# LA-UR-12-20087

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Title:	Title V Semi-Annual Emissions Report for Permit P100R1 July 1, 2017 – December 31, 2011	1
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Intended for:	NMED Report Air quality	

Air quality Reading Room **Title V Compliance** 



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# Title V Semi-Annual Emissions Report for Permit P100R1 July 1, 2011 - December 31, 2011

#### **Emission 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 2.11 of this permit.
- 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 1<sup>st</sup> to June 30<sup>th</sup> and July 1<sup>st</sup> to December 31<sup>st</sup>. This condition is pursuant to 20.2.70.302.E.1 NMAC.

# **Specific Emissions Reports:**

Emission		Allowa	ble Emission Li	mits		
Unit TA-60-BDM	NO <sub>x</sub> 95.0 tpy	SO <sub>2</sub>	PM 0.04 gr/dscf 33.8 lbs/hr	CO 95.0 tpy	95.0 tpy	-
	55.0 tpy	5010 (р.)	95.0 tpy	5510 tpy	55.0 tpj	
porting Requ				(1)		
.6.1 Reports shall	be submitted in acc	cordance with c	onditions 4.1 and	4.2.(1)		
Reports shall r NOx, CO, SO include fugitiv	ual emissions from not include emissio 2, PM and VOCs sl re emissions. The re- period with the faci	ns from insignif nall not include eports shall incl	ficant activities. I fugitive emission ude a comparisor	Emission estimate s. Emission estin 1 of actual emission	es of criteria j nates of HAP ons that occu	oollutants s shall rred during
Condition 4.2 refers	to submitting a Semi	-Annual Monitori	ing report which L	ANL submitted on	February 9, 20	12, Tracking
s this reporting rec	quirement been met	during this rep	orting period with	n a separate repor	ting submitta	1? Answer
s this reporting rec s or No below.	uirement been met	during this rep	orting period with	a separate repor	ting submitta	l? Answer
s or No below.	-		orting period with			1? Answer
s or No below.	Date report sub	mitted:		Tracking Num	iber:	l? Answer
s or No below.           Yes           No	-	mitted:		Tracking Num	iber:	1? Answer
s or No below.           Yes           No	Date report sub	mitted: dentify any sup		Tracking Num	iber:	l? Answer
s or No below.           Yes           No         Provide           mments:	Date report sub e comments and ic January - June	mitted:	porting docume	Tracking Num ntation as an att Permit Limit	iber: tachment.	l? Answer
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S or No below.         Yes         No       Provide         mments:         Asphalt Plant         TA-60-BDM	Date report sub e comments and id January - June Emissions (tons)	mitted: dentify any sup July - December Emissions (tons)	Annual Emissions (tons)	Tracking Num ntation as an att Permit Limit (Condition 2.1 (tons per year	aber: tachment. ts .2)	l? Answer
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S or No below.  Yes  No Provide mments:  Asphalt Plant TA-60-BDM NOx SO2 PM CO VOC	Date report sub         e comments and id         January - June         Emissions (tons)         0.012         0.001         0.007         0.43         0.002	mitted: July - December Emissions (tons) 0.021 0.002 0.013 0.74 0.003	Annual Emissions (tons) 0.033 0.003 0.020 1.171 0.005	Tracking Num ntation as an att Permit Limit (Condition 2.1 (tons per year 95.0 95.0 95.0 95.0 95.0 95.0 95.0 95.0	achment.	l? Answer

#### 2.2 Beryllium Activities

#### 2.2.2 Emission Limits

Source	Allowable I	Emission Limits
	Beryllium	Aluminum
Sigma Facility TA-3-66	10 gm/24 hr	Not Applicable
Beryllium Technology Facility TA-3-141	0.35 gm/24 hr 3.5 gm/yr	Not Applicable

Source	Allowable	Emission Limits
	Beryllium	Aluminum
Target Fabrication Facility TA-35-213	1.8 x 10 <sup>-04</sup> gm/hr 0.36 gm/yr	Not Applicable
Plutonium Facility TA-55-PF4		
Machining Operation	0.12 gm/24 hr 2.99 gm/yr	0.12 gm/24 hr 2.99 gm/yr
Foundry Operation	$3.49 \ge 10^{-5} \text{ gm}/24 \text{ hr}$ $8.73 \ge 10^{-4} \text{ gm/yr}$	3.49 x 10 <sup>-5</sup> gm/24 hr 8.73 x 10 <sup>-4</sup> gm/yr

#### **Reporting Requirement**

2.2.6 Reports shall be submitted in accordance with conditions 4.1 and 4.2.<sup>(1)</sup>

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<sub>2</sub>, 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 2.11 of this permit.

