San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JUN 2 6 2017

Shams Hasan
E & B Natural Resources
3000 James Road
Bakersfield, CA 93308

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-1624
Project Number: S-1162838

Dear Mr. Hasan:

Enclosed for your review and comment is the District's analysis of E & B Natural Resources's application for Emission Reduction Credits (ERCs) resulting from shutdown and removal of four micro turbines, at E&B's Del Monte Gas Plant. The quantity of ERCs proposed for banking is 386 lb-NOx/yr, 578 lb-PM10/yr, 3,492 lb-CO/yr and 177 lb-VOC/yr.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to the issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Dan Klevann of Permit Services at (661) 392-5500.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:dk

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
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Bakersfield, CA 93308-9725
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www.valleyair.org www.healthyairliving.com

EMISSION REDUCTION CREDIT BANKING APPLICATION REVIEW

Facility Name: E & B Natural Resources
Mailing Address: 3000 James Road
Bakersfield, CA 93308

Contact Name: Shams Hasan
Telephone: (661) 616-4664

Facility: S-1624
Permit Numbers: S-1624-179. '-180, '-181, and '-182

ERC Certificate Numbers: S-4774-1, S-4774-2, S-4774-3, S-4774-4
Project Number: S-1162838

Date Received: August 3, 2016
Date Complete: September 6, 2016

Engineer: Dan Klevann
Date: June 1, 2017

Lead Engineer: Rich Karrs, Supervising AQE

I. SUMMARY:

E&B Natural Resources(E&B) is proposing to bank the NOx, VOC, CO, PM10, and CO2e emission reductions associated with the shutdown and removal of four identical 3.27 MMBtu/hr micro turbines(S-1624-179, '-180, '-181, and '-182). The turbines were used to generate electricity for E&B's heavy oil central stationary source oilfield production operation. The following emission reductions have been found to qualify for banking:

		---------- ERC (lb) ----------			
ERC #		Q1	Q2	Q3	Q4
S-4774-2	NOx	91	93	100	102
S-4774-1	VOC	756	603	1,055	1,078
S-4774-3	CO	41	44	47	45
S-4774-4	PM10	135	145	150	148
	CO2E	0	0	0	0

E&B is a facility subject to the California Air Resources Cap and Trade program. The Turbines were shut down after January 1, 2012. Therefore, the CO2e emissions are not bankable per Rule 2301 section 4.5.3.1.

II. APPLICABLE RULES:

Rule 2201 New and Modified Stationary Source Review Rule (February 18, 2016)
Rule 2301 Emission Reduction Credit Banking (January 19, 2012)

III. PROJECT LOCATION:

The four micro turbines are located at E&B's Del Monte Gas Plant at SE Section 32, T27S, R27E.

IV. METHOD OF GENERATING EMISSION REDUCTIONS:

The emission reductions are being generated by removing the micro turbines from service and canceling the permits. See surrendered permits in Appendix F.

Equipment Description:

PTO	Equipment
S-1624-179-1	250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR
S-1624-180-1	250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR
S-1624-181-1	250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR
S-1624-182-1	250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR

V. CALCULATIONS:

A. Assumptions and Emission Factors

The actual emissions will be calculated for each of the calendar quarters in the baseline period. The Historical Actual Emissions (HAE) will be calculated using actual fuel use data and source test results, permitted limits, or District rule limits whichever is less.

PM10 emissions are from natural gas combustion. EPA AP-42 3.1.3 indicates that the PM emissions from natural gas combustion are generally considered less than 1.0 micrometer in diameter. Therefore, the PM2.5 fraction of the PM10 is expected to be 100%.

The current permitted NOx emission factor is 1.5 ppmvd. Source test data is provided in Appendix C.

There are no other control measures noticed for workshop or include in the air quality attainment plan that apply to these units.

B. Baseline Period Determination

Per the following sections of Rule 2201, baseline period is defined as:

3.8.1 two consecutive years of operation immediately prior to submission of the complete application; or

3.8.2 another time period of at least two consecutive years within the five years immediately prior to submission of the complete application as determined by the APCO as more representative of normal operation;

The applicant provided monthly fuel use data for the subject gas turbine engines from May 2010 to April 2016 (see fuel usage records in Appendix B). The baseline period was determined by using a representative 24 month period in the 5 yr period preceding the ERC banking application that is most representative of normal source operation.

To determine normal source operation, the average monthly fuel usage for all four of the turbines combined was calculated (8090 MMscf). To determine the baseline period, the average monthly fuel usage in rolling 24 month rolling periods was calculated between May 2010 and April 2016. The 24 month period that had average monthly fuel usage (8127 MMscf) closest to normal source operation was selected as the baseline period, see Appendix B.

Baseline Period		
Location	Permit Unit	Dates
E &B Natural Resources (S32, T27S, R27E)	S-1624-179	March 2013 – February 2015
	S-1624-180	
	S-1624-181	
	S-1624-182	

C. Historical Actual Emissions (HAE)

The average emissions are determined from fuel use records supplied by the applicant. (see fuel use records in Appendix B, source tests in Appendix C, and calculations in Appendix D):

Assumptions:

The NOx and CO emission factors used in calculating the HAE change during the baseline period based on source tests conducted in that period. We use the source test results as they are indicative of the actual emissions and also below both the permitted emission limit and Rule 4703 limits. The VOC and PM10 emission factors do not change during the baseline periods.

The following table lists the emissions source tests for each of the permit units which covered the baseline period of March 2013 to February 2015 (see Appendix C for actual source tests). The source tests for NOx and CO during the baseline period were all under the permit limits.

The current permitted NOx limit for each of the turbines is 1.5 ppmvd. The NOx and CO source test values were less than the permitted limits as seen in the below tables. Therefore, the historical emissions for NOx and CO will be calculated using source test emission factors during the baseline period.

Unit		S-1624-179		S-1624-180			Permit Limit
Source Test		ppmvd (15% O_2)	Lb/MMBtu	ppmvd (15% O_2)	Lb/MMBtu		ppmvd (15% O2)
8/15/12	NO_x	0.95	0.0035	0.84	0.0031	NOx	1.5
	CO	18.7	0.0419	6.3	0.0141	CO	50
8/14/13	NO_x	1.38	0.0051	1.24	0.0046	NOx	1.5
	CO	14.6	0.0327	8.8	0.0197	CO	50
8/27/14	NO_x	1.2	0.0044	1.18	0.0043	NOx	1.5
	CO	26	0.0583	19	0.0426	CO	50

Unit		S-1624-181		S-1624-182			Permit Limit
Source Test		ppmvd (15% O_2)	Lb/MMBtu	ppmvd (15% O_2)	Lb/MMBtu		ppmvd (15% O2)
8/15/12	NO_x	1.03	0.0038	1.16	0.0043	NOx	1.5
	CO	6.6	0.0148	5.9	0.0132	CO	50
8/14/13	NO_x	1.15	0.0042	1.27	0.0047	NOx	1.5
	CO	21.9	0.0491	16.4	0.0368	CO	50
8/27/14	NO_x	1.17	0.0043	1.24	0.0046	NOx	1.5
	CO	43.1	0.0966	22	0.0493	CO	50

The following example calculation shows how the emissions are calculated:

HAE = [(NOx emissions factor) x (heat input per quarter)]

The emission factor for each month during the baseline period is determined from the source test for that time period. The heat input is based on monthly fuel usage records. The first quarter emissions are comprised of January, February, and March fuel usages multiplied by the associated emission factor for that month. Second quarter uses April, May, and June. Third quarter is July, August, September. Fourth quarter is October, November, December.

