



COPY

**Environment Safety & Health**

PO Box 1663, MS K491  
 Los Alamos, New Mexico 87545  
 (505)667-4218/Fax (505) 665-3811

Date: **SEP 21 2015**  
 Symbol: ADESH-15-138  
 LA-UR: 15-26874  
 Locates Action No.: N/A

Received

SEP 22 2015

Air Quality Bureau

Compliance Reporting Manager  
 Compliance & Enforcement Section  
 New Mexico Environment Department  
 Air Quality Bureau  
 1301 Siler Road, Building B  
 Santa Fe, New Mexico 87507-3113

Dear Compliance Reporting Manager:

**Subject: Title V Semi-Annual Emissions Report for Permit P100-R1-M3, January 1, 2015 – February 26, 2015 and Permit P100-R2, February 27, 2015 - June 30, 2015  
 AI No. 856 – Los Alamos National Laboratory (LANL)**

Enclosed is Los Alamos National Laboratory's (LANL) Semi-Annual Emissions report for Permit P100-R1-M3 for the period January 1, 2015 through February 26, 2015 and for Permit P100-R2 for the period February 27, 2015 through June 30, 2015. This report is required by permit condition A109 B and is submitted within 90 days from the end of the reporting period as required by that condition.

The semi-annual emissions report includes actual emissions from permitted sources included in LANL's Operating Permit. In this report, the actual emissions are listed along with the emission limits for ease in comparing and verifying compliance. No annual emission limits were exceeded during this reporting period.

Additionally, this report includes emissions from LANL's stationary standby generators in order to verify compliance with the previous operating permit which was in effect until February 26, 2015.

Please contact Steven L. Story at (505) 665-2169 or [story@lanl.gov](mailto:story@lanl.gov) of the Environmental Compliance Programs (ENV-CP) if you have questions.

Sincerely,

Michael T. Brandt, DrPH, CIH  
 Associate Director  
 Environment, Safety & Health



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Sincerely,

Michael T. Brandt, DrPH, CIH  
Associate Director  
Environment, Safety & Health

MTB:SLS:WW/lm

Enclosure: 1. Title V Semi-Annual Emissions Report for Permit P100-R1-M3, Jan. 1, 2015 – Feb. 26, 2015 and Permit P100-R2, Feb 27, 2015 – Jun 30, 2015

Cy: Hai Shen, EM-SG, (E-File)  
Kirsten Laskey, LASO-SUP, (E-File)  
Paul David Henry, DIR, (E-File)  
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ENV-CP Title V Emissions Report File, J978  
[Env-correspondence@lanl.gov](mailto:Env-correspondence@lanl.gov)

# Title V Semi-Annual Emission Report for Permit P100-R1-M3

January 1, 2015 – February 26, 2015

## and Permit P100-R2

February 27, 2015 – June 30, 2015

### Identifying Information

Source Name: Los Alamos National Laboratory County: Los Alamos

Source Address:

City: Los Alamos State: NM Zip Code: 87545

Responsible Official: Michael T. Brandt Ph No. (505) 667-4218 Fax No. (505) 665-3811

Technical Contact: Steven L. Story Ph No. (505) 665-2169 Fax No. (505) 665-8858

Principal Company Product or Business: National Security and Nuclear Weapons Research Primary SIC Code: 8733

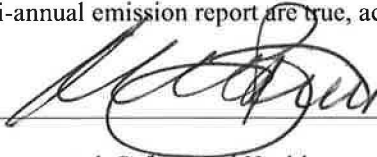
Permit No. P100-R1-M3, Jan 1, 2015 – Feb. 26, 2015 {IDEA/Tempo ID No. 856} Permit Issued Date: April 26, 2013

Permit No. P100-R2, Feb. 27, 2015 – June 30, 2015 {IDEA/Tempo ID No. 856} Permit Issued Date: Feb. 27, 2015

### Certification of Truth, Accuracy, and Completeness

I, Michael T. Brandt certify that, based on information and belief formed after reasonable inquiry, the statements and information in the attached semi-annual emission report are true, accurate, and complete.