<sup>(1)</sup> Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 9, 2012, Tracking Number SBR20120003.

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

 Yes
 Date report submitted:
 Tracking Number:

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

 Comments:
 Continued on the next page

## 2.2 Beryllium Activities - continued

Comments:					
Source	Pollutant	January - June Emissions	July - December Emissions	Annual Emissions	Permit Limits (Condition 2.2.2)
Beryllium Test Facility TA-3-141 <sup>(1)</sup>	Beryllium (grams)	< 0.0033	< 0.0033	< 0.007	3.5 gm/yr
Target Fabrication Facility TA-35-213 <sup>(2)</sup>	Beryllium (grams)	< 0.00944	< 0.009	< 0.018	0.36 gm/yr
Plutonium Facility TA-55-PF4	Beryllium (grams)	< 1.495	< 1.41	< 2.91	2.99 gm/yr
Machining Operation <sup>(3)</sup>	Aluminum (grams)	< 1.495	< 1.41	< 2.91	2.99 gm/yr
Plutonium Facility TA-55-PF4	Beryllium (grams)	0	0	0.00	8.73 x 10 <sup>-4</sup> gm/yr
Foundry Operation <sup>(4)</sup>	Aluminum (grams)	0	0	0.00	8.73 x 10 <sup>-4</sup> gm/yr
Beryllium Total	<sup>(5)</sup> (tons) =	< 1.66E-06	< 1.57E-06	< 3.23E-06	
Aluminum Tota	al (tons) =	< 1.65E-06	< 1.55E-06	< 3.30E-06	

Notes: <sup>(1)</sup> Emission values shown for the Beryllium Test Facility are from actual stack emission measurements which are submitted to NMED quarterly. <sup>(2)</sup> Emissions for the Target Fabrication Facility are from initial compliance testing of that source and calculated based on a conservative assumption of 8 hour work days. Log books were checked to verify that work days were much less than 8 hours. <sup>(3)</sup> Emissions for the Plutonium Facility are calculated based on permitted throughputs. Log books were checked to verify that throughputs were much less than permitted values. <sup>(4)</sup> The Plutonium Facility foundry operations did not operate in 2011. <sup>(5)</sup> The Sigma Facility listed in section 2.2 of the permit does not require reporting in the Semi-Annual Emissions Report.

Source		Allow	able Emission L	imits	
All Boilers	NOx	CO	PM or PM <sub>10</sub>	SO <sub>2</sub>	VOC
nd Heaters <sup>1</sup>	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
	80	80	50	50	50
Excludes TA-3-2	2 Power Plant a	ddressed in Co	ndition 2.9		U
eporting Requi	irement				
3.6.1 Reports shall	be submitted in a	ccordance with	conditions 4.1 and	4.2. <sup>(1)</sup>	
Reports shall n NOx, CO, SO <sub>2</sub> , include fugitive the reporting po permit.	ot include emission PM and VOCs s e emissions. The reprint with the factor	ons from insigni hall not include reports shall incl ility-wide allowa	ficant activities. E fugitive emissions ude a comparison able emission limit	shall be submitted o mission estimates o s. Emission estimate of actual emissions as specified in Sectio	f criteria pollutants s of HAPs shall that occurred durin on 2.11 of this
	submitting a Semi	i-Annual Monitor	ing report which LA	NL submitted on Febr	ruary 9, 2012, Trackin
umber SBR20120003.	•	. 1			1 10 10 1
as this reporting requ	iirement been me	et during this rep	orting period with	a separate reporting	g submittal? Answei
es or No below.					
Ves	Data nonant	mittade		Trooking Number	
Yes	Date report sub	omitted:		Tracking Number	:
	•		morting documer		
X No Provide	•		pporting documer	Tracking Number	
X No Provide omments:	comments and i January - June Emissions	identify any sur July - December Emissions	pporting documer Annual Emissions (tons)		
X No Provide mments: pilers and Heaters	comments and i January - June Emissions (tons)	dentify any sup July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.3.2) (tons per year)	
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#### **2.4 Carpenter Shops**

2.4.2 Emission Limits
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Source	Allowable Emission Limits
source	PM <sub>10</sub> (tp y)
TA-15-563	2.81
TA-3-38	3.07

### **Reporting Requirement**

2.4.6.1 Reports shall be submitted in accordance with conditions 4.1 and  $4.2^{(1)}$ 

Date report submitted:

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<sub>2</sub>, 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 2.11 of this permit.

