfill Gas Flare (A-2). Raw landfill gas shall not be vented to the atmosphere, except for unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 and for inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303.
(basis: Regulation 8-34-301)
6. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas collection system. Increasing or decreasing the number of wells or collectors, changing the length of collectors, or changing the locations of wells or collectors are all considered to be modifications that are subject to the Authority to Construct requirement.
The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths are as described in detail in Permit Application #16418.

	Current
Total Number of Vertical Wells:	18

(basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, 8-34-305)
7. The landfill gas collection system in Part 6 shall be operated continuously. Wells shall not be shut off, disconnected or removed from operation without written authorization from the APCO, unless the Permit Holder



BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

801 FILLMORE STREET
SAN FRANCISCO, CALIFORNIA 94102
(415) 771-6000

PERMIT
TO OPERATE

Plant# 2039

Exp. 6

Expires DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law

*** PERMIT CONDITIONS ***

=====

complies with all applicable requirements of
Regulation 8, Rule 34, Sections 113, 116, 117, and
118. (basis: Regulation 8-34-301.1)

8. The heat input to the A-2 Landfill Gas Flare shall not exceed 1,080 million BTU per day and shall not exceed 394,200 million BTU per year. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record, on a monthly basis, the maximum daily and total monthly heat input to the flare based on: (a) the landfill gas flow rate recorded pursuant to part 13.h., (b) the average methane concentration in the landfill gas measured in most recent source test, and (c) a high heating value for methane of 1013 BTU per cubic foot at 60 degrees F. (basis: Regulation 2-1-301)
9. The combustion zone temperature of the A-2 Landfill Gas Flare shall be maintained at a minimum of 1,660 degrees F, averaged over any 3-hour period, during all times that landfill gas is being combusted in the flare. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise the minimum combustion zone temperature limit in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria: (1) the minimum combustion zone temperature measured during the most recent complying source test minus 50 degrees F, (2) the minimum combustion zone temperature shall not be less than 1,400 degrees F. (Basis: Regulation 8-34-301.3)
10. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control system's exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the hydrogen sulfide content in collected landfill gas on a quarterly basis using a draeger tube. Compliance with the total sulfur limit is assumed if the hydrogen sulfide content is found to be equal to or less than 1000 ppmv. The landfill gas sample shall be taken from



GAY AND LAM QUALITY
LANDFILL DISTRICT
SPECIAL OFFICE
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

PERMIT
TO
OPERATE

Plant# 2039

Page: 7

Expires: DEC 1, 2007

This document (this and parts) may not be used to violate any District regulation or other law

*** PERMIT CONDITIONS ***

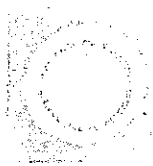
=====

the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and quarterly thereafter. (basis: Regulation 9-1-302)

11. In order to demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412, the Permit Holder shall ensure that a District approved source test is conducted annually on the Landfill Gas Flare (A-2). The annual source test shall determine the following:
 - a. landfill gas flow rate to the flare (dry basis);
 - b. concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), total hydrocarbons (THC), methane (CH₄), and total non-methane organic compounds (NMOC) in the landfill gas;
 - c. stack gas flow rate from the flare (dry basis);
 - d. concentrations (dry basis) of THC, CH₄, NMOC, and O₂ in the flare stack gas;
 - e. the NMOC destruction efficiency achieved by the flare; and
 - f. the average combustion temperature in the flare during the test period.

Annual source tests shall be conducted no earlier than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and to the Source Test Section within 45 days of the test date. (basis: Regulations 2-1-301, 8-34-301.3, and 8-34-412)

12. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by part 11 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 11.b, the landfill gas shall be analyzed for the following compounds:



SAN FRANCISCO AIR QUALITY
MANAGEMENT DISTRICT
1300 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

PERMIT
TO
OPERATE

Plant# 2039

Page

8

Expires

DEC 1, 2007

This document is subject to all the holder to violate any District regulation or other law.

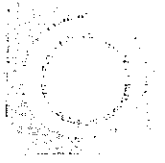
*** PERMIT CONDITIONS ***

=====

Acrylonitrile	Ethylene dibromide
Benzene	Fluorotrichloromethane
Carbon disulfide	Hexane
Carbon tetrachloride	Hydrogen sulfide
Chlorobenzene	Isopropyl alcohol
Chlorodifluoromethane	Methylethylketone
Chloroethane	Methylene chloride
Chloroform	Perchloroethylene
1,1 Dichloroethane	Toluene
1,1 Dichloroethene	1,1,1 Trichloroethane
1,2 Dichloroethane	1,1,2,2 Tetrachloroethane
1,4 Dichlorobenzene	Trichloroethylene
Dichlorodifluoromethane	Vinyl chloride
Dichlorofluoromethane	Xylenes
Ethylbenzene	

All concentrations shall be reported on a dry basis. The test report shall be submitted to the Compliance and Enforcement Division within 45 days of the test date. (basis: Toxic Risk Management Policy and Regulation 8-34-412)

