LA-UR-09-04659

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> Title:
> Title V Semi-Annual Monitoring Report for Permit P100M2 January 2009 through June 2009
>
>
> Author(s):
> David Paulson, ENV-EAQ
>
>
> Intended for:
> Compliance Reporting Manager New Mexico Environment Department - Air Quality Bureau 1301 Siler Road, Building B Santa Fe, New Mexico 87507



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Title V Semi-Annual Monitoring Report for Permit P100M2

Part 1 – Monitoring Activity Reporting Requirements

4.0 REPORTING

Conditions of 4.0 are pursuant to 20.2.70.302.E NMAC.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.
- 4.3 The report required by Condition 4.1 shall be submitted within 90 days from the end of the reporting period. The semiannual report required by Condition 4.2 shall be submitted within 45 days from the end of the reporting period. The reporting periods are January 1st to June 30th and July 1st to December 31st. This condition is pursuant to 20.2.70.302.E.1 NMAC.
- 4.4 The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the start of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the start of the occurrence, written notice using the Excess Emissions Form (attached to this permit) shall be submitted to the Department. This condition is pursuant to 20.2.70.302.E.2. NMAC.

Attachment 1 Asphalt Plant Opacity Reports

Month	Read Location	Date	Time	Average Opacity	EPA Method
January	Top of Shaker	01/13/09	9:20 am	0	9 ^(a)
February	Top of Shaker	02/04/09	8:40 am	0	9 ^(a)
March	Top of Shaker	03/11/09	9:16 am	0	9 ^(a)
April	Top of Shaker	04/09/09	8:40 am	0	9 ^(a)
May	Top of Shaker	05/18/09	10:12 am	0	9 ^(a)
June	Top of Shaker	06/05/09	9:55 am	0	9 ^(a)

Summary Table, Reports Attached

(a) EPA Method 9 was used. Average opacity for the Asphalt Plant is the sum of the highest consecutive 24 readings divided by 24 (6 minutes of readings). The method is in accordance with 20.2.61 NMAC and conditions 2.1.4.1 and 2.1.4.3 of the Los Alamos National Laboratory (LANL) Operating Permit P100M2.

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Ecology and Air Quality Los Alamos National Laboratory

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	Notify the Department within 60 days after each calendar quarter of the facility's compliance status with the permitted emission rate from the continuous monitoring system.
	Provide any data generated by activities described in the Quality Assurance Plan (QAP) that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request.
TA-16-207	See condition 4.2.
TA-35-87	See condition 4.2.
Target Fabrication Facility TA-35-213	See conditions 4.1 and 4.2.
Plutonium Facility TA-55-PF4	Stack emission test results and facility operating parameters will be made available to Department personnel upon request. Reports may be required to be submitted to the Department if inspections of the source indicate noncompliance with this permit or as a means of determining compliance.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes Date report submitted: January 29, 2009 & April 22, 2009 (Beryllium Test Facility TA-3-141) Tracking Numbers: SBR20090003, SBR20090005

No Provide comments and identify any supporting documentation as an attachment.

Comments:

<u>Chemistry and Metallurgy Research Facility (TA-3-29)</u> – This beryllium source was removed from Operating Permit P100M1 as requested by LANL. A letter from NMED-AQB amending the permit was dated July 16, 2007. This amendment resulted in the assignment of Operating Permit No. P100M2.

<u>Sigma Facility (TA-3-66)</u> - A log is maintained showing the number of metallographic specimens used in the polishing operation. Logs are maintained showing the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations. Logs are available on-site for NMED inspection.

2.3 Boilers and Heaters

- 2.3.4 Emissions Monitoring Requirements
- 2.3.4.1 Emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.
- 2.3.4.2 Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.
- 2.3.4.3 40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.

Reporting Requirement

- 2.3.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.
- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
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Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes Date report submitted:

Tracking Number:

No Provide comments and identify any supporting documentation as an attachment.