Permit S-1624-179, 2nd Quarter 2013:

NOx = [(EF) x (Heat Input)]

$NOx = [(EF_{April} \times Heat\ Input_{April}) + (EF_{May} \times Heat\ Input_{May}) + (EF_{June} \times Heat\ Input_{June})]$

$NOx = [(0.0035\ lb/MMBtu_{April} \times 2{,}463\ MMBtu_{April}) + (0.0035\ lb/MMBtu_{May} \times 2{,}433\ MMBtu_{May}) + (0.0035\ lb/MMBtu_{June} \times 636\ MMBtu_{June})]$

$NOx = [(8.62\ lb_{April}) + (8.52\ lb_{May}) + (2.23\ lb_{June})]$

NOx = 19.37 lb/qtr

The calculated emissions for each quarter during the 24 month baseline period are added together to get a total for each calendar quarter. This total is divided by two to arrive at the average HAE for the unit during each calendar quarter of the baseline period.

Quarterly HAE for S-1624-179 (lb NOx)				
	Q1	Q2	Q3	Q4
2013	8.60	19.37	31.18	34.18
2014	30.67	34.00	30.63	28.39
2015	20.33			
Total	60	53	62	63
HAE (Total/2)	30	27	31	31

From Appendix D the HAE for all of the turbines added together are shown below for each pollutant.

Quarterly HAE (lb NOx)				
Turbine	Q1	Q2	Q3	Q4
S-1624-179	30	27	31	31
S-1624-180	23	23	25	25
S-1624-181	18	23	26	25
S-1624-182	30	30	29	32
Combined HAE	101	103	111	113

Quarterly HAE (lb CO)				
Turbine	Q1	Q2	Q3	Q4
S-1624-179	284	225	325	298
S-1624-180	126	103	178	169
S-1624-181	190	176	422	438
S-1624-182	240	166	247	293
Combined HAE	840	670	1,172	1,198

Quarterly HAE (lb VOC)				
Turbine	Q1	Q2	Q3	Q4
S-1624-179	13	12	14	13
S-1624-180	11	12	12	11
S-1624-181	9	12	13	12
S-1624-182	13	13	13	14
Combined HAE	46	49	52	50

Quarterly HAE (lb PM10)				
Turbine	Q1	Q2	Q3	Q4
S-1624-179	43	40	45	43
S-1624-180	36	40	39	37
S-1624-181	28	38	42	39
S-1624-182	43	43	41	45
Combined HAE	150	161	167	164

D. Actual Emissions Reductions (AER)

Actual Emissions Reductions are calculated as follows:

AER = HAE - PE2

Where:
HAE = Historic Actual Emissions
PE2 = Post-project Potential to Emit

The HAE from the previous section is copied into the tables below for each pollutant. The turbines in this project have been removed therefore the PE2 is zero.

Permit Units S-1624-179, '-180, '-181, '-182:

Quarterly AER (NOx) lbs				
	Q1	Q2	Q3	Q4
Combined HAE	100	103	111	114
PE2	0	0	0	0
AER (NOx)	100	103	111	114

Quarterly AER (CO) lbs				
	Q1	Q2	Q3	Q4
Combined HAE	841	669	1,171	1,197
PE2	0	0	0	0
AER (CO)	841	669	1,171	1,197

Quarterly AER (VOC) lbs				
	Q1	Q2	Q3	Q4
Combined HAE	45	49	51	50
PE2	0	0	0	0
AER (VOC)	45	49	51	50

Quarterly AER (PM10) lbs				
	Q1	Q2	Q3	Q4
Combined HAE	150	161	167	165
PE2	0	0	0	0
AER (PM10)	150	161	167	165

E. Air Quality Improvement Deduction (AQID)

Actual Emission Reductions must be discounted by 10% for Air Quality Improvement.

Sample calculation:

Q1 NOx lb = AER X (0.1)
= (101 lb) X (0.1)
= 10 lb

Calculations are shown in Appendix E and summarized in the table below.

Permit Units S-1624-179, '-180, '-181, '-182:

	AQID (lb)			
	Q1	Q2	Q3	Q4
NOx	10	10	11	11
CO	84	67	117	120
VOC	5	5	5	5
PM10	15	16	17	17

F. Increases in Permitted Emissions

No emission increases are being authorized at this or any other location. Therefore, the Increase in Permitted Emissions for this application is zero.

G. Bankable Emissions Reductions Credits

The bankable emission reduction (ERC) is equal to the AER minus the AQID.

Sample calculation:

Q1 NOx lb = AER - AQID
= 101 lb – 10 lb
= 91 lb

Calculations are shown in Appendix E and summarized in the table below.

ERC S-4774, Permit Units S-1624-179, '-180, '-181, '-182:

		ERC (lb)			
ERC #	pollutant	Q1	Q2	Q3	Q4
S-4774-2	NOx	91	93	100	102
S-4774-3	CO	756	603	1,055	1,078
S-4774-1	VOC	41	44	47	45
S-4774-4	PM10	135	145	150	148

VI. COMPLIANCE:

To be eligible for banking, emission reduction credits (ERC's) must be verified as being real, enforceable, quantifiable, permanent, and surplus pursuant to District Rules 2201 and 2301. In addition, the application must be submitted within the timeline specified in Rule 2301.

A. Real

The AER quantified above are based on actual, historical emissions and were calculated from actual fuel use data and source tests. The gas turbines have been removed. E&B has installed solar generation and will use grid power to make up for the microturbine electricity generation that has been removed. Therefore, the AER is real.

B. Enforceable

The permits associated with the turbines have been surrendered and canceled. E&B would need to apply for an authority to construct to install the turbines again. The turbines would be subject to the current rules and regulations at the time. Therefore, the quantified AER is enforceable.

C. Quantifiable

The actual emission reductions (AER) quantified above are based on actual, historical emissions calculated from fuel use data and source tests. Therefore, the AER is quantifiable.

D. Permanent

E & B has removed the turbines from service and canceled the permits. E&B does not have any other electrical generation equipment that has emissions. Installation of new fuel-fired electric generation equipment would require District permits. Therefore the AER is permanent.

E. Surplus

The emission reductions are not mandated by any law, rule, regulation, agreement, or order of the District, State, or Federal Government. Rule 4703 applies to the gas turbines. The Rule 4703 limits the NOx emissions to 9 ppmv@15% O_2. Permit limits (1.5 ppmvd @15% O2) and source tests performed on the turbines were well below the NOx Rule 4703 limits. The District does not have any plans to open Rule 4703 for amendment at this time. The emissions reductions are surplus of current Rule 4703 requirements and PTO limits.

Federal requirements for turbines are covered in NSPS Subparts GG and KKKK. However, the subparts only apply to turbines over 10 MMBtu/hr heat input. These turbines are less than 10 MMBtu/hr heat input. Therefore, the federal requirements do not apply to these turbines. There are no state rules or requirements for these turbines. There are no other control measures noticed for workshop or include in the air quality attainment plan that apply to these units. Therefore, the AER is surplus.

F. Timeliness

The ERC application was submitted on August 3, 2016. The permits were canceled October 10, 2016. The ERC application was submitted prior to the date that emission reductions occurred. Therefore, the application is timely.