<sup>(1)</sup> Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 9, 2012, Tracking Number SBR20120003.

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

Yes

**Tracking Number:** 

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

Comments:					
Shop	Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.4.2) (tons per year)
TA-3-38	PM <sub>10</sub>	0.013	0.035	0.048	3.07
TA-15-563	PM <sub>10</sub>	0.009	0.009	0.018	2.81

2	2.5 Chemical Usage				
2	2.5.2 Emission Limits				
	2.5.3.1 The contribution of VOC he exceedence of the corresponding				all not cause
	200 tons per year of facility- 8 tons per year of individual 24 tons per year of total faci	facility-wide H	AP		
1	Reporting Requirement				
	2.5.5.1 Reports shall be submitted in a	ccordance with co	nditions 4.1 and 4	4.2. <sup>(1)</sup>	
4	4.1 Reports of actual emissions from Reports shall not include emission NOx, CO, SO <sub>2</sub> , PM and VOCs s include fugitive emissions. The r the reporting period with the fac permit.	ons from insignific hall not include fu reports shall include	cant activities. En gitive emissions. de a comparison c	nission estimates of Emission estimate of actual emissions	f criteria pollutants s of HAPs shall that occurred during
N	<sup>1)</sup> Condition 4.2 refers to submitting a Sem Number SBR20120003. Has this reporting requirement been me				
	Yes or No below.	a during this repor	ting period with a	a separate reporting	submittar: Answer
	Yes Date report sub	omitiea:		Tracking Number	:
	X No Provide comments and i	dentify any supp	orting document	tation as an attach	nment.
(	Comments:				
	Chemical Usage LANL-FW-CHEM	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.5.3.1)
F	VOCs	3.4	3.0	6.4	
	HAPs	1.0	1.6	2.6	
	Highest Individual HAP for the first 6 months of 2011 (Methanol)	0.16	0.20	0.36	Source limits refer to facility-wide limits.
	Highest Individual HAP for the second 6 months of 2011 (Hexane)	0.12	0.46	0.58	
-					

2.6 Degreasers					
2.6.2 Emission Li					
	ibution of VOC an corresponding fac			nical usage shall not	t cause the
8 tons per	er year of facility- year of an individu r year of total facil	al facility-wide	НАР		
Reporting Rec	uirement				
	all be submitted in a	cordance with co	onditions 4.1 and	4 2 <sup>(1)</sup>	
2.0.0.0 Reports sh			inditions und		
Reports shal	l not include emissio	ons from insignifi	cant activities. E	shall be submitted on mission estimates of 5. Emission estimates	criteria pollutants
Ų		1	1	of actual emissions t s specified in Section	Ų
<sup>(1)</sup> Condition 4.2 refer Number SBR201200		-Annual Monitorin	g report which LA	NL submitted on Febru	ary 9, 2012, Tracking
Has this reporting r Yes or No below.	equirement been me	t during this repo	rting period with	a separate reporting	submittal? Answer
<b>Yes</b>	Date report sub	mitted:		Tracking Number:	
	•			0	
X No Prov	de comments and i	dentify any supp	porting document	itation as an attachi	nent.
			. 0		
Comments: Degreaser TA-55-DG-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year)	
Comments: Degreaser	Emissions	December	Annual Emissions	Permit Limits (Condition 2.6.2.1) (tons per year) Source limits refer to facility-wide	
Comments: Degreaser TA-55-DG-1	Emissions (tons)	December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year) Source limits refer	
Comments: Degreaser TA-55-DG-1 VOCs	Emissions (tons)	December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year) Source limits refer to facility-wide limits. (See Facility Emissions Table	
Comments: Degreaser TA-55-DG-1 VOCs	Emissions (tons)	December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year) Source limits refer to facility-wide limits. (See Facility Emissions Table	
Comments: Degreaser TA-55-DG-1 VOCs	Emissions (tons)	December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.6.2.1) (tons per year) Source limits refer to facility-wide limits. (See Facility Emissions Table	