Comments:

- 2.3.4.1 The TA-21 Steam Plant was officially and permanently shut-down as of September 28, 2007. This information was communicated to NMED in a letter dated October 16, 2007.
- 2.3.4.2 Volumetric flow meters are utilized to measure the total amount of natural gas being used by units TA-55-6-BHW-1 and TA-55-6-BHW-2 on a monthly basis. Natural gas usage is summarized in Attachment 2.
- 2.3.4.3 LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

2.4 C	Carpenter Shops
2.4.4	Emissions Monitoring
2.4.4.1	The permittee shall maintain logs of the hours the carpenter shops are in operation.
Repo	rting Requirement
2.4.6	Reports shall be submitted in accordance with conditions 4.1 and 4.2.
4.1	Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO ₂ , PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
4.2	Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.
	s reporting requirement been met during this reporting period with a separate report submittal? Answer No below.
Ves	Date report submitted: Tracking Number:
No No	Provide comments and identify any supporting documentation as an attachment.
Comm	ents:
2.4.4.1	A log is maintained of the hours of operation for each of the permitted carpenter shops. Hour readings are collected and recorded monthly from hour meters installed on each of the cyclone separators. Hours of operation are provided in Attachment 3 .

2.5 Chemical Usage

- 2.5.4 Emissions Monitoring/Recordkeeping Requirements
- 2.5.4.1 Maintain records of chemical purchasing through facility-wide chemical tracking system, and use the data to calculate the emissions on a semiannual basis in accordance with Condition 4.1.

Reporting Requirement

2.5.5 Reports shall be submitted in accordance with conditions 4.1 and 4.2.

4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.

4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

Yes

Date report submitted:

Tracking Number:

No Provide comments and identify any supporting documentation as an attachment.

Comments:

2.5.4.1 Records of chemical purchases are maintained through LANL's facility wide chemical tracking system (ChemLog). The data is used to calculate emissions which are submitted in the Semi-Annual Emission Reports.

Attachment 4 Degreaser Solvent Usage

General Degreaser Information

Degreaser	Туре	TA	Solvent		
TA-55-DG-1	Cold Batch	55	Trichloroethyl	ene	
Date Measured	Initial Solvent Level (inches)	Volume Added (liters)	Level Added (inches)	Volume Removed (liters)	Level Removed (inches)
Jan-28-2009	6.00	0.00	0.00	0.00	0.00
Feb-26-2009	6.00	0.00	0,00	0.00	0.00
Mar-17-2009	5.75	3.44	1.75	0.00	0.00
Apr-07-2009	7.50	0.00	0.00	0.00	0.00
Apr-28-2009	7.00	0.00	0.00	13.76	7.00
May-21-2009	0.00	15.73	8.00	0.00	0.00
Jun-22-2009	7.50	0.00	0.00	0.00	0.00

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Attachment 5 Internal Combustion Generator Hours of Operation