VII. RECOMMENDATION:

After public notice, comments and review, issue ERCs to E&B Natural Resources in the amounts shown below:

ERC S-4774, Permit Units S-1624-179, '-180, '-181, '-182:

		---------- ERC (lb) ----------			
ERC #		Q1	Q2	Q3	Q4
S-4774-2	NOx	91	93	100	102
S-4774-3	CO	756	603	1,055	1,078
S-4774-1	VOC	41	44	47	45
S-4774-4	PM10	135	145	150	148

Appendix A

Draft ERC

San Joaquin Valley
Air Pollution Control District

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Emission Reduction Credit Certificate

S-4774-1

DRAFT

ISSUED TO: E&B NATURAL RESOURCES MGMT

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: HEAVY OIL CENTRAL
CA
SECTION: NE 5 TOWNSHIP: 28S RANGE: 27E

For VOC Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
41 lbs	44 lbs	47 lbs	45 lbs

Method Of Reduction

[ ] Shutdown of Entire Stationary Source
[X] Shutdown of Emissions Units
[ ] Other

Shutdown of four 3.27 MMbtu/hr microturbines.

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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Air Pollution Control District

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Emission Reduction Credit Certificate

DRAFT

S-4774-2

ISSUED TO: E&B NATURAL RESOURCES MGMT

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: HEAVY OIL CENTRAL
CA
SECTION: NE 5 TOWNSHIP: 28S RANGE: 27E

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
91 lbs	93 lbs	100 lbs	102 lbs

Method Of Reduction

[ ] Shutdown of Entire Stationary Source
[X] Shutdown of Emissions Units
[ ] Other

Shutdown of four 3.27 MMbtu/hr microturbines.

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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Emission Reduction Credit Certificate

DRAFT

S-4774-3

ISSUED TO: E&B NATURAL RESOURCES MGMT

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: HEAVY OIL CENTRAL
CA
SECTION: NE 5 TOWNSHIP: 28S RANGE: 27E

For CO Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
756 lbs	603 lbs	1,055 lbs	1,078 lbs

Method Of Reduction

[ ] Shutdown of Entire Stationary Source
[X] Shutdown of Emissions Units
[ ] Other

Shutdown of four 3.27 MMbtu/hr microturbines.

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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Emission Reduction Credit Certificate

DRAFT

S-4774-4

ISSUED TO: E&B NATURAL RESOURCES MGMT

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: HEAVY OIL CENTRAL
CA
SECTION: NE 5 TOWNSHIP: 28S RANGE: 27E

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
135 lbs	145 lbs	150 lbs	148 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
100.0%	100.0%	100.0%	100.0%
135 lbs	145 lbs	150 lbs	148 lbs

Method Of Reduction

[ ] Shutdown of Entire Stationary Source
[X] Shutdown of Emissions Units
[ ] Other

Shutdown of four 3.27 MMbtu/hr microturbines.

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

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Appendix B

Fuel Use Records

Monthly fuel usage for each GTE (MMScf)

	Unit 179	Unit 180	Unit 181	Unit 182	Total all 4 units	
May-10	1,114	1,072	1,097	1,000	4,283	
Jun-10	1,852	2,126	2,305	1,173	7,456	
Jul-10	2,034	1,788	2,471	1,888	8,181	
Aug-10	2,642	1,951	2,251	2,079	8,923	
Sep-10	2,603	2,062	2,475	1,580	8,720	
Oct-10	2,705	2,127	2,545	2,138	9,515	
Nov-10	2,453	2,207	2,048	2,184	8,892	
Dec-10	2,548	1,628	2,502	2,288	8,966	
Jan-11	2,587	1,841	2,516	1,891	8,835	
Feb-11	2,256	2,076	2,183	2,139	8,654	
Mar-11	2,350	2,262	2,130	2,283	9,025	
Apr-11	2,345	2,153	2,275	2,018	8,791	
May-11	2,292	2,175	2,358	2,180	9,005	
Jun-11	2,449	2,114	2,089	2,105	8,757	
Jul-11	4,061	2,071	2,293	2,112	10,537	
Aug-11	2,452	2,134	2,116	2,151	8,853	
Sep-11	2,240	2,071	1,591	2,098	8,000	
Oct-11	2,468	2,306	2,332	2,279	9,385	
Nov-11	2,307	1,256	2,210	2,137	7,910	
Dec-11	2,477	2,320	2,405	2,287	9,489	
Jan-12	1,838	2,401	1,821	2,535	8,595	
Feb-12	1,838	2,401	1,821	2,535	8,595	
Mar-12	1,838	2,401	1,821	2,535	8,595	
Apr-12	1,838	2,401	1,821	2,535	8,595	8,607
May-12	1,838	2,401	1,821	2,535	8,595	8,786
Jun-12	1,838	2,401	1,821	2,535	8,595	8,834
Jul-12	1,838	2,401	1,821	2,535	8,595	8,851
Aug-12	1,838	2,401	1,821	2,535	8,595	8,837
Sep-12	1,838	2,401	1,821	2,535	8,595	8,832
Oct-12	1,838	2,401	1,821	2,535	8,595	8,794
Nov-12	1,838	2,401	1,821	2,535	8,595	8,781
Dec-12	1,838	2,401	1,821	2,535	8,595	8,766
Jan-13	2,196	2,286	2,190	2,329	9,001	8,773
Feb-13	2,167	2,033	2,053	2,135	8,388	8,762
Mar-13	2,458	2,030	2,309	2,154	8,951	8,759
Apr-13	2,463	2,016	2,153	2,138	8,770	8,758
May-13	2,433	2,080	2,155	2,073	8,741	8,747
Jun-13	636	1,721	2,027	2,182	6,566	8,655
Jul-13	2,225	1,899	2,132	1,994	8,250	8,560
Aug-13	2,257	1,964	2,136	2,044	8,401	8,541
Sep-13	2,329	1,867	2,088	2,085	8,369	8,557
Oct-13	2,355	1,735	1,712	2,285	8,087	8,503
Nov-13	2,170	2,282	2,056	2,363	8,871	8,543
Dec-13	2,177	2,321	1,983	2,397	8,878	8,517
Jan-14	2,070	2,309	1,988	2,419	8,786	8,525
Feb-14	1,770	2,020	1,679	1,990	7,459	8,478
Mar-14	2,173	2,185	1,747	2,310	8,415	8,470
Apr-14	2,243	2,108	1,269	2,299	7,919	8,442
May-14	2,308	2,197	1,872	2,297	8,674	8,445
Jun-14	2,115	1,939	2,099	2,111	8,264	8,432
Jul-14	2,404	1,879	2,033	2,030	8,346	8,421
Aug-14	2,376	2,097	2,182	2,217	8,872	8,433
Sep-14	2,181	2,000	2,043	2,141	8,365	8,423
Oct-14	2,189	2,156	2,086	2,223	8,654	8,426
Nov-14	2,185	2,191	2,086	2,275	8,737	8,432
Dec-14	2,080	645	1,963	2,149	6,837	8,358
Jan-15	2,313	223	835	2,233	5,604	8,217
Feb-15	2,307	2,023	0	1,900	6,230	8,127 <--24 month average closest to normal source operation
Mar-15	2,497	2,291	0	2,120	6,908	8,042
Apr-15	2,212	2,135	0	1,934	6,281	7,938
May-15	2,346	2,277	0	2,113	6,736	7,855
Jun-15	1,974	1,805	828	1,899	6,506	7,852
Jul-15	1,477	1,026	1,556	1,031	5,090	7,720
Aug-15	2,119	2,283	1,786	1,898	8,086	7,707
Sep-15	1,920	2,254	1,392	1,848	7,414	7,667
Oct-15	2,139	1,829	2,208	1,410	7,586	7,647
Nov-15	2,085	2,381	2,257	0	6,723	7,557
Dec-15	2,285	2,552	2,388	0	7,225	7,488
Jan-16	2,378	2,668	2,510	0	7,556	7,437
Feb-16	2,285	2,636	1,363	0	6,284	7,388
Mar-16	2,389	2,978	0	2,428	7,795	7,362
Apr-16	608	2,257	326	1,318	4,509	7,220
	Unit 179	Unit 180	Unit 181	Unit 182	Total all 4 units	24-mo avg