## 2.7 Internal Combustion Sources

Source         Allowable Emission Limits           NO <sub>x</sub> <sup>1</sup> CO         VOC         SO <sub>x</sub> <sup>2</sup>							nission	Limit	s			
	N	O <sub>x</sub> <sup>1</sup>	C	0	VC	)C	SC	$D_x^2$	T	SP	PN	A10
TA 00 C 1	pph		pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
TA-33-G-1 TA-33-G-2	40.3		33.7	15.2	0.7	0.3	5.5	2.5	1.4	0.6	1.4	0.6
TA-33-G-2 TA-33-G-3	0.83		0.2	0.1	0.1							
A-33-G-4	9.33		5.7	1.4	0.75	0.2	0.62	0.16				
Reports o Reports o Reports sl NOx, CO include fu	shall be f actual f nall not f , SO <sub>2</sub> , Pl agitive en	submitted emissions include er M and VO	s from missio OCs sł	permit ns fror nall not	tted sou n insign t include	rces in nificant e fugiti clude a	Sectio activit	n 2.0 sl ies. En ssions. trison o	hall be s nission Emissi	estimato on estir	es of cr nates o	iteria j f HAP
ber SBR2012 his reportin	fers to su 0003. g require	ıbmitting a	ne faci a Semi- en met	lity-wi -Annua during	l Monito g this re	oring rej	port whi	th LAN	IL subm	ed in So	ection 2 Februar	2.11 of ry 9, 20
permit. ndition 4.2 re <u>ser SBR2012</u> his reportin <u>or No below</u> Yes No Pr	fers to su 0003. g require	ibmitting a	ne faci a Semi- en met rt subr	lity-wi -Annua : durinş <u>mitted</u> lentify	l Monito g this re : r any su	pring reporting	port whi	d with a	IL subm a separa Trackin	ed in So itted on itte report	Ection 2 Februar rting su	2.11 of ry 9, 20 ibmitta
permit. adition 4.2 re <u>ver SBR2012</u> his reportin or No below Yes <u>No Pr</u>	fers to su 0003. g require. D ovide co	ibmitting a ement bee ate repor	ne faci a Semi- en met and io June ons	-Annua - Annua - during mitted dentify J Dec Emi	l Monito g this re	porting reporting	port whi	al bons	IL subm a separa <u>Trackin</u> ation a Pern (Cond	ed in So itted on itte report	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. ndition 4.2 re ber SBR2012 this reportin or No below <b>Yes</b> <b>No Pro- ments:</b> Generator	fers to su 0003. g require. D ovide co	abmitting a ement bec ate report omments anuary Emissio	ne faci a Semi- en met and io June ons	-Annua - Annua : durinş dentify J Dec Emi (t	l Monito g this re : any su uly - sember ssions	porting reporting	ing doc Annua	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in Se itted on te report is an at nit Limi lition 2.7	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. ndition 4.2 re ber SBR2012 his reportin or No below Yes No Pro- ments: Generator TA-33-G-1	fers to su 0003. g require. D ovide co	ement bee ate report omments anuary - , Emissio (tons)	a Semi- en met and ic June	-Annua - Annua : durinş dentify Jec Emi (t	l Monito g this re : any su uly - sember ssions ons)	porting reporting	ing doc Annua (tons	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in So itted on ate report as an at s an at hit Limi ition 2.7 s per yea	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. dition 4.2 re er SBR2012 his reportin r No below Yes No Pr nents: Generator TA-33-G-1 NOx	fers to su 0003. g require. D ovide co	abmitting a ement bec ate report omments anuary - , Emissio (tons) 4.91	a Semi- en met and ic June	-Annua - during mitted Jentify Dec Emi (t	l Monito g this re r any su uly - cember ssions ons) 0.04	porting reporting	ing doc Annua (tons 4.95	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in So itted on ate report as an at hit Limi lition 2.7 s per yea 18.1	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. dition 4.2 re <u>er SBR2012</u> his reportin <u>r No below</u> <u>Yes</u> <u>No Pr</u> nents: Generator TA-33-G-1 <u>NOx</u> <u>SOx</u>	fers to su 0003. g require. D ovide co	abmitting a ement bee ate report omments Emissio (tons) 4.91 0.73	a Semi- en met rt subn and ic	Annua during mitted J Dec Emi (t ( 0 0	l Monito g this re r any su uly - ssions ons) 0.04 0.01	porting reporting	annua annua annua anissia (tons 4.95 0.74	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in So itted on tte report ng Nun as an at hit Limi lition 2.7 5 per yea 18.1 2.5	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. ondition 4.2 re ber SBR2012 this reportin or No below <b>Yes</b> <b>No Pro- ments:</b> <b>Generator</b> <b>TA-33-G-1</b> <b>NOx</b> <b>SOx</b> <b>TSP</b>	fers to su 0003. g require. D ovide co	ate report ate report anuary - , Emissio (tons) 4.91 0.73 0.16	a Semi- en met rt subn and ic	Annua during dentify J Dec Emi (t 0 0 0 0	I Monito g this re r any su uly - sember ssions ons) 0.04 0.01	porting reporting	annua anna annua annua anna annua ann anna anna annnn annn ann ann annn annnn annn ann ann annn annnn annnn a	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in Se itted on tte report as an at hit Limi lition 2.7 s per yea 18.1 2.5 0.6	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta
permit. ndition 4.2 re ber SBR2012 this reportin or No below <b>Yes</b> <b>No Pr</b> ments: <b>Generator</b> <b>TA-33-G-1</b> <b>NOx</b> <b>SOx</b> <b>TSP</b> <b>PM</b> <sub>10</sub>	fers to su 0003. g require. D ovide co	ate report ate report anuary - , Emissio (tons) 4.91 0.73 0.16 0.16	a Semi- en met rt subr June	Annua during dentify J Dec Emi (t 0 0 0	I Monito g this re r any su uly - sember ssions 0.04 0.01 .001 .001	porting reporting	Annua Annua Ming doc (tons 4.95 0.74 0.17 0.17	al ons	IL subm a separa Trackin ation a Pern (Cond (tons	ed in Se itted on te report as an at hit Limi lition 2.7 s per yea 18.1 2.5 0.6 0.6	ection 2 Februar rting su hber: tachmo ts 7.2)	2.11 of ry 9, 20 ibmitta