2009 Standby Generator Hours

	_							First 6	Month Re	adings	Second	6 Month R	eadings
TA	Bida	Manufacturer	MODEL	KW/	Fuel Type	Previous Reading Date	Previous Reading	6 Month Reading Date	Reading	Hours Run	12 Month Reading Date	Reading	Hours Ru
3	40	Onan Sons	1500DVE15R31374B	150	Diesel	Dec-08	12.8	Jun-09	12.8	0.0	2010	ricabary	110010110
3	223	Onan Sons	45.0EM-15R/10742D	45	Propane	Dec-08		eo-nuc 90-nuc	492.5	0.0			
3	440	Cummins	500FDR5051	260	Diesel	Dec-08	121.8	Jun-09	121.8	0.0			
3	440	Cummins	DFGA-5005210	500	Diesel	Dec-08	99.9	PO-nu C	107.5	7.6			
3	1076	Cummins	DGBB-5601289	35	Diesel	Dec-08	181.1	Jun-09	195.1	14.0			-
3	1400	Cummins	DFEH-5699616	400	Diesel	Dec-08	44	Jun-09	63	19.0			
3	1404	Cummins	DFLC-5554001	1250	Diesel	Dec-08	393.5	e0-nut	417.6	24.1	Contract of the		
3	1498	Caterpillar	SR-4	600	Diesel	Dec-08	337	90-nu L	347.0	10.0			
3	2322	Onan Sons	DGDA-5005757	80	Diesel	Dec-08	358.6	e0-nut	364.8	6.2			
16	980	Cummins	KTA50-G2	1100	Diesel	Dec-08	318.6	Jun-09	321	2.4			
16	1374	Onan Sons	60ENA	60	Nat. Gas	Dec-08	1125	e0-nuL	1161	36.0			
35	2	Onan Sons	100DGDB	100	Diesel	Dec-08	115.5	Jun-09	115.5	0.0			
35	402	Cummins	DGCB-5674244	60	Diesel	Dec-08	175	Jun-09	216.0	41.0			
43	1	Cummins	4BT3.9-GC	50	Diesel	Dec-08	392.9	Jun-09	401.3	8.4			
43	1	Onan Sons	DVE	150	Diesel	Dec-08	671.9	Jun-09	700.0	28.1		1.00	
46	335	Onan Sons	300DEFCB	300	Diesel	Dec-08	1020	Jun-09	1063.1	43.1			
48	45	Onan Sons	DFCB-5740130	300	Diesel	Dec-08	78.5	Jun-09	103.6	25.1			-
50	37	Cummins	680FDR5059FF	500	Diesel	Dec-08	502.9	Jun-09	502.9	0.0		Contraction of the	1.18.5
50	184	Onan Sons	DGFA-568741	150	Diesel	Dec-08	256	Jun-09	291.0	35.0			
50	188	Onan Sons	1940563879	1250	Diesel	Dec-08	149	Jun-09	149.0	0.0			
53	1	Onan Sons	60ENA	60	Nat. Gas	Dec-08	1271	Jun-09	1289.0	18.0			
53	2	Kato Eng.	Kamag-14	50	Diesel	Dec-08	194.6	Jun-09	194.6	0.0	Cash Director		
53	3N	Onan	15.0JC-18R	15	Propane	Dec-08	362.3	Jun-09	362.6	0.3			
54	412	Olympian	95M-07874-F	500	Diesel	Dec-08	331.7	90-nuL	372.4	40.7		1000	
55	5	Kohler	100RZ71	100	Propane	Dec-08	98.3	Jun-09	115.0	16.7			
55	8	Delco/Detroit	E 7014DD	600	Diesel	Dec-08	840.6	90-nuL	848.9	8.3			
55	364	Onan Sons	1250DFLC-4987	1250	Diesel	Dec-08	134.3	90-nuL	147.8	13.5			
55	28	Onan Sons	40DL6T	40	Diesel	Dec-08	84.6	Jun-09	89.0	4.4			
55	47	Onan Sons	1465	200	Diesel	Dec-08	569	Jun-09	575.0	6.0			
55	142	Cummins	DFEB-4963414	400	Diesel	Dec-08	122.1	Jun-09	137.0	14.9	Contraction of the		
59	1	Allis Chalmers	2884-0703	90	Diesel	Dec-08	750	Jun-09	750.0	0.0			
50	yard	Cummins	DFHD-4964979	1000	Diesel	Dec-08	650	Jun-09	657	7.0			
53	93	Murphy	3166-0084	30	Diesel	Dec-08	716	eo-nuL	716.0	0.0			
64	1	Onan Sons	250DVG	250	Diesel	Dec-08	178	eo-nu L	184.6	6.6	Contraction of the		1019
69	33	Cummins	DFLC-5568730	1250	Diesel	Dec-08	85	Jun-09	100.0	15.0	No. 2 and		
	35	Generators in u	se						TOTAL	451.4		TOTAL	0.0
	Not Rea				half average			12.9		nd half avera			

Permitted Generators First Half 2009 Second Half 2009 12 Month Reading 2nd half of 6 Month Total Reading Hours Hours Reading Run Date Run Hours TA Bldg Manufacturer Serial # MODEL KW Fuel Type previous year Date Reading Run Reading 33 290 Kohler 375801 1600R0ZD 1600 34.3 35.4 1.1 Diesel Dec. 08 Jun-09 Dec-09 1.1 33 151 Caterpillar 6PK01065 XQ225 225 Diesel Dec. 08 3307.0 Jun-09 3365.0 58.0 Dec-09 58.0 Kohler Jul-09 33 209 2025460 20EORZ 20 Diesel Dec. 08 384.1 384.1 0.0 0.0 33 280 Kohler 2025461 20EORZ 20 Diesel Dec. 08 175.9 Jun-09 176.1 0.2 0.2

* The 225 kW and the two 20 kW generators have a limit of 500 hours of operation per year. The 1600 kW unit is limited to 900 hours per year.

Attachment 6 Data Disintegrator Box Throughput

2009 TA-52 Data Disintegrator

	Data Entry		Data Entry
Month	Boxes Shredded	Month	Boxes Shredded
January	92	July	Strate Burney
February	55	August	
March	116	September	
April	87	October	
May	157	November	
June	117	December	
6 mo. Total:	624	6 mo. Total:	0
	Annual Boxes:	624	

No. 2195BM1, Condition 3.h.