13. In order to demonstrate compliance with the above conditions, the Permit Holder shall maintain the following records in a District approved logbook.
 - a. Record the total amount of municipal solid waste received at S-1 on a daily basis. Summarize the daily waste acceptance records for each calendar month.
 - b. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell. Record the cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.
 - c. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the Permit Holder shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
 - d. Maintain daily records of low VOC soil acceptance rate and emissions, pursuant to part 3.
 - e. Record of the dates, locations, and frequency per



OFFICE OF AIR AND SOLID WASTE
SAN FRANCISCO DISTRICT
808 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 775-3000

PERMIT
TO
OPERATE

Plant# 2039

Page 9

Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law

*** PERMIT CONDITIONS ***

=====

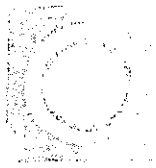
day of all watering activities on unpaved roads or active soil or fill areas. Record the dates, locations, and type of any dust suppressant applications. Record the dates and description of all paved roadway cleaning activities. All records shall be summarized on a monthly basis.

- f. Record the initial operation date for each new landfill gas well and collector.
- g. Maintain an accurate map of the landfill that indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to part 7. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
- h. Record the operating times and the landfill gas flow rate to the A-2 Landfill Gas Flare on a daily basis. Summarize these records on a monthly basis. Calculate and record the heat input to A-2, pursuant to part 8.
- i. Maintain continuous records of the combustion zone temperature for the A-2 Landfill Gas Flare during all hours of operation.
- j. Maintain records of all test dates and test results performed to maintain compliance with parts 10, 11, and 12 above or any applicable rule or regulation.
- k. Maintain records of landfill gas condensate injection throughput and the duration of the injection on a daily basis.

All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (basis: Cumulative Increase, 2-1-301, 2-6-501, 6-301, 6-305, 8-2-301, 8-34-301, 8-34-304, and 8-34-501)

- 14. The Potrero Hills Landfill is subject to the following waste acceptance and waste handling requirements:
(basis: Regulation 2-1-403)

- a. No Class I wastes may be disposed on onsite without



POTRERO HILLS LANDFILL
PERMIT DISTRICT
335 FILL STREET
SAN FRANCISCO, CALIFORNIA 94102
(415) 177-6000

PERMIT
TO
OPERATE

Plant# 2039

Page: 10

Expires: DEC 1, 2007

This document does not permit the holder to violate any District regulation or other law.

*** PERMIT CONDITIONS ***

- =====
- prior BAAQMD approval except for ash from a waste-to-energy plant burning municipal waste, owned and operated by Solano Garbage Company under a BAAQMD permit. All other necessary state, federal, and local permits must be obtained before such disposal is allowed.
- b. At the end of each operating day, the working face and all other exposed refuse shall be covered with a 6" minimum layer of soil such that no refuse is left exposed.
- c. Alternative daily cover including digested, dewatered, municipal sewage sludge (biosolids) and/or wood chips may be used provided that dust and/or odor from the alternative cover are not present on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. If a public nuisance situation occurs, Potrero Hills Landfill shall cease using alternative cover materials until the problem has been identified and corrected to the satisfaction of the APCO.
15. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting period for the first increment of the Regulation 8-34-411 annual report that is submitted subsequent to the issuance of the MFR Permit for this site shall be from December 1, 2002 through August 31, 2003. This first increment report shall be submitted by September 30, 2003. The reporting periods and report submittal due dates for all subsequent increments of the Regulation 8-34-411 report shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site. (basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

CONDITION ID #14098

Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 940,000 gallons in any consecutive 12 month period.



BUREAU OF AIR QUALITY
MANAGEMENT
805 PINE STREET
SAN FRANCISCO, CALIFORNIA 94106
(415) 774-3000

PERMIT
TO OPERATE

Plant# 2039

Page 11

Expires DEC 1, 2007

This document is not to be used by the holder to violate any District regulation or other law.