Normal Source Operation monthly usage = 8,090

Appendix C
Source Test data

Source Tests for Turbines

Test Date	Unit 179	Unit 180	Unit 181	Unit 182	
08/15/2012	0.95	0.84	1.03	1.16	ppm NOx
	18.7	6.3	6.6	5.9	ppm CO
08/14/2013	1.38	1.24	1.15	1.27	ppm NOx
	14.6	8.8	21.9	16.4	ppm CO
08/27/2014	1.2	1.18	1.17	1.24	ppm NOx
	26	19	43.1	22	ppm CO

Permitted Unit Source Test History

E&B NATURAL RESOURCES MGMT
Permit #: 179

Permit #	Test Date	Unit ID	Fail	Ann.	Initial	Retest	CGA	RATA	STAT /RATA	NOV	Area Inspector	Test Company	Project #
S-1624-179-1	09/10/2015	TURBINE 1		X							LONGC	REM	REM-1624-091015
			Result		Limit	%O2	Unit				Equipment		
			19.90000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	.00		00	15	TURBINE 1						
			1.320000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 1						
	08/27/2014	TURBINE 1		X							WILLIAMC	REM	REM-1626-082714
			Result		Limit	%O2	Unit				Equipment		
			26.00000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 1						
			1.200000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 1						
	08/14/2013	TURBINE 1		X							TURNIPSJ	REM	REM-1624-081413
			Result		Limit	%O2	Unit				Equipment		
			14.60000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 1						
			1.380000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 1						
	08/15/2012	TURBINE 1		X							TURNIPSJ	REM	REM-1624-081512
			Result		Limit	%O2	Unit				Equipment		
			18.70000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 1						
			0.950000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 1						
	09/22/2011	TURBINE 1				X					TURNIPSJ	REM	REM-1624-081911
			Result		Limit	%O2	Unit				Equipment		
			10.10000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 1						
			1.230000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 1						

SJVUAPCD
SOUTHERN

Permitted Unit Source Test History

E&B NATURAL RESOURCES MGMT
Permit #: 180

12/5/16
12:23 pm

Permit #	Test Date	Unit ID	Fail	Ann.	Initial	Retest	CGA	RATA	STAT /RATA	NOV	Area Inspector	Test Company	Project #
S-1624-180-1	09/10/2015	TURBINE 2		X							LONGC	REM	REM-1624-091015
			Result		Limit	%O2	Unit				Equipment		
			22.90000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 2						
			1.470000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 2						
	08/27/2014	TURBINE 2		X							WILLIAMC	REM	REM-1626-082714
			Result		Limit	%O2	Unit				Equipment		
			19.00000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 2						
			1.180000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 2						
	08/14/2013	TURBINE 2		X							TURNIPSJ	REM	REM-1624-081413
			Result		Limit	%O2	Unit				Equipment		
			8.800000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	0		00	15	TURBINE 2						
			1.240000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 2						
	08/15/2012	TURBINE 2		X							TURNIPSJ	REM	REM-1624-081512
			Result		Limit	%O2	Unit				Equipment		
			6.300000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	0		00	15	TURBINE 2						
			0.840000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 2						
	09/13/2011	TURBINE 2		X							TURNIPSJ	REM	REM-1624-081911
			Result		Limit	%O2	Unit				Equipment		
			15.10000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 2						
			1.030000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 2						

SJVUAPCD
SOUTHERN

Permitted Unit Source Test History

E&B NATURAL RESOURCES MGMT
Permit #: 181

12/5/16
12:24 pm

Permit #	Test Date	Unit ID	Fail	Ann.	Initial	Retest	CGA	RATA	STAT /RATA	NOV	Area Inspector	Test Company	Project #
S-1624-181-1	09/11/2015	TURBINE 3		X							LONGC	REM	REM-1624-091015
			Result		Limit	%O2	Unit				Equipment		
			39.30000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 3						
			1.450000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 3						
	08/27/2014	TURBINE 3		X							WILLIAMC	REM	REM-1626-082714
			Result		Limit	%O2	Unit				Equipment		
			43.10000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 3						
			1.170000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 3						
	08/14/2013	TURBINE 3		X							TURNIPSJ	REM	REM-1624-081413
			Result		Limit	%O2	Unit				Equipment		
			21.90000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 3						
			1.150000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 3						
	08/15/2012	TURBINE 3		X							TURNIPSJ	REM	REM-1624-081512
			Result		Limit	%O2	Unit				Equipment		
			6.600000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	0		00	15	TURBINE 3						
			1.030000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 3						
	09/22/2011	TURBINE 3		X							TURNIPSJ	REM	REM-1624-081911
			Result		Limit	%O2	Unit				Equipment		
			3.900000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	0		00	15	TURBINE 3						
			1.410000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 3						

SJVUAPCD
SOUTHERN

Permitted Unit Source Test History

E&B NATURAL RESOURCES MGMT
Permit #: 182

12/5/16
12:24 pm

Permit #	Test Date	Unit ID	Fail	Ann.	Initial	Retest	CGA	RATA	STAT /RATA	NOV	Area Inspector	Test Company	Project #
S-1624-182-1	09/11/2015	TURBINE 4		X							LONGC	REM	REM-1624-091015
			Result		Limit	%O2	Unit				Equipment		
			21.40000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 4						
			1.270000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 4						
	08/28/2014	TURBINE 4 RETEST				X					WILLIAMC	REM	
			Result		Limit	%O2	Unit				Equipment		
			22.00000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 4						
	08/27/2014	TURBINE 4	X	X						5013 258	WILLIAMC	REM	REM-1626-082714
			Result		Limit	%O2	Unit				Equipment		
			78.70000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 4						
			1.240000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 4						
	08/14/2013	TURBINE 4		X							TURNIPSJ	REM	REM-1624-081413
			Result		Limit	%O2	Unit				Equipment		
			16.40000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	00		00	15	TURBINE 4						
			1.270000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 4						
	08/15/2012	TURBINE 4		X							TURNIPSJ	REM	REM-1624-081512
			Result		Limit	%O2	Unit				Equipment		
			5.900000		50.00000						250 KW GAS FIRED MICRO TURBINE W/ DLN		
		CO (ppm):	0		00	15	TURBINE 4						
			1.160000		1.500000								
		NOx (ppm):	0		0	15	TURBINE 4						
	09/14/2011	TURBINE 4		X							TURNIPSJ	REM	REM-1624-081911

Appendix D
Calculations

Emissions from Permit S-1624-179

	Unit 179 MMBtu	NOx Emission Factor (lb/MMBtu)	lb/month	lb NOx 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,458	0.0035	8.60	8.60			
Apr-13	2,463	0.0035	8.62		8.62		
May-13	2,433	0.0035	8.52		8.52		
Jun-13	636	0.0035	2.23		2.23		
Jul-13	2,225	0.0035	7.79			7.79	
Aug-13	2,257	0.0051	11.51			11.51	
Sep-13	2,329	0.0051	11.88			11.88	
Oct-13	2,355	0.0051	12.01				12.01
Nov-13	2,170	0.0051	11.07				11.07
Dec-13	2,177	0.0051	11.10				11.10
Jan-14	2,070	0.0051	10.56	10.56			
Feb-14	1,770	0.0051	9.03	9.03			
Mar-14	2,173	0.0051	11.08	11.08			
Apr-14	2,243	0.0051	11.44		11.44		
May-14	2,308	0.0051	11.77		11.77		
Jun-14	2,115	0.0051	10.79		10.79		
Jul-14	2,404	0.0044	10.58			10.58	
Aug-14	2,376	0.0044	10.45			10.45	
Sep-14	2,181	0.0044	9.60			9.60	
Oct-14	2,189	0.0044	9.63				9.63
Nov-14	2,185	0.0044	9.61				9.61
Dec-14	2,080	0.0044	9.15				9.15
Jan-15	2,313	0.0044	10.18	10.18			
Feb-15	2,307	0.0044	10.15	10.15			