- 2.9.4.9 At least once each calendar quarter the permittee shall use the method specified in Conditions 2.9.4.7 and 2.9.4.8 to determine compliance of Unit TA-3-22 CT-1 with the hourly and annual emission limits specified in this permit. This condition was brought forward from NSR Permit No. 2195BM1, Condition 3.i.
- 2.9.4.10 Visible emissions from stationary combustion equipment shall not equal or exceed an opacity of 20%. Use of pipeline quality natural gas fuel as defined in Conditions 2.9.3.1 and 2.9.3.4 constitutes compliance with 20.2.61 NMAC unless opacity exceeds 20%. At such time as No. 2 fuel oil as defined in Condition 2.9.3.1 is used, opacity shall be measured in accordance with the procedures at 40 CFR 60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis per calendar year for each effected unit until such time as pipeline quality natural gas is used. This condition is pursuant to 20.2.61 NMAC and NSR Permit No. 2195BM1, Condition 2.c.
- 2.9.4.11 Initial compliance tests are required on Unit TA-3-22 CT-1 for NOx and CO. These tests shall be conducted within sixty (60) days after the unit achieves the maximum normal production. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source. The tests shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 7E for NOx, and Method 10 for CO contained in CFR Title 40, Part 60, Appendix A, and with the requirements of Subpart A, General Provisions, 60.8(f). Alternative test method(s) may be used if the Department approves the change. The permittee shall submit a testing protocol to the Department at least thirty (30) days prior to the test date, and provide notification to the Department at least thirty (30) days prior to the test date. This condition was brought forward from NSR Permit No. 2195BM1, Condition 6.b and General Condition 13.
- 2.9.4.12 The permittee shall comply with fuel sulfur monitoring requirements at 40 CFR 60.334(h) applicable to Unit TA-3-22 CT-1 by making the required demonstration which shows the fuel combusted in the turbine meets the definition of natural gas at 40 CFR 60.331(u).

The conditions of Section 2.9.4 are pursuant to 20.2.70.302.C NMAC.

Reporting Requirement

2.9.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.

This condition is pursuant to 20.2.60.302.E NMAC.

- 4.1 Reports of actual emissions from permitted sources in Section 2.0 shall be submitted on a 6 month basis. Reports shall not include emissions from insignificant activities. Emission estimates of criteria pollutants NOx, CO, SO₂, PM and VOCs shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits specified in Section 2.10 of this permit.
- 4.2 Reports of all required monitoring activities shall be submitted on a semiannual basis. All instances of deviation from permit requirements, including emergencies, shall be clearly identified in these reports. The conditions of 4.1 and 4.2 are pursuant to 20.2.70.302.E.1 NMAC.

Has this reporting requirement been met during this reporting period with a separate report submittal? Answer Yes or No below.

production rate on September 27, 2007, and the compliance test was performed on October 5, 2007. The test report was provided to NMED on October 22, 2007. The test consisted of the EPA test methods identified in this permit condition.

2.9.4.12 The natural gas used by the combustion turbine meets the definition of natural gas in 60.331(u). The sulfur monitoring requirement is met under 40 CFR 60.334(h)(3)(i), which allows the use of a current and valid transportation contract that specifies the maximum total sulfur content is 20 grains per 100 scf or less. The transportation contract specifies a sulfur content not to exceed 2 grains of total sulfur per 100 scf. A copy of the transportation contract is available at the facility for NMED inspection.

		20	09 Da	aily T	urbir	ie Ga	is Us	e (M	CF), '	12 M	onth	Rolli	ng T	otal (Gas I	Jse,	& Ho	urs o	fOp	erati	on			
	Ja	917	F	eb	M	ar	A	pr	M	ay	JI	un .	JL	ıly	A	ug	Se	ept	0	ct	N	VO	D	ec
Day	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs	Gas Use	Hrs
1	0	0	0	0	0	0	295	0.9	0	0	0	0												
2	0	0	0	0	0	0	0	0	0	0	0	0												
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18	0	0	0	0	0	0	0	0	0	0	0	0												
19	0	0	0	0	565	3	0	0	7	0	0	0			-									
20	62	1.1	0	0	0	0	0	0	0	0	0	0									1			
21	8	0	0	0	0	0	0	0	0	0	0	0												
22	0	0	0	0	0	0	0	0	0	0	0	0												
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28	0	0	0	0	0	0	0	0	0	0	0	0												
29	0	0			0	0	75	0.4	0	0	0	0												
30	0	0			0	0	0	0	0	0	0	0												
31	0	0			0	0			0	0														
and the second se	116	21	207	0.6	984	6.8	492	1.6	114	1	211	1												
12-Mo. olling Gas Jse (MCF)	170)39	172	246	18:	201	180	593	18	689	18-	485												
Fi	rst Ha	fGas	Use:	21	24	MCF				Seco	nd Ha	lf G as	Use:		0	MCF			Annua	al Gas	Use:	2124	MCF	