Signature



Date:

9/21/15

Title: Associate Director Environmental, Safety, and Health

# **ENCLOSURE 1**

**Title V Semi-Annual Emissions Report for Permits  
P100-R1-M3**

**January 1, 2015 – February 26, 2015  
and**

**P100-R2  
February 27, 2015 – June 30, 2015**

**ADESH-15-138**

**LA-UR-15-26874**

**Date: SEP 21 2015**

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**Title V Semi-Annual Emissions Report**  
**Permit P100-R1-M3, January 1, 2015 - February 26, 2015**  
**Permit P100-R2, February 27, 2015 - June 30, 2015**

**Emission Reporting Requirements**

**A109 Facility: Reporting Schedules**

- A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1<sup>st</sup> and July 1<sup>st</sup> of each year.
- B. A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.



## Specific Emissions Reports:

### A600 Asphalt Production

A602 Emission Limits - Asphalt Production

Unit No.	Nox tpy	SO <sub>2</sub> tpy	PM tpy	CO tpy	VOC tpy
TA-60-BDM	50.0	50.0	50.0	30.0	50.0

### Reporting Requirement

A607 F The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

☒

No

Provide comments and identify any supporting documentation as an attachment.

Comments:

Asphalt Plant TA-60-BDM	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A602 A) (tons per year)
NO <sub>x</sub>	0.001			50.0
SO <sub>2</sub>	0.000			50.0
PM	0.001			50.0
CO	0.042			30.0
VOC	0.001			50.0
HAPs	0.001			No Source Permit Limit

## A700 Beryllium Activities

### A702 Emission Limits - Beryllium Activities

Source	Beryllium Particulate Matter	Aluminum Particulate Matter
Sigma Facility TA-3-66	10 gm/24 hr	N/A
Beryllium Technology Facility TA-3-141	3.5 gm/yr	N/A
Target Fabrication Facility TA-35-213	0.36 gm/yr	N/A
Plutonium Facility TA-55-PF-4 Machining Operation	2.99 gm/yr	2.99 gm/yr
Plutonium Facility TA-55-PF-4 Foundry Operation	8.73X10 <sup>-04</sup> gm/yr	8.73X10 <sup>-04</sup> gm/yr

### Reporting Requirement

A707 D The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

☒

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

Comments: Continued on the next page



## A700 Beryllium Activities - continued

### Comments:

Source	Pollutant	January - June Emissions	July - December Emissions	Annual Emissions	Permit Limits (Condition A702 A)
Sigma Facility TA-3-66 <sup>(1)</sup>	Beryllium (grams)	9.80E-07			10 gm/24 hr
Beryllium Test Facility TA-3-141 <sup>(2)</sup>	Beryllium (grams)	< 0.0033			3.5 gm/yr
Target Fabrication Facility TA-35-213 <sup>(3)</sup>	Beryllium (grams)	< 0.00944			0.36 gm/yr
Plutonium Facility TA-55-PF4 Machining Operation <sup>(4)</sup>	Beryllium (grams)	< 1.495			2.99 gm/yr
	Aluminum (grams)	< 1.495			2.99 gm/yr
Plutonium Facility TA-55-PF4 Foundry Operation <sup>(5)</sup>	Beryllium (grams)	0			8.73 x 10 <sup>-4</sup> gm/yr
	Aluminum (grams)	0			8.73 x 10 <sup>-4</sup> gm/yr
<b>Beryllium Total<sup>(5)</sup> (tons) =</b>		<b>&lt; 1.66E-06</b>			
<b>Aluminum Total (tons) =</b>		<b>&lt; 1.65E-06</b>			

**Notes:** (1) Emissions from the Sigma Facility are from electroplating, chemical milling, and metallographic operations. (2) Emission values shown for the Beryllium Test Facility are from actual stack emission measurements which are submitted to NMED quarterly. (3) 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. (4) 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. (5) The Plutonium Facility foundry operations did not operate during the first six months of 2015.