Total	lb/qtr	60	53	62	63
Historical actual	lb/qtr	30	27	31	31

	Unit 179 MMBtu	CO Emission Factor (lb/MMBtu)	lb/month	lb CO 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,458	0.0419	103	102.99			
Apr-13	2,463	0.0419	103		103.20		
May-13	2,433	0.0419	102		101.94		
Jun-13	636	0.0419	27		26.65		
Jul-13	2,225	0.0419	93			93.23	
Aug-13	2,257	0.0327	74			73.80	
Sep-13	2,329	0.0327	76			76.16	
Oct-13	2,355	0.0327	77				77.01
Nov-13	2,170	0.0327	71				70.96
Dec-13	2,177	0.0327	71				71.19
Jan-14	2,070	0.0327	68	67.69			
Feb-14	1,770	0.0327	58	57.88			
Mar-14	2,173	0.0327	71	71.06			
Apr-14	2,243	0.0327	73		73.35		
May-14	2,308	0.0327	75		75.47		
Jun-14	2,115	0.0327	69		69.16		
Jul-14	2,404	0.0583	140			140.15	
Aug-14	2,376	0.0583	139			138.52	
Sep-14	2,181	0.0583	127			127.15	
Oct-14	2,189	0.0583	128				127.62
Nov-14	2,185	0.0583	127				127.39
Dec-14	2,080	0.0583	121				121.26
Jan-15	2,313	0.0583	135	134.85			
Feb-15	2,307	0.0583	134	134.50			

Total	lb/qtr	569	450	649	595
Historical actual	lb/qtr	284	225	325	298

	Unit 179 MMBtu	VOC Emission Factor (lb/MMBtu)	lb/month	lb VOC 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,458	0.002	5	4.92			
Apr-13	2,463	0.002	5		4.93		
May-13	2,433	0.002	5		4.87		
Jun-13	636	0.002	1		1.27		
Jul-13	2,225	0.002	4			4.45	
Aug-13	2,257	0.002	5			4.51	
Sep-13	2,329	0.002	5			4.66	
Oct-13	2,355	0.002	5				4.71
Nov-13	2,170	0.002	4				4.34
Dec-13	2,177	0.002	4				4.35
Jan-14	2,070	0.002	4	4.14			
Feb-14	1,770	0.002	4	3.54			
Mar-14	2,173	0.002	4	4.35			
Apr-14	2,243	0.002	4		4.49		
May-14	2,308	0.002	5		4.62		
Jun-14	2,115	0.002	4		4.23		
Jul-14	2,404	0.002	5			4.81	
Aug-14	2,376	0.002	5			4.75	
Sep-14	2,181	0.002	4			4.36	
Oct-14	2,189	0.002	4				4.38
Nov-14	2,185	0.002	4				4.37
Dec-14	2,080	0.002	4				4.16
Jan-15	2,313	0.002	5	4.63			
Feb-15	2,307	0.002	5	4.61			

Total	lb/qtr	26	24	28	26
Historical actual	lb/qtr	13	12	14	13

	Unit 179 MMBtu	PM10 Emission Factor (lb/MMBtu)	lb/month	lb PM10 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,458	0.0066	16	16.22			
Apr-13	2,463	0.0066	16		16.26		
May-13	2,433	0.0066	16		16.06		
Jun-13	636	0.0066	4		4.20		
Jul-13	2,225	0.0066	15			14.69	
Aug-13	2,257	0.0066	15			14.90	
Sep-13	2,329	0.0066	15			15.37	
Oct-13	2,355	0.0066	16				15.54
Nov-13	2,170	0.0066	14				14.32
Dec-13	2,177	0.0066	14				14.37
Jan-14	2,070	0.0066	14	13.66			
Feb-14	1,770	0.0066	12	11.68			
Mar-14	2,173	0.0066	14	14.34			
Apr-14	2,243	0.0066	15		14.80		
May-14	2,308	0.0066	15		15.23		
Jun-14	2,115	0.0066	14		13.96		
Jul-14	2,404	0.0066	16			15.87	
Aug-14	2,376	0.0066	16			15.68	
Sep-14	2,181	0.0066	14			14.39	
Oct-14	2,189	0.0066	14				14.45
Nov-14	2,185	0.0066	14				14.42
Dec-14	2,080	0.0066	14				13.73
Jan-15	2,313	0.0066	15	15.27			
Feb-15	2,307	0.0066	15	15.23			

Total	lb/qtr	86	81	91	87
Historical actual	lb/qtr	43	40	45	43

Emissions from Permit S-1624-180

	Unit 180 MMBtu	NOx Emission Factor (lb/MMBtu)	lb/month	lb NOx 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,030	0.0031	6.29	6.29			
Apr-13	2,016	0.0031	6.25		6.25		
May-13	2,080	0.0031	6.45		6.45		
Jun-13	1,721	0.0031	5.34		5.34		
Jul-13	1,899	0.0031	5.89			5.89	
Aug-13	1,964	0.0046	9.03			9.03	
Sep-13	1,867	0.0046	8.59			8.59	
Oct-13	1,735	0.0046	7.98				7.98
Nov-13	2,282	0.0046	10.50				10.50
Dec-13	2,321	0.0046	10.68				10.68
Jan-14	2,309	0.0046	10.62	10.62			
Feb-14	2,020	0.0046	9.29	9.29			
Mar-14	2,185	0.0046	10.05	10.05			
Apr-14	2,108	0.0046	9.70		9.70		
May-14	2,197	0.0046	10.11		10.11		
Jun-14	1,939	0.0046	8.92		8.92		
Jul-14	1,879	0.0043	8.08			8.08	
Aug-14	2,097	0.0043	9.02			9.02	
Sep-14	2,000	0.0043	8.60			8.60	
Oct-14	2,156	0.0043	9.27				9.27
Nov-14	2,191	0.0043	9.42				9.42
Dec-14	645	0.0043	2.77				2.77
Jan-15	223	0.0043	0.96	0.96			
Feb-15	2,023	0.0043	8.70	8.70			

Total	lb/qtr	46	47	49	51
Historical actual	lb/qtr	23	23	25	25

	Unit 180 MMBtu	CO Emission Factor (lb/MMBtu)	lb/month	lb CO 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,030	0.0141	29	28.62			
Apr-13	2,016	0.0141	28		28.43		
May-13	2,080	0.0141	29		29.33		
Jun-13	1,721	0.0141	24		24.27		
Jul-13	1,899	0.0141	27			26.78	
Aug-13	1,964	0.0197	39			38.69	
Sep-13	1,867	0.0197	37			36.78	
Oct-13	1,735	0.0197	34				34.18
Nov-13	2,282	0.0197	45				44.96
Dec-13	2,321	0.0197	46				45.72
Jan-14	2,309	0.0197	45	45.49			
Feb-14	2,020	0.0197	40	39.79			
Mar-14	2,185	0.0197	43	43.04			
Apr-14	2,108	0.0197	42		41.53		
May-14	2,197	0.0197	43		43.28		
Jun-14	1,939	0.0197	38		38.20		
Jul-14	1,879	0.0426	80			80.05	
Aug-14	2,097	0.0426	89			89.33	
Sep-14	2,000	0.0426	85			85.20	
Oct-14	2,156	0.0426	92				91.85
Nov-14	2,191	0.0426	93				93.34
Dec-14	645	0.0426	27				27.48
Jan-15	223	0.0426	9	9.50			
Feb-15	2,023	0.0426	86	86.18			