Attachment 8 Combustion Turbine Daily and 12-Month Rolling Natural Gas Use

Permit Limit (12 mo rolling): 646 MMSCF or

or 646,000 MCF

Semi-annual Form - Permit Number P100M2 LA-UR-09-04659

6						e
- Los Alamos LOS ALAMOS NATIONA						
Source Name:	Observation D		MI.ve	Star:	. inte	End Time
LANL Power Plant	1-13	0	7	10	08	1018
Source Location: TA-3-22	Sec					
Type of Source Type of Control Equipment	Nin	0	15	30	4.5	Comments
Boiler #1 No Baticulate Contra		0	0	0	0	
Describe Emission Point (Top of stack, etc.)	- 2	0	D	0	0	
Top of Boiler #1 stack	3	0	0	0	D	
Height Above Ground Level Height Relative to Observer 1557 Feet	4	0	b	0	0	
Distance From Observer Direction of Source From Observer	5		0	0	0	
200 Féer E		0	Ø	0	D	
Description of Phune (stack exit only) Lofting Drapping Deoping DFanning DComing	6	0	Ø	0	0	
TNo Plume Present	7	0	D	0	0	
Emission Color Plume Type DNo Plume Present IContinuous E Fuguive Elistermittent	S	0	0	0	0	
Water Droplets Present?	9	0		0		
WNO DYES IFYES, droplet plume is CAttached Detached		0	0	0	P	
At what point in the plante was opacity determined"	10	0	e	0	Ø	
ZIFT. above too of stack	11					
Background Color Sky Conditions	12					
Blue Clear	- 13					
Wind Speed Wind Direction (provide from North to South)	14			1		
From SE						
Ambient Temperature Relative Humidity	- 15				-	
Additional Comments Information	16					
Fuel Oil Bum Exercise	17					
That Oak Durn France	18			1		
	19					
	=					
Stack SOURCE LAYOUT SKETCH	20		<u> </u>	L		
Phune Emission North Direction		lumte (opacity		Min.	Opacity Readings Max
Sun 🕂 Point	0	1/0	2		DY	a Dío
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	Von	510	Ene		En	PINEEr
	Signature	1	í.		1	Date
	Velon	Ste	m	-		1-13-09
	Observer Oy	Calizati	00 /	-		
OBSERVER'S POSITION	Certified by	4/0	1E	Ja.	T	Centrication Date
	T-A				- 1	8-27-08
-13	ETA_					0-41-00
SUN LOCATION LINE						

THIS FORM IS FROM LAQ-30". RJ

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<u>.</u>							2		
- Los Alamo	05	LOS ALAMOS NATIO							
Scurce Name:		ISIBLE EMISSION OBS	and a second second	Observation Da		MLNU	Start	Tima	End Time
Fuela	oil # 3	Boler (Power Pl	ant)	3-17-				147	
TA-3	SM-22 1	aver MANT		Min Sec	0	15	30	45	Comments
Type of Source		Type of Control Equipment		1	6	0	0	0	
Describe Engine	ion Point (Tap of a			2	0	G	3	C	
	Alade St.	Height Relative to Observer		3	G	6	e	0	
. /	10 Feet	LIO Feet		4	G	G	Ø	0	
Distance From ZO	-	Direction of Source From Observe 1002.76	r	5	G	0	0	0	
Description of H	Sume (stack exit of	dr?		6	0	G	0	6-	
Enuryion Color	esent	ig DFaming DConing		7	0	0	Ð.	0	
Clea	Z. Continu	icus 🗆 Fugitive 🗆 Internation		8	0	0	0	G	
Water Dioplets	Present? TYE5, droplet plur	ne is E Attached Detached		9	0	0	0	0	
	the plume was ope			10 -	¢.	G.	G	O	
Describe Bache	round i.e. blue dry	trees, etc.)		11					
Background Col	e sky	Sky Condigona		12					
	U.C. Wind Dur	Clear	_	13					
	iph (previde f	ron: to, i.e. from North to South)		14					10
-5/5 Ambieut Tempe	Hanne Germ 30	Relative Humidity	ksi	15					
	2 F	27 %		16					
Tin D	al bus	n exercise		17					
1 ng c	~	,		18					
				19					
Stack With Q	SOURCE L	AYOUT SKETCH		20					
Plume	Fm	Draw Arr North Du		Average 10-M	inute C	pacity	R	ange of fin. 4	f Opacity Readings
Sun 🕂		eint A		0					
Wind —>	(X) (1		OBSERVER (OR	Tin	Title:	ENGINCE FING TELMNOLOGIST
				Signature	1:	210	112		Date
	-			1	D	the			3/11/09
		(A)		Observer Org	mizatio			-Asses - Is	,
	£	OBSERVER'S POSITION		LANS Certified by			-	- T	Certification Date
	\sim	42		ETA				.	2-26-09
	SUN LOC-	ATION LINE							