2.7 Internal Con	nbustion Sour	<b>ces</b> - continu	ed	
Comments:				
Generator TA-33-G-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NOx	0.001	0.003	0.004	0.21
SO <sub>x</sub>	0.000	0.000	0.000	Not Required
TSP	0.000	0.000	0.000	Not Required
PM <sub>10</sub>	0.000	0.000	0.000	Not Required
СО	0.000	0.001	0.001	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	2.03E-07	9.73E-07	1.18E-06	No Source Limit

**Note:** This generator only ran for 1.5 hours during the first six months of 2011 and 8.7 hours during the second six months of 2011.

Generator TA-33-G-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NOx	0.000	0.002	0.002	0.21
SO <sub>x</sub>	0.000	0.000	0.000	Not Required
TSP	0.000	0.000	0.000	Not Required
PM <sub>10</sub>	0.000	0.000	0.000	Not Required
CO	0.000	0.000	0.000	0.1
VOC	0.000	0.000	0.000	Not Required
HAPs	0.00E+00	5.00E-07	5.00E-07	No Source Limit

**Note:** This generator rdid not run for the first 6 months of 2011. and only operated for 3.7 hours during the second six months of 2011.

Generator TA-33-G-4	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition 2.7.2) (tons per year)
NOx	0.057	0.014	0.071	2.33
SO <sub>x</sub>	0.004	0.001	0.005	0.16
TSP	0.004	0.001	0.005	Not Required
PM <sub>10</sub>	0.004	0.001	0.005	Not Required
CO	0.012	0.003	0.015	1.4
VOC	0.004	0.001	0.005	0.2
HAPs	1.83E-05	4.56E-06	2.28E-05	No Source Limit

Continued on the next page.

### 2.7 Internal Combustion Sources - continued

## Comments:

Stationary Standby Generators	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	2.61	3.58	6.19	
SOx	0.08	0.10	0.18	
TSP	0.11	0.14	0.25	No Source Specific
PM <sub>10</sub>	0.11	0.14	0.25	Emission Limits for Standby
CO	0.61	0.84	1.45	Generators
VOC	0.11	0.14	0.25	
HAPs	0.001	0.001	0.002	

Note: Standby Generators are insignificant sources.