Total	lb/qtr	253	205	357	338
Historical actual	lb/qtr	126	103	178	169

	Unit 180 MMBtu	VOC Emission Factor (lb/MMBtu)	lb/month	lb VOC 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,030	0.002	4	4.06			
Apr-13	2,016	0.002	4		4.03		
May-13	2,080	0.002	4		4.16		
Jun-13	1,721	0.002	3		3.44		
Jul-13	1,899	0.002	4			3.80	
Aug-13	1,964	0.002	4			3.93	
Sep-13	1,867	0.002	4			3.73	
Oct-13	1,735	0.002	3				3.47
Nov-13	2,282	0.002	5				4.56
Dec-13	2,321	0.002	5				4.64
Jan-14	2,309	0.002	5	4.62			
Feb-14	2,020	0.002	4	4.04			
Mar-14	2,185	0.002	4	4.37			
Apr-14	2,108	0.002	4		4.22		
May-14	2,197	0.002	4		4.39		
Jun-14	1,939	0.002	4		3.88		
Jul-14	1,879	0.002	4			3.76	
Aug-14	2,097	0.002	4			4.19	
Sep-14	2,000	0.002	4			4.00	
Oct-14	2,156	0.002	4				4.31
Nov-14	2,191	0.002	4				4.38
Dec-14	645	0.002	1				1.29
Jan-15	223	0.002	0	0.45			
Feb-15	2,023	0.002	4	4.05			

Total	lb/qtr	22	24	23	23
Historical actual	lb/qtr	11	12	12	11

	Unit 180 MMBtu	PM10 Emission Factor (lb/MMBtu)	lb/month	lb PM10 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,030	0.0066	13	13.40			
Apr-13	2,016	0.0066	13		13.31		
May-13	2,080	0.0066	14		13.73		
Jun-13	1,721	0.0066	11		11.36		
Jul-13	1,899	0.0066	13			12.53	
Aug-13	1,964	0.0066	13			12.96	
Sep-13	1,867	0.0066	12			12.32	
Oct-13	1,735	0.0066	11				11.45
Nov-13	2,282	0.0066	15				15.06
Dec-13	2,321	0.0066	15				15.32
Jan-14	2,309	0.0066	15	15.24			
Feb-14	2,020	0.0066	13	13.33			
Mar-14	2,185	0.0066	14	14.42			
Apr-14	2,108	0.0066	14		13.91		
May-14	2,197	0.0066	15		14.50		
Jun-14	1,939	0.0066	13		12.80		
Jul-14	1,879	0.0066	12			12.40	
Aug-14	2,097	0.0066	14			13.84	
Sep-14	2,000	0.0066	13			13.20	
Oct-14	2,156	0.0066	14				14.23
Nov-14	2,191	0.0066	14				14.46
Dec-14	645	0.0066	4				4.26
Jan-15	223	0.0066	1	1.47			
Feb-15	2,023	0.0066	13	13.35			

Total	lb/qtr	71	80	77	75
Historical actual	lb/qtr	36	40	39	37

Emissions from Permit S-1624-181

	Unit 181 MMBtu	NOx Emission Factor (lb/MMBtu)	lb/month	lb NOx 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,309	0.0038	8.77	8.77			
Apr-13	2,153	0.0038	8.18		8.18		
May-13	2,155	0.0038	8.19		8.19		
Jun-13	2,027	0.0038	7.70		7.70		
Jul-13	2,132	0.0038	8.10			8.10	
Aug-13	2,136	0.0042	8.97			8.97	
Sep-13	2,088	0.0042	8.77			8.77	
Oct-13	1,712	0.0042	7.19				7.19
Nov-13	2,056	0.0042	8.64				8.64
Dec-13	1,983	0.0042	8.33				8.33
Jan-14	1,988	0.0042	8.35	8.35			
Feb-14	1,679	0.0042	7.05	7.05			
Mar-14	1,747	0.0042	7.34	7.34			
Apr-14	1,269	0.0042	5.33		5.33		
May-14	1,872	0.0042	7.86		7.86		
Jun-14	2,099	0.0042	8.82		8.82		
Jul-14	2,033	0.0043	8.74			8.74	
Aug-14	2,182	0.0043	9.38			9.38	
Sep-14	2,043	0.0043	8.78			8.78	
Oct-14	2,086	0.0043	8.97				8.97
Nov-14	2,086	0.0043	8.97				8.97
Dec-14	1,963	0.0043	8.44				8.44
Jan-15	835	0.0043	3.59	3.59			
Feb-15	0	0.0043	0.00	0.00			

Total	lb/qtr	35	46	53	51
Historical actual	lb/qtr	18	23	26	25

	Unit 181 MMBtu	CO Emission Factor (lb/MMBtu)	lb/month	lb CO 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,309	0.0148	34	34.17			
Apr-13	2,153	0.0148	32		31.86		
May-13	2,155	0.0148	32		31.89		
Jun-13	2,027	0.0148	30		30.00		
Jul-13	2,132	0.0148	32			31.55	
Aug-13	2,136	0.0491	105			104.88	
Sep-13	2,088	0.0491	103			102.52	
Oct-13	1,712	0.0491	84				84.06
Nov-13	2,056	0.0491	101				100.95
Dec-13	1,983	0.0491	97				97.37
Jan-14	1,988	0.0491	98	97.61			
Feb-14	1,679	0.0491	82	82.44			
Mar-14	1,747	0.0491	86	85.78			
Apr-14	1,269	0.0491	62		62.31		
May-14	1,872	0.0491	92		91.92		
Jun-14	2,099	0.0491	103		103.06		
Jul-14	2,033	0.0966	196			196.39	
Aug-14	2,182	0.0966	211			210.78	
Sep-14	2,043	0.0966	197			197.35	
Oct-14	2,086	0.0966	202				201.51
Nov-14	2,086	0.0966	202				201.51
Dec-14	1,963	0.0966	190				189.63
Jan-15	835	0.0966	81	80.66			
Feb-15	0	0.0966	0	0.00			

Total	lb/qtr	381	351	843	875
Historical actual	lb/qtr	190	176	422	438

	Unit 181 MMBtu	VOC Emission Factor (lb/MMBtu)	lb/month	lb VOC 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,309	0.002	5	4.62			
Apr-13	2,153	0.002	4		4.31		
May-13	2,155	0.002	4		4.31		
Jun-13	2,027	0.002	4		4.05		
Jul-13	2,132	0.002	4			4.26	
Aug-13	2,136	0.002	4			4.27	
Sep-13	2,088	0.002	4			4.18	
Oct-13	1,712	0.002	3				3.42
Nov-13	2,056	0.002	4				4.11
Dec-13	1,983	0.002	4				3.97
Jan-14	1,988	0.002	4	3.98			
Feb-14	1,679	0.002	3	3.36			
Mar-14	1,747	0.002	3	3.49			
Apr-14	1,269	0.002	3		2.54		
May-14	1,872	0.002	4		3.74		
Jun-14	2,099	0.002	4		4.20		
Jul-14	2,033	0.002	4			4.07	
Aug-14	2,182	0.002	4			4.36	
Sep-14	2,043	0.002	4			4.09	
Oct-14	2,086	0.002	4				4.17
Nov-14	2,086	0.002	4				4.17
Dec-14	1,963	0.002	4				3.93
Jan-15	835	0.002	2	1.67			
Feb-15	0	0.002	0	0.00			