Ecology and Air Quality Los Alamos National Laboratory

2						
Los Alamos LOS ALAMOS NATIONAL						
Transformed and the second sec	Observation D		MINU	Starr	Time	End Time
Source Name:		nG				17372
Seuce Location	4-7- Sec	PI	I	13	27	1371
TA-3-22	Min	0	15	30	45	Comments
Type of Source Type of Control Equipment	1	0	0			
Boiles #1 No Particulate Control		0	Q	R	ę	
Describe Emission Point (Top of stack, etc.)	2	0	0	P	0	
Height Above Ground Level Height Kelative to Observer	3	O	n	n	0	
150 Feet ILO Feet	4		0	0	0	
Distance From Observer Direction of Source From Observer	1	Ø	P	\mathcal{O}	\mathcal{O}	
ZDD Feet E	5	D	0	D	0	
Description of Plume (stack exit only)	6	D	D	D	10	
□Lofting □Trapping □Looying □Faunting □Coning MNo Plume Present	7	0	0	0		
Emission Color Plume Type INo Plume Present		D	0	0	0	
NIA	S	0	0	0	D	
Watef Droplets Present? ØNO □YES If YES, droplet plume is □Attached □Detached	9	0	D	D	D	
At what point in the plume was opacity determined?	10	D	n	n	n	
21ft. above top of stack	11	0	C	10	P	
Describe Background (i.e. blue'sky, trees, etc.) Blue KK			C.C.	atene:		
Background Color Sky Conditions	12					
Wind Speed Wind Direction	13	POR .				
L 10 mph (provide from/to, i.e. from North to South)	14	1997				
From 5W	15		le mente le mete	ale ale	aleu ale	
Ambient Temperature Relative Humidity			E 25	ALE AS		
Additional Comments/Information:	16	in Section				
Burner Molwagement	17					
furner i consequences	18	I GARA		all and		
	19					
				APRIL PAR	na ang	
Stack SOURCE LAYOUT SKETCH	20		影響			
Plume North Diraction	Average 10-N	linute	Opacit		Range c Min.	of Opacity Readings
Sun	0	2/0			0	10 0/0
$ Wind \rightarrow (X) / (V)$	OBSERVER	(please	print)			
	Nama:	14	110		Title:	A . A/
	Signatore	210	se	-	En	Bate
6		1	L			11 7 -0
	for	19	Dr	W		7-1-09
	Observer Or	appizett	ion			w di
	ENY-	EA	y			0
OBSERVER'S POSITION	Certified by					Certification Date
140°	ETA					2-25-09
SUN LOCATION LINE						

THIS FORM IS FROM EAQ-307, R4

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Ecology and Air Quality Los Alamos National Laboratory

Los ALAMOS NATIONAL LABORATORY (LAND) Storer Mane: VISIBLE EMISSION OBSERVATION FOR MICHAELAND, Storer Mane: Store Lecture Store The Control	6						
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	 Are there any deviations not yet reported? If No, no further information is required on the Deviation Summary Report. If Yes, answer question 3 below and enter the required information in the Deviation Summary Table. 							Yes	No No		
	 Did any of the deviations result in excess emissions? For deviations resulting in excess emissions a completed Excess Emission Form for each deviation must be attached to this report. 								🗌 Yes	🗌 No	
Dev	viation Sum	ımary Ta	ble for o	leviatio	ons n	ot yet repor	ted.				
No.	Io. Applicable Requirement (Include Rule Citation)			nission Unit ID(s)	Cause of Deviation Corrective Action Taken			Action Taken			
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