## A800 External Combustion

### A802 Emission Limits - External Combustion

Unit No.	NOx tpy	CO tpy	VOC tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy
All Boilers	80.0	80.0	50.0	50.0	50.0	50.0

Unit No.	NOx tpy	CO tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy
RLUOB-BHW-1 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
RLUOB-BHW-2 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
RLUOB-BHW-3 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
RLUOB-BHW-4 (gas)	2.9	4.8	0.3	0.4	0.4	0.4
RLUOB Boilers (oil)	2.9	0.9	10.4	0.5	0.3	0.3
RLUOB Boilers Total	14.5	20.1	11.6	2.1	1.9	1.9

### Reporting Requirement

A807 B The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

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

#### Comments:

Boilers	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 A) (tons per year)
NO <sub>x</sub>	12.18			80
SO <sub>2</sub>	0.07			50
TSP	0.98			50
PM-10	0.98			50
CO	9.80			80
VOCs	0.70			50
HAPs	0.23			No Source Limit

**Note:** The emissions shown in this table includes all exempt, non-exempt, metered, and non-metered boilers at LANL except for the TA-3-22 Power Plant boilers. The Power Plant boilers can be found under Section A1300 of this report.

Continued on the next page

# A800 External Combustion - continued

RLUOB-BHW-1 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.008			2.9
SO <sub>2</sub>	0.000			0.3
TSP	0.001			0.4
PM-10	0.001			0.4
PM-2.5	0.001			0.4
CO	0.011			4.8
VOCs	0.007			No Source Limit
HAPs	0.001			No Source Limit

RLUOB-BHW-2 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.008			2.9
SO <sub>2</sub>	0.000			0.3
TSP	0.001			0.4
PM-10	0.001			0.4
PM-2.5	0.001			0.4
CO	0.011			4.8
VOCs	0.007			No Source Limit
HAPs	0.001			No Source Limit

RLUOB-BHW-3 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.008			2.9
SO <sub>2</sub>	0.000			0.3
TSP	0.001			0.4
PM-10	0.001			0.4
PM-2.5	0.001			0.4
CO	0.011			4.8
VOCs	0.007			No Source Limit
HAPs	0.001			No Source Limit

RLUOB-BHW-4 (Gas)	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A802 B) (tons per year)
NOx	0.000			2.9
SO <sub>2</sub>	0.000			0.3
TSP	0.000			0.4
PM-10	0.000			0.4
PM-2.5	0.000			0.4
CO	0.000			4.8
VOCs	0.000			No Source Limit
HAPs	0.000			No Source Limit

Note: The RLUOB-BHW-4 boiler has not been installed.

Continued on the next page.

# **A800 External Combustion - continued**

<b>RLUOB Boilers Totals (Oil)</b>	<b>January - June Emissions (tons)</b>	<b>July - December Emissions (tons)</b>	<b>Annual Emissions (tons)</b>	<b>Permit Limits (Condition A802 B) (tons per year)</b>
NOx	0.000			2.9
SO <sub>2</sub>	0.000			10.4
TSP	0.000			0.5
PM-10	0.000			0.3
PM-2.5	0.000			0.3
CO	0.000			0.9
VOCs	0.000			No Source Limit
HAPs	0.000			No Source Limit

**Note:** The RLUOB boilers did not operate on fuel oil during the first 6 months of 2015.

<b>RLUOB Boilers Totals (Gas and Oil)</b>	<b>January - June Emissions (tons)</b>			<b>Permit Limits (Condition A802 B) (tons per year)</b>
NOx	0.025			14.5
SO <sub>2</sub>	0.000			11.6
TSP	0.004			2.1
PM-10	0.004			1.9
PM-2.5	0.004			1.9
CO	0.032			20.1
VOCs	0.021			No Source Limit
HAPs	0.002			No Source Limit