*** PERMIT CONDITIONS ***

=====

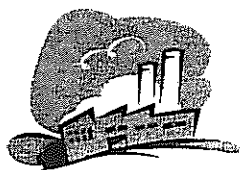
CONDITION ID #18996

Diesel IC Engines for Electrical Power Generation: S-12,
S-13

1. Only low sulfur fuel (<0.05% sulfur by weight) shall be combusted at S-12 and S-13. The maximum sulfur content of the fuel shall be demonstrated by vendor certification. (basis: Regulation 9-1-304)
2. The exhaust of the Diesel IC Engines S-12 and S-13 shall be observed for visible smoke during all periods of operation. If persistent smoke is detected, the operator of the source shall take the necessary corrective action to stop the emissions. (basis: Regulation 6-301, Regulation 2-1-403)

~~~~~ END OF CONDITIONS ~~~~~

## **Source Test Plan**



**Blue Sky Environmental, LLC.**

624 San Gabriel Ave

Albany, California 94706

(510) 525 1261 phone/fax

(510) 508 3469 cell

blueskyenvironmental@yahoo.com

July 16, 2007

Attn.: Ken Kunaniec

Bay Area Air Quality Management District

Compliance and Enforcement Division

939 Ellis Street

San Francisco, CA 94109

**TEST NOTIFICATION &  
SCHEDULE**

**Re: Source Test Plan (STP) for compliance emissions testing of one flare (A-2), located at the Potrero Hills Landfill in Suisun, BAAQMD Plant # 2039.**

Blue Sky Environmental, LLC is pleased to present this Source Test Plan for the above referenced sampling project. Testing will include the following:

The Annual testing requirement summary presented below was extracted from current BAAQMD Permits.

|                                         |                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BAAQMD Source #</b>                  | (A-2)                                                                                                                                                  |
| <b>Source Description</b>               | Flare                                                                                                                                                  |
| <b>Test Schedule Window</b>             | 5/28/07 – 8/27/07                                                                                                                                      |
| <b>Permit Conditions</b>                | 1948-11, 1948-12                                                                                                                                       |
| <b>Required Test Parameters</b>         | THC/CH <sub>4</sub> /NMOC<br>Exhaust Temp.<br>Exhaust Flowrate<br>LFG Flowrate<br>LFG Basic Analysis <sup>1</sup><br>LFG Characterization <sup>1</sup> |
| <b>Parameter &amp; Emissions Limits</b> | NMOC <30 ppm @ 3% O <sub>2</sub> or D.E. 98%<br>LFG-TRS <150 ppm                                                                                       |

Defintions:

| LFG Basic Analysis <sup>1</sup> | LFG Characterization <sup>1</sup> |
|---------------------------------|-----------------------------------|
| CO <sub>2</sub>                 | Acrylonitrile                     |
| N <sub>2</sub>                  | Benzene                           |
| O <sub>2</sub>                  | Carbon Tetrachloride              |
| CH <sub>4</sub>                 | Chlorobenzene                     |
| NMOC                            | Chlorodifluoromethane             |
|                                 | Chloroethane                      |
|                                 | Chloroform                        |
|                                 | 1,1 Dichloroethane                |
|                                 | 1,1 Dichloroethene                |
|                                 | 1,2 Dichloroethane                |
|                                 | 1,4 Dichlorobenzene               |
|                                 | Dichlorodifluoromethane           |
|                                 | Dichlorofluoromethane             |
|                                 | Ethylbenzene                      |
|                                 | Ethylene Dibromide                |
|                                 | Fluorotrichloromethane            |
|                                 | Hexane                            |
|                                 | Isopropyl Alcohol                 |
|                                 | Methyl Ethyl Ketone               |
|                                 | Methylene Chloride                |
|                                 | Perchloroethylene                 |
|                                 | Toluene                           |
|                                 | 1,1,1 Trichlororethane            |
|                                 | 1,1,2,2 Tetrachloroethane         |
|                                 | Trichloroethylene                 |
|                                 | Vinyl Chloride                    |
|                                 | Xylenes                           |
|                                 | Hydrogen Sulfide                  |
|                                 | Carbon Disulfide                  |

- 1) Three 30 minute test runs will be performed for the following as required; THC/CH<sub>4</sub>/NMOC, and O<sub>2</sub> using BAAQMD Methods ST-7 and ST-14 respectively.
- 2) One integrated bag sample of the landfill gas will be collected per source using EPA Method 25C to determine CH<sub>4</sub>, THC and NMOC Destruction/Removal Efficiency (DRE). The samples will also be analyzed for %CH<sub>4</sub>, %CO<sub>2</sub>, %N<sub>2</sub>, %O<sub>2</sub>, BTU and F-factor by ASTM D-3588 and D-1945.
- 3) One sample of the LFG will be collected per Flare source and analyzed for Organic and/or Sulfur Speciation as specified in the Table above.
- 4) Emission Flowrates will be determined by EPA Method 19 calculation and measurement using the Facility fuel flow data, fuel analysis and exhaust oxygen content.

- 5) Facility Fuel Flow and temperature records will be collected during testing and documented in the report.
- 6) Four bound copies, one unbound copy and a pdf copy of the Emission Test Report will be submitted to the CLIENT within 4 weeks of the test program completion. The report will include a test narrative and tables presenting emission results in units specified in the Permit Limits (e.g., concentrations (ppm), emission factors (lbs/Bhp-hr) and emission rates (lbs/hr). All supporting documentation will be included (e.g., strip charts, field data sheets, calibrations, calculations, etc.).

**This test program is scheduled to commence at 7am on August 23<sup>rd</sup>, 2007.** If you have any questions, please call Guy Worthington at 510.525.1261. The facility contact is David Zieger, who may be contacted at 510 262 1669.

Sincerely,



Guy Worthington  
Principal

**BAAQMD**  
**Dave Zieger**

fax 415.749.4922  
ph 510.262.1669  
fax