Source		Allowa	ble Emission Li	mits	]
-52-11	TSP (pph)	TSP (tp		0 (pph)	PM10 (tpy)
	2.3 issions limits sho	9.9		2.3	9.9
Reports of actu Reports shall no NOx, CO, SO <sub>2</sub> , include fugitive	ot include emissio PM and VOCs sh e emissions. The re	permitted source ns from insignifi nall not include f eports shall inclu	es in Section 2.0 s cant activities. En ugitive emissions de a comparison	shall be submit mission estima . Emission esti of actual emiss	tted on a 6 month basi ttes of criteria pollutar imates of HAPs shall sions that occurred du Section 2.11 of this
ber SBR20120003. his reporting requ	-				n February 9, 2012, Trac
or No below.	Date report sub	mitted		Tracking Nu	mher
	comments and ic	lentify any supp	oorting documen	itation as an a	uttachment.
ments:	comments and id January - June Emissions (tons)	July - December Emissions	Annual Emissions (tons)	Permit Lim (Condition 2 (tons per ye	nits 8.2)
ments: a Disintegrator	January - June Emissions	July - December	Annual Emissions	Permit Lin (Condition 2	nits 8.2)
ments: a Disintegrator TA-52-11	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Lin (Condition 2 (tons per ye	nits 8.2)

### 2.9 Power Plant at Technical Area 3 (TA-3-22)

2.9.2 Emission Limits

Source					Allowa	ble En	nission	Limi	its			
Source	N	Ox	C	O	S	Dx	TS	SP	PM	[ <sub>10</sub>	V	C
	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil
TA-3-22-1 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
TA-3-22-2 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
TA-3-22-3 (lb/hr)	10.2	11.3	7.0	6.5	1.1	9.6	1.3	4.3	1.3	3.0	1.0	0.3
Boilers Individually (tpy)	3	5.9	N	/A	N	/A	N/	A	N/.	A	N	/A
Boilers Combined <sup>1</sup> (tpy)	60	0.2	41	1.3	7	.9	8.	4	8.	2	5	.6

		Allowable Emission Limits										
Source	N	NOX CO SOX TSP PM <sub>10</sub> VO						DC				
	Gas	Oil	Gas	Oil	Gas	Oil	Gas Oil		Gas	Oil	Gas	Oil
TA-3-22 CT- 1 (lb/hr)	23	3.8	17	0.9	1	.4	1.	6	1.0	6	1.	0
TA-3-22 CT- 1 (tpy) <sup>1,2</sup>	33.2		19.8		1.9		2.	3	2.3	3	-	
TA-3-22 CT-1 (ppm)		mv @ % O2	N/A N/A N/A N/A		N/A N/A N/A		A	N	A			

Annual emission limits are 12-month rolling totals. This is pursuant to NSR Permit 2195B-M1R2,

Table 2.1, Note 7.

"-" notation implies emission rates less than or equal to 0.5 tpy.

\* N/A means not applicable.

### **Reporting Requirement**

2.9.6.1 Reports shall be submitted in accordance with conditions 4.1 and 4.2.<sup>(1)</sup>

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<sub>2</sub>, 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 2.11 of this permit.

<sup>(1)</sup> Condition 4.2 refers to submitting a Semi-Annual Monitoring report which LANL submitted on February 9, 2012, Tracking Number SBR20120003.

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

 Yes
 Date report submitted:
 Tracking Number:

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

 Comments:
 Continued on the next page

2.9 Power Plant at Technical Area 3 (TA-3-22) - Continued

Boilers TA-3-22-1, TA-3-22-2, TA-3-22-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition 2.9.2) (tons per year)
NOx	7.22	5.82	13.04	60.2
SO <sub>2</sub>	0.26	0.06	0.32	7.9
TSP	0.97	0.76	1.73	8.4
PM <sub>10</sub>	0.96	0.76	1.72	8.2
СО	4.95	4.01	8.96	41.3
VOC	0.67	0.55	1.22	5.6
HAPs	0.23	0.19	0.42	No Source Limit

Boiler	Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition 2.9.2) (tons per year)
TA-3-22-1	NOx	3.19	3.21	6.40	35.9
TA-3-22-2	NOx	3.84	2.18	6.02	35.9
TA-3-22-3	NOx	0.19	0.42	0.61	35.9

Combustion Turbine TA-3-22 CT-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition 2.9.2) (tons per year)		
NOx	0.50	1.27	1.76	33.2		
SO <sub>2</sub>	0.04	0.09	0.13	1.9		
TSP	0.07	0.17	0.24	2.3		
PM <sub>10</sub>	0.07	0.17	0.24	2.3		
СО	0.10	0.26	0.36	19.8		
VOC	0.02	0.06	0.08	No TPY Limit		
HAPs	0.01	0.03	0.04	No Source Limit		