## A900 Chemical Usage

### A902 Emission Limits - Chemical Usage

Unit No.	VOC/HAPs tpy
LANL-FW-CHEM	3.75 <sup>1</sup>
CMRR-CHEM	3.75 <sup>1</sup>

<sup>1</sup> The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

### Reporting Requirement

A907 A The permittee shall submit reports described in Section A109 and in accordance with B110. With respect to individual HAPs, reports shall include any HAP emitted in quantity greater than 0.5 tons per year.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NOx, CO, SO2, VOC, TSP, PM10, and PM2.5 shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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

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Yes

Date report submitted:

Tracking Number:

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

Comments:

Chemical Usage LANL-FW-CHEM		January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A902 B)
VOCs		5.72			Source limits refer to facility-wide limits.
HAPs		2.35			
Individual HAPs greater than 0.5 tons	Glycol Ethers	0.72			
	Hydrochloric Acid	0.67			

Chemical Usage CMRR-CHEM		January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A902 B)
HAPs		0			3.75
VOCs		0			3.75
TAPs		0			No Source Limit

## A1000 Degreasers

### A1002 Emission Limits - Degreasers

Unit No.	VOC/HAPs tpy
TA-55-DG-1	-- <sup>1</sup>

<sup>1</sup> The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in Table 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs. Any VHAPs that are also defined as a VOC shall be included in the VOC total.

### Reporting Requirement

A1007 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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

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Yes

Date report submitted:

Tracking Number:

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

#### Comments:

Degreaser TA-55-DG-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1002 A) (tons per year)
VOCs	0.003			Source limits refer to facility-wide limits.
HAPs	0.003			



## A1100 Internal Combustion

### A1102 Emission Limits - Internal Combustion

Unit No.	NO <sub>x</sub> tpy	CO tpy	VOC tpy	SO <sub>2</sub> tpy	TSP tpy	PM <sub>10</sub> tpy
TA-33-G-1P	18.1	15.2	0.3	2.5	0.6	0.6
TA-33-G-2	0.21	0.1	-- <sup>1</sup>	--	--	--
TA-33-G-3	0.21	0.1	-- <sup>1</sup>	--	--	--
TA-33-G-4	2.33	1.4	0.2	0.16	--	--

<sup>1</sup> The VOC emissions from this source category are included in the facility-wide allowable emissions limit established in condition 106.B: 200 tpy VOC, 8.0 tpy per individual HAP, and 24.0 tpy of combined total HAPs.

## Reporting Requirement

A107 A The permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart A as required in 60.4218 and in accordance with Section B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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

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Yes

Date report submitted:

Tracking Number:

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

### Comments:

Generator TA-33-G-1P	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NO <sub>x</sub>	0.015			18.1
SO <sub>2</sub>	0.000			2.5
TSP	0.000			0.6
PM <sub>10</sub>	0.000			0.6
CO	0.002			15.2
VOC	0.001			0.3
HAPs	4.36E-06			No Source Limit

Note: The TA-33-G-1P generator only operated for 1.5 hours during the first six months of 2015.

Generator TA-33-G-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NO <sub>x</sub>	0.010			0.21
SO <sub>2</sub>	0.001			Not Required
TSP	0.001			Not Required
PM <sub>10</sub>	0.001			Not Required
CO	0.003			0.1
VOC	0.001			Not Required
HAPs	3.34E-06			No Source Limit

Continued on the next page.

# A1100 Internal Combustion- continued

Generator TA-33-G-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NOx	0.000			0.21
SO <sub>2</sub>	0.000			Not Required
TSP	0.000			Not Required
PM <sub>10</sub>	0.000			Not Required
CO	0.000			0.1
VOC	0.000			Not Required
HAPs	1.35E-08			No Source Limit

Note: The TA-33-G-3 generator only operated for a 0.1 hours during the first six months of 2015.