Total	lb/qtr	17	23	25	24
Historical actual	lb/qtr	9	12	13	12

	Unit 181 MMBtu	PM10 Emission Factor (lb/MMBtu)	lb/month	lb PM10 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,309	0.0066	15	15.24			
Apr-13	2,153	0.0066	14		14.21		
May-13	2,155	0.0066	14		14.22		
Jun-13	2,027	0.0066	13		13.38		
Jul-13	2,132	0.0066	14			14.07	
Aug-13	2,136	0.0066	14			14.10	
Sep-13	2,088	0.0066	14			13.78	
Oct-13	1,712	0.0066	11				11.30
Nov-13	2,056	0.0066	14				13.57
Dec-13	1,983	0.0066	13				13.09
Jan-14	1,988	0.0066	13	13.12			
Feb-14	1,679	0.0066	11	11.08			
Mar-14	1,747	0.0066	12	11.53			
Apr-14	1,269	0.0066	8		8.38		
May-14	1,872	0.0066	12		12.36		
Jun-14	2,099	0.0066	14		13.85		
Jul-14	2,033	0.0066	13			13.42	
Aug-14	2,182	0.0066	14			14.40	
Sep-14	2,043	0.0066	13			13.48	
Oct-14	2,086	0.0066	14				13.77
Nov-14	2,086	0.0066	14				13.77
Dec-14	1,963	0.0066	13				12.96
Jan-15	835	0.0066	6	5.51			
Feb-15	0	0.0066	0	0.00			

Total	lb/qtr	56	76	83	78
Historical actual	lb/qtr	28	38	42	39

Emissions from Permit S-1624-182

	Unit 182 MMBtu	NOx Emission Factor (lb/MMBtu)	lb/month	lb NOx 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,154	0.0043	9.26	9.2622			
Apr-13	2,138	0.0043	9.19		9.1934		
May-13	2,073	0.0043	8.91		8.9139		
Jun-13	2,182	0.0043	9.38		9.3826		
Jul-13	1,994	0.0043	8.57			8.5742	
Aug-13	2,044	0.0047	9.61			9.6068	
Sep-13	2,085	0.0047	9.80			9.7995	
Oct-13	2,285	0.0047	10.74				10.7395
Nov-13	2,363	0.0047	11.11				11.1061
Dec-13	2,397	0.0047	11.27				11.2659
Jan-14	2,419	0.0047	11.37	11.3693			
Feb-14	1,990	0.0047	9.35	9.3530			
Mar-14	2,310	0.0047	10.86	10.8570			
Apr-14	2,299	0.0047	10.81		10.8053		
May-14	2,297	0.0047	10.80		10.7959		
Jun-14	2,111	0.0047	9.92		9.9217		
Jul-14	2,030	0.0046	9.34			9.3380	
Aug-14	2,217	0.0046	10.20			10.1982	
Sep-14	2,141	0.0046	9.85			9.8486	
Oct-14	2,223	0.0046	10.23				10.2258
Nov-14	2,275	0.0046	10.47				10.4650
Dec-14	2,149	0.0046	9.89				9.8854
Jan-15	2,233	0.0046	10.27	10.2718			
Feb-15	1,900	0.0046	8.74	8.7400			

Total	lb/qtr	60	59	57	64
Historical actual	lb/qtr	30	30	29	32

	Unit 182 MMBtu	CO Emission Factor (lb/MMBtu)	lb/month	lb CO 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,154	0.0132	28	28.4328			
Apr-13	2,138	0.0132	28		28.2216		
May-13	2,073	0.0132	27		27.3636		
Jun-13	2,182	0.0132	29		28.8024		
Jul-13	1,994	0.0132	26			26.3208	
Aug-13	2,044	0.0368	75			75.2192	
Sep-13	2,085	0.0368	77			76.7280	
Oct-13	2,285	0.0368	84				84.0880
Nov-13	2,363	0.0368	87				86.9584
Dec-13	2,397	0.0368	88				88.2096
Jan-14	2,419	0.0368	89	89.0192			
Feb-14	1,990	0.0368	73	73.2320			
Mar-14	2,310	0.0368	85	85.0080			
Apr-14	2,299	0.0368	85		84.6032		
May-14	2,297	0.0368	85		84.5296		
Jun-14	2,111	0.0368	78		77.6848		
Jul-14	2,030	0.0493	100			100.0790	
Aug-14	2,217	0.0493	109			109.2981	
Sep-14	2,141	0.0493	106			105.5513	
Oct-14	2,223	0.0493	110				109.5939
Nov-14	2,275	0.0493	112				112.1575
Dec-14	2,149	0.0493	106				105.9457
Jan-15	2,233	0.0493	110	110.0869			
Feb-15	1,900	0.0493	94	93.6700			

Total	lb/qtr	479	331	493	587
Historical actual	lb/qtr	240	166	247	293

	Unit 182 MMBtu	VOC Emission Factor (lb/MMBtu)	lb/month	lb VOC 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,154	0.002	4	4.3080			
Apr-13	2,138	0.002	4		4.2760		
May-13	2,073	0.002	4		4.1460		
Jun-13	2,182	0.002	4		4.3640		
Jul-13	1,994	0.002	4			3.9880	
Aug-13	2,044	0.002	4			4.0880	
Sep-13	2,085	0.002	4			4.1700	
Oct-13	2,285	0.002	5				4.5700
Nov-13	2,363	0.002	5				4.7260
Dec-13	2,397	0.002	5				4.7940
Jan-14	2,419	0.002	5	4.8380			
Feb-14	1,990	0.002	4	3.9800			
Mar-14	2,310	0.002	5	4.6200			
Apr-14	2,299	0.002	5		4.5980		
May-14	2,297	0.002	5		4.5940		
Jun-14	2,111	0.002	4		4.2220		
Jul-14	2,030	0.002	4			4.0600	
Aug-14	2,217	0.002	4			4.4340	
Sep-14	2,141	0.002	4			4.2820	
Oct-14	2,223	0.002	4				4.4460
Nov-14	2,275	0.002	5				4.5500
Dec-14	2,149	0.002	4				4.2980
Jan-15	2,233	0.002	4	4.4660			
Feb-15	1,900	0.002	4	3.8000			

Total	lb/qtr	26	26	25	27
Historical actual	lb/qtr	13	13	13	14

	Unit 182 MMBtu	PM10 Emission Factor (lb/MMBtu)	lb/month	lb PM10 1st qtr	2nd qtr	3rd qtr	4th qtr
Mar-13	2,154	0.0066	14	14.2164			
Apr-13	2,138	0.0066	14		14.1108		
May-13	2,073	0.0066	14		13.6818		
Jun-13	2,182	0.0066	14		14.4012		
Jul-13	1,994	0.0066	13			13.1604	
Aug-13	2,044	0.0066	13			13.4904	
Sep-13	2,085	0.0066	14			13.7610	
Oct-13	2,285	0.0066	15				15.0810
Nov-13	2,363	0.0066	16				15.5958
Dec-13	2,397	0.0066	16				15.8202
Jan-14	2,419	0.0066	16	15.9654			
Feb-14	1,990	0.0066	13	13.1340			
Mar-14	2,310	0.0066	15	15.2460			
Apr-14	2,299	0.0066	15		15.1734		
May-14	2,297	0.0066	15		15.1602		
Jun-14	2,111	0.0066	14		13.9326		
Jul-14	2,030	0.0066	13			13.3980	
Aug-14	2,217	0.0066	15			14.6322	
Sep-14	2,141	0.0066	14			14.1306	
Oct-14	2,223	0.0066	15				14.6718
Nov-14	2,275	0.0066	15				15.0150
Dec-14	2,149	0.0066	14				14.1834
Jan-15	2,233	0.0066	15	14.7378			
Feb-15	1,900	0.0066	13	12.5400			