1.10 Open Burning         2.10.2 Emission Limits         2.10.2 Emission Limits         2.11. The contribution of HAP emissions from open burning shall not cause the exceedance of the corresponding facility-wide HAP 24 tons per year of total facility on the significant activities. Emission estimates of titler pollutants NOX, CO, SO, PM and VOC shall not include fugitive emissions. Emission estimates of HAP shall include a comparison of actual emissions frame outpress thall include a comparison of actual emission frame or courred during the reporting period with the facility-wide allowable emission limits specified in Section 2.11 of this permit.         Marcine Table Comments been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:       Tracking Number:         No       Portede comments and identify any supporting documentation as an attachment.         Comments:       No pen burning activities took place in 2011.	• 0
2.10.2.1 The contribution of HAP emissions from open burning shall not cause the exceedance of the corresponding facility-wide limit listed below:         8 tons per year of an individual facility-wide HAP 24 tons per year of total facility-wide HAPs         2.10.5.1 Reports grequirement         2.10.5.1 Reports shall be submitted in accordance with conditions 4.1.         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 <sub>2</sub> , 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 2.11 of this permit.         Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:       Tracking Number:         Xo       Provide comments and identify any supporting documentation as an attachment.         Comments:       Comments       Comments	
of the corresponding facility-wide limit listed below:         8 tons per year of an individual facility-wide HAP 24 tons per year of total facility-wide HAPs         2.10.5.1 Reporting Requirement         2.10.5.1 Reports shall be submitted in accordance with conditions 4.1.         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 <sub>2</sub> , 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 2.11 of this permit.         Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:       Tracking Number:         X       No       Provide comments and identify any supporting documentation as an attachment.	2.10.2 Emission Limits
At tons per year of total facility-wide HAPs         Reporting Requirement         2.10.5.1 Reports shall be submitted in accordance with conditions 4.1.         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 <sub>2</sub> , 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 2.11 of this permit.         Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:       Tracking Number:         X       No       Provide comments and identify any supporting documentation as an attachment.	
2.10.5.1 Reports shall be submitted in accordance with conditions 4.1.         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 <sub>2</sub> , 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 2.11 of this permit.         Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:       Tracking Number:         X       No       Provide comments and identify any supporting documentation as an attachment.	
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 <sub>2</sub> , 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 2.11 of this permit.         Has this reporting requirement been met during this reporting period with a separate reporting submittal? Answer Yes or No below.         Yes       Date report submitted:         Tracking Number:         X       No         Provide comments and identify any supporting documentation as an attachment.         Comments:	
Yes or No below.       Tracking Number:         Yes       Date report submitted:       Tracking Number:         X       No       Provide comments and identify any supporting documentation as an attachment.         Comments:       Comments:	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 <sub>2</sub> , 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 2.11 of this
X         No         Provide comments and identify any supporting documentation as an attachment.           Comments:         Comments:	
Comments:	Yes Date report submitted: Tracking Number:
Comments:	<b>X</b> No. Provide comments and identify any supporting documentation as an attachment

## 2.11 Facility Wide Emission Limits

2.11.1 Emission Limits

Pollutant	Emission Limit (tons per year)	
Nitrogen Oxides (NO <sub>x</sub> )	245	
Carbon Monoxide (CO)	225	
Volatile Organic Compounds (VOCs)	200	
Sulfur Dioxide (SO <sub>2</sub> )	150	
Particulate Matter (PM)	120	
Hazardous Air Pollutants (HAPs)	24 combined / 8 individual	

#### **Reporting Requirement**

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<sub>2</sub>, 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 2.11 of this permit.

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

Yes

Date report submitted:

**Tracking Number:** 

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

Comments:					
Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	2011 Annual Emissions (tons)	Facility Wide Permit Limits (Condition 2.11.1) (tons per year)	
Nitrogen Oxides	30.3	23.3	53.7	245	
Sulfur Dioxide	1.2	0.3	1.5	150	
Particulate Matter	2.6	2.2	4.8	120	
Carbon Monoxide	22.2	16.1	38.3	225	
Volatile Organic Compounds	5.2	4.5	9.7	200	
Hazardous Air Pollutants	1.6	2.1	4.7	24 combined	
Highest Individual HAP (Hexane)	0.12	0.46	0.58	8 individual	