Generator TA-33-G-4	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1102 A) (tons per year)
NOx	0.647			2.33
SO <sub>2</sub>	0.044			0.16
TSP	0.044			Not Required
PM <sub>10</sub>	0.044			Not Required
CO	0.390			1.4
VOC	0.051			0.2
HAPs	2.10E-04			No Source Limit

Generator RLUOB-GEN-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.217			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.006			
TSP	0.013			
PM <sub>10</sub>	0.011			
CO	0.268			
VOC	0.031			
HAPs	5.63E-05			

Generator RLUOB-GEN-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.074			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.002			
TSP	0.004			
PM <sub>10</sub>	0.004			
CO	0.092			
VOC	0.010			
HAPs	1.92E-05			

Continued on the next page.

# **A1100 Internal Combustion- continued**

Generator RLUOB-GEN-3	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.202			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.005			
TSP	0.012			
PM <sub>10</sub>	0.010			
CO	0.250			
VOC	0.028			
HAPs	5.24E-05			

Generator TA-48-GEN-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.000			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.000			
TSP	0.000			
PM <sub>10</sub>	0.000			
CO	0.000			
VOC	0.000			
HAPs	0.00E+00			

**Note:** The TA-48-GEN-1 generator did not operate during the first six months of 2015.

Generator TA-55-GEN-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.000			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.000			
TSP	0.000			
PM <sub>10</sub>	0.000			
CO	0.000			
VOC	0.000			
HAPs	0.00E+00			

**Note:** The TA-55-GEN-1 generator did not operate during the first six months of 2015.

Generator TA-55-GEN-2	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits
NOx	0.000			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.000			
TSP	0.000			
PM <sub>10</sub>	0.000			
CO	0.000			
VOC	0.000			
HAPs	0.00E+00			

**Note:** The TA-55-GEN-2 generator did not operate during the first six months of 2015.

Continued on the next page.



# **A1100 Internal Combustion- continued**

<b>Generator TA-55-GEN-3</b>	<b>January - June Emissions (tons)</b>	<b>July - December Emissions (tons)</b>	<b>Annual Emissions (tons)</b>	<b>Permit Limits</b>
NO <sub>x</sub>	0.148			No Source Specific Emission Limits for the CMRR Generators
SO <sub>2</sub>	0.003			
TSP	0.005			
PM <sub>10</sub>	0.005			
CO	0.032			
VOC	0.007			
HAPs	2.70E-05			

<b>Stationary Standby Generators</b>	<b>January - June Emissions (tons)</b>	<b>July - December Emissions (tons)</b>	<b>Annual Emissions (tons)</b>	<b>Permit Limits</b>
NO <sub>x</sub>	2.03			No Source Specific Emission Limits for Standby Generators
SO <sub>2</sub>	0.10			
TSP	0.11			
PM <sub>10</sub>	0.11			
CO	0.46			
VOC	0.11			
HAPs	7.46E-04			

**Note:** The P100-R2 permit does not include this source. However, the standby stationary generators are included in this emissions report because it was a source in the previous permit (P100-R1-M3) which was in effect until February 27, 2015. The emissions from this source will not be added to the facility wide totals.

## A1200 Data Disintegrator

### A1202 Emission Limits - Data Disintegrator

Unit No.	TSP tpy	PM10 tpy
TA-52-11	9.9	9.9

## Reporting Requirement

A1207 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NOx, CO, SO2, VOC, TSP, PM10, and PM2.5 shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

☒

No

Provide comments and identify any supporting documentation as an attachment.