Total	lb/qtr	86	86	83	90
Historical actual	lb/qtr	43	43	41	45

Appendix E
ERC Calculations

	total from all 4 turbines	
1st qtr HAE	101	lb NOx
1st qtr AER	101	lb NOx
1st qtr AQID	10	lb NOx
1st qtr bankable	91	lb NOx
2nd qtr HAE	103	lb NOx
2nd qtr AER	103	lb NOx
2nd qtr AQID	10	lb NOx
2nd qtr bankable	93	lb NOx
3rd qtr HAE	111	lb NOx
3rd qtr AER	111	lb NOx
3rd qtr AQID	11	lb NOx
3rd qtr bankable	100	lb NOx
4th qtr HAE	113	lb NOx
4th qtr AER	113	lb NOx
4th qtr AQID	11	lb NOx
4th qtr bankable	102	lb NOx

	total from all 4 turbines	
1st qtr HAE	840	lb CO
1st qtr AER	840	lb CO
1st qtr AQID	84	lb CO
1st qtr bankable	756	lb CO
2nd qtr HAE	670	lb CO
2nd qtr AER	670	lb CO
2nd qtr AQID	67	lb CO
2nd qtr bankable	603	lb CO
3rd qtr HAE	1,172	lb CO
3rd qtr AER	1,172	lb CO
3rd qtr AQID	117	lb CO
3rd qtr bankable	1,055	lb CO
4th qtr HAE	1,198	lb CO
4th qtr AER	1,198	lb CO
4th qtr AQID	120	lb CO
4th qtr bankable	1,078	lb CO

	total from all 4 turbines	
1st qtr HAE	46	lb VOC
1st qtr AER	46	lb VOC
1st qtr AQID	5	lb VOC
1st qtr bankable	41	lb VOC
2nd qtr HAE	49	lb VOC
2nd qtr AER	49	lb VOC
2nd qtr AQID	5	lb VOC
2nd qtr bankable	44	lb VOC
3rd qtr HAE	52	lb VOC
3rd qtr AER	52	lb VOC
3rd qtr AQID	5	lb VOC
3rd qtr bankable	47	lb VOC
4th qtr HAE	50	lb VOC
4th qtr AER	50	lb VOC
4th qtr AQID	5	lb VOC
4th qtr bankable	45	lb VOC

	total from all 4 turbines	
1st qtr HAE	150	lb PM10
1st qtr AER	150	lb PM10
1st qtr AQID	15	lb PM10
1st qtr bankable	135	lb PM10
2nd qtr HAE	161	lb PM10
2nd qtr AER	161	lb PM10
2nd qtr AQID	16	lb PM10
2nd qtr bankable	145	lb PM10
3rd qtr HAE	167	lb PM10
3rd qtr AER	167	lb PM10
3rd qtr AQID	17	lb PM10
3rd qtr bankable	150	lb PM10
4th qtr HAE	164	lb PM10
4th qtr AER	164	lb PM10
4th qtr AQID	16	lb PM10
4th qtr bankable	148	lb PM10

Appendix F
Surrendered Permits

CONDITIONS FOR PERMIT S-1624-179-1

EXPIRATION DATE: 06/30/2021

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT
MAILING ADDRESS: ATTN: SHAMS HASAN
3000 JAMES ROAD
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: NE5 **TOWNSHIP:** 28S **RANGE:** 27E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired only on PUC quality natural gas with a total sulfur content not exceeding 1.0 grains/100 dscf. [District Rules 2201]
5. If the microturbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
6. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rules 1080, 2201, and 4703]
7. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Reduced Load is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust diverter gate, not to exceed one hour. [District Rules 2201 and 4703]
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 1.5 ppmvd @ 15% O2; PM10 - 0.0066 lb/MMBtu; CO - 50.0 ppmvd @ 15% O2; or VOC (as methane) - 1.6 ppmvd @ 15% O2. [District Rule 2201 and 4703]
9. Permittee shall perform a source test to measure the NOx and CO emission concentrations at least once every 12 months. [District Rule 4703]
10. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rule 4703]
11. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
13. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703]

14. The following test methods shall be used: NOx - EPA Method 7E or 20, CO - EPA Method 10 or 10B and O2 - EPA Method 3, 3A, or 20. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules1081and 4703]
15. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or Double GC for H2S and Mercaptans. [District Rule 1081]
16. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of PUC-quality natural gas consumed. [District Rules 2201and 4703]
17. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703]

CONDITIONS FOR PERMIT S-1624-180-1

EXPIRATION DATE: 06/30/2021

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT
MAILING ADDRESS: ATTN: SHAMS HASAN
3000 JAMES ROAD
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: NE5 **TOWNSHIP:** 28S **RANGE:** 27E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
3. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. This unit shall be fired only on PUC quality natural gas with a total sulfur content not exceeding 1.0 grains/100 dscf. [District Rules 2201]
5. If the microturbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
6. The owner shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier. Prior to the issuance of a Permit to Operate, the owner shall submit to the District information correlating the control system operating parameters to the associated measured NOx output. [District Rules 1080, 2201, and 4703]
7. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Reduced Load is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust diverter gate, not to exceed one hour. [District Rules 2201 and 4703]
8. Emission rates from this unit shall not exceed any of the following limits: NOx (as NO2) - 1.5 ppmvd @ 15% O2; PM10 - 0.0066 lb/MMBtu; CO - 50.0 ppmvd @ 15% O2; or VOC (as methane) - 1.6 ppmvd @ 15% O2. [District Rule 2201 and 4703]
9. Permittee shall perform a source test to measure the NOx and CO emission concentrations at least once every 12 months. [District Rule 4703]
10. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted within 60 days of initial start-up. [District Rule 4703]
11. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
13. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703]

14. The following test methods shall be used: NOx - EPA Method 7E or 20, CO - EPA Method 10 or 10B and O2 - EPA Method 3, 3A, or 20. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules1081and 4703]

15. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or Double GC for H2S and Mercaptans. [District Rule 1081]

16. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of PUC-quality natural gas consumed. [District Rules 2201and 4703]

17. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703]

CONDITIONS FOR PERMIT S-1624-181-1

INSPECTION WORKSHEET

EXPIRATION DATE: 06/30/2021

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT
MAILING ADDRESS: ATTN: SHAMS HASAN
3000 JAMES ROAD
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: NE5 **TOWNSHIP:** 28S **RANGE:** 27E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR

CONDITIONS

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2. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
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5. If the microturbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]
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7. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Reduced Load is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust diverter gate, not to exceed one hour. [District Rules 2201 and 4703]
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15. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246 or Double GC for H2S and Mercaptans. [District Rule 1081]

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17. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703]

CONDITIONS FOR PERMIT S-1624-182-1

INSPECTION WORKSHEET

EXPIRATION DATE: 06/30/2021

LEGAL OWNER OR OPERATOR: E&B NATURAL RESOURCES MGMT
MAILING ADDRESS: ATTN: SHAMS HASAN
3000 JAMES ROAD
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
CA

SECTION: NE5 **TOWNSHIP:** 28S **RANGE:** 27E

INSPECT PROGRAM PARTICIPANT: NO

EQUIPMENT DESCRIPTION:
250 KW (3.27 MMBTU/HR) INGERSOLL RAND MODEL 250SM-64L-210 NATURAL GAS-FIRED MICROTURBINE GENERATOR SET EQUIPPED WITH A DRY LOW NOX (DLN) BURNER AND RECUPERATOR

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