Comments:

Data Disintegrator TA-52-11	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limits (Condition A1202 A) (tons per year)
TSP	0.03			9.9
PM10	0.03			9.9

## A1300 TA-3 Power Plant

A1302 Emission Limits - TA-3 Power Plant

### All TA-3 Power Plant Boilers Combined (TA-33-1, TA-33-2, TA-33-3)

NOx tpy	CO tpy	VOC tpy	SOx tpy	TSP tpy	PM <sub>10</sub> tpy	PM2.5 tpy
31.5	21.5	2.8	4.9	4.7	4.4	4.2

### TA-3 Power Plant Turbine (TA-3-22-CT-1)

NOx tpy	CO tpy	VOC tpy	SOx tpy	TSP tpy	PM <sub>10</sub> tpy	PM2.5 tpy
59.4	72.3	1.5	4.2	4.8	4.8	4.8

## Reporting Requirement

A1307 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NOx, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

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

Comments:

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 A1302 A) (tons per year)
NOx	6.11			31.5
SO <sub>2</sub>	0.06			4.9
TSP	0.80			4.7
PM <sub>10</sub>	0.80			4.4
PM <sub>2.5</sub>	0.80			4.2
CO	4.21			21.5
VOC	0.58			2.8
HAPs	0.20			No Source Limit

Combustion Turbine TA-3-22 CT-1	January - June Emissions (tons)	July - December Emissions (tons)	Annual Emissions (tons)	Permit Limit (Condition A1302 A) (tons per year)
NOx	0.39			59.4
SOx	0.03			4.2
TSP	0.05			4.8
PM <sub>10</sub>	0.05			4.8
PM <sub>2.5</sub>	0.05			4.8
CO	0.08			72.3
VOC	0.02			1.5
HAPs	1.07E-02			No Source Limit



## A1400 Open Burning

### A1402 Emission Limits - Open Burning

Unit No.	Individual HAP <sup>1</sup> (tpy)	Total HAPs <sup>1</sup> (tpy)
Facility-Wide Open Burning	8.0	24.0

<sup>1</sup> Individual and Total HAPs emitted by Open Burning are included in facility-wide HAP emission limits at Table 106.B.

## Reporting Requirement

A1407 A The permittee shall submit reports described in Section A109 and in accordance with B110.

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:

☒

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

### Comments:

No open burning activities took place during the first six months of 2015.

**A102 Facility Wide Emission Limits****Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility**

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	245.0
Carbon Monoxide (CO)	225.0
Volatile Organic Carbons (VOC)	200.0
Sulfur Dioxide (SO <sub>2</sub> )	150.0
Total Particulate Matter (TSP)	120.0
Particulate Matter less than 10 microns (PM <sub>10</sub> )	120.0
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> )	120.0

**Table 102.B: Total Potential HAPs that exceed 1.0 tons per year**

Pollutant	Emissions (tons per year)
Individual HAP	8.0
Total HAPs	24.0

**Reporting Requirement**

A109 B A Semi-Annual Report of actual emissions from all permitted sources unless otherwise specified in this permit is due within 90 days following the end of every 6-month reporting period as defined at Condition A109.A. Emission estimates of criteria pollutants NOx, CO, SO<sub>2</sub>, VOC, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> shall not include fugitive emissions. Emission estimates of HAPs shall include fugitive emissions. Emission estimates shall not include Insignificant or Trivial Activities, except that facility-wide emissions from all natural gas combustion sources shall be estimated. The reports shall include a comparison of actual emissions that occurred during the reporting period with the facility-wide allowable emission limits at Table 106.B.

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:**☒**No Provide comments and identify any supporting documentation as an attachment.****Comments:**

Pollutant	January - June Emissions (tons)	July - December Emissions (tons)	2015 Annual Emissions (tons)	Facility Wide Permit Limits (Condition A102) (tons per year)
Nitrogen Oxides	20.0			245
Carbon Monoxide	15.2			225
Volatile Organic Carbons	7.1			200
Sulfur Dioxide	0.2			150
Total Particulate Matter	1.9			120
Particulate Matter less than 10 microns	1.9			120
Particulate Matter less than 2.5 microns	0.9			120
Hazardous Air Pollutants	2.8			24