

Calendar Year 2016 Stationary Source Emissions Inventory

**United States Department of Energy
Sandia Field Office**

**Sandia National Laboratories
New Mexico**

Sandia National Laboratories is a multi-mission laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.



This Page Intentionally Left Blank

Table of Contents

Acronyms and Abbreviations	iii
1.0 Introduction	1
2.0 Emission Summaries	1
2.1 Permit # 144-M1 (Building 6583)	1
2.2 Permit # 374-M2 (Building 870)	1
2.3 Permit # 402 (Building 862)	2
2.4 Permit # 415-M2-RV1 (Building 6920)	2
2.5 Registration # 547-RV1 (Building 905)	3
2.6 Permit # 924-RV1 (Building 702)	3
2.7 Permit # 925-M2 (Generator at Building 701)	3
2.8 Registration #1406-M1-RV1 (Building 700)	4
2.9 Permit # 1712-RV1 (Building 6539)	4
2.10 Permit # 1725-M1 (Building 518)	5
2.11 Permit # 1820-M1 (Building 858)	5
2.12 Registration # 1823-RV1 (Building 899A)	6
2.13 Permit # 1828 (Southeast Corner of Technical Area-I Generator)	6
2.14 Registration #1888-RV1 (Building 878)	6
2.15 Permit #1900 (Building 963)	7
2.16 Permit #1901-M1 (Site Wide-Chemicals)	7
2.17 Registration #1902-RV1 (Building 865)	7
2.18 Permit #1930-RV1 (Building 962)	8
2.19 Permit #2097-M2 (Building 833)	8
2.20 Registration #2109 (Building 802)	9
2.21 Registration #2110 (Building 804)	9
2.22 Registration #2111 (Building 810)	9
2.23 Registration #2112 (Building 823)	10
2.24 Registration #2113 (Building 840)	10
2.25 Registration #2114 (Building 857)	10
2.26 Registration #2115 (Building 860)	11
2.27 Permit #2116-M1 (Building 880)	11
2.28 Registration #2117 (Building 890)	11
2.29 Registration #2118 (Building 887)	12
2.30 Registration #2119 (Building 891)	12
2.31 Registration #2120 (Building 892)	12
2.32 Registration #2121 (Building 894)	13
2.33 Registration #2122 (Building 897)	13
2.34 Registration #2169 (Building 960)	13
2.35 Registration #2170 (Building 895)	14
2.36 Registration #2171 (Building 800)	14
2.37 Registration #2172-RV1 (Building 6585)	14
2.38 Registration #2173 (Building 6597)	15
2.39 Registration #2174-RV1 (Building 6580)	15
2.40 Registration #2175 (Building 981)	15
2.41 Registration #3111 (Building 983)	16
2.42 Permit #3216-M1 (Burn Site)	16

Acronyms and Abbreviations

CO	Carbon Monoxide
COA	City of Albuquerque
CY	Calendar Year
FLAME	Fire Laboratory for Accreditation of Modeling by Experimentation
HAP	Hazardous Air Pollutants
hp	Horsepower
hr	hour
lb	pound
MMBtu	million British Thermal Units
NMHC	Non-Methane Hydrocarbons
NO _x	Nitrous Oxides
PM _{2.5}	Particulate Matter less than 2.5 microns in size
PM ₁₀	Particulate Matter less than 10 microns in size
SO _x	Sulfur Oxides
tpy	tons per year
TSP	Total Suspended Particulate
VOC	Volatile Organic Compounds
XTF	Cross flow Fire Test Facility
yr	year

1.0 Introduction

The City of Albuquerque (COA) Environmental Health Department Air Quality Program has issued stationary source permits and registrations the Department of Energy/Sandia Field Office for operations at the Sandia National Laboratories/New Mexico. This emission inventory report meets the annual reporting compliance requirements for calendar year (CY) 2016 as required by the COA.

2.0 Emission Summaries

Stationary source permit and registration emissions are summarized in the following sections.

2.1 Permit # 144-M1 (Building 6583)

Permit #144-M1 CY2016 Emissions

Source Description	Operating Hours	TSP Emission Total
Security Document Disintegrator 800 lb/hr	408	1.02 tpy

tpy – tons per year

TSP – Total Suspended Particulate

lb/hr – pound per hour

2.2 Permit # 374-M2 (Building 870)

Permit #374-M2 CY2016 Boiler Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
6 Natural Gas Boilers 2 MMBtu/hr	NO _x	4.0E-02	1.77E-01
	CO	6.8E-02	2.98E-01
	PM ₁₀	6.2E-03	2.70E-02
	SO _x	1.5E-03	6.38E-03
	VOC	4.5E-03	1.95E-02

SO_x – Sulfur Oxides

NO_x – Nitrogen Oxides

PM – particulate matter

VOC – Volatile Organic Compounds

CO – Carbon Monoxide

MMBtu – million British thermal units

Permit #374-M2 CY 2016 Generator Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 576 hp	6	NO _x	1.78E+01	5.33E-02
		CO	3.83E+00	1.15E-02
		PM ₁₀	1.25E+00	3.75E-03
		SO _x	1.17E+00	3.51E-03
		VOC	1.41E+00	4.23E-03

hp – horsepower

2.3 Permit # 402 (Building 862)

Permit #402 CY2016 Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
4 Diesel-Fired Generators 805 hp each	Generator #1 – 14.9	NO _x	See T 2.3b	5.7E-01
	Generator #2 – 16.4	CO	See T 2.3b	1.5E-01
	Generator #3 – 15.2	PM ₁₀	1.3E+00	1.0E-02
	Generator #4 – 16.7	SO _x	9.1E+00	7.2E-02
		VOC	2.0E+00	1.6E-02

Permit #402 Testing Results for NO_x and CO

Criteria Pollutant	Testing Emissions			
	Generator #1 Average	Generator #2 Average	Generator #3 Average	Generator #4 Average
	lb/hr	lb/hr	lb/hr	lb/hr
NO _x	11.6	12.1	11.8	10.9
CO	1.4	1.0	1.0	1.3

2.4 Permit # 415-M2-RV1 (Building 6920)

Permit #415-M2-RV1 CY2016 Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 192 hp	2.9	NO _x	5.9E+00	8.6E-03
		CO	1.3E+00	1.9E-03
		PM ₁₀	4.2E-01	6.1E-04
		SO _x	3.9E-01	5.7E-04
		VOC	4.7E-01	6.9E-04

2.5 Registration # 547-RV1 (Building 905)

Registration #547-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 4.37 MMBtu/hr	NO _x	6.3E-02	2.8E-01
	CO	5.3E-02	2.3E-01
	PM ₁₀	4.8E-03	2.1E-02
	SO _x	3.8E-04	1.7E-03
	VOC	3.5E-03	1.5E-02

2.6 Permit # 924-RV1 (Building 702)

Permit #924-RV1 CY2016 Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 896 hp	8	NO _x	2.2E+01	8.6E-02
		CO	4.9E+00	2.0E-02
		PM ₁₀	6.3E-01	2.5E-03
		SO _x	7.2E+00	2.9E-02
		VOC	6.3E-01	2.5E-03

2.7 Permit # 925-M2 (Generator at Building 701)

Permit #925-M2 CY2016 Generator Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 896 hp	7	NO _x	2.2E+01	7.5E-02
		CO	4.9E+00	1.7E-02
		PM ₁₀	6.3E-01	2.2E-03
		SO _x	7.2E+00	2.5E-02
		VOC	6.3E-01	2.2E-03

Permit #925-M2 CY2016 Boiler Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
5 Natural Gas Boilers 2 MMBtu/hr	NO _x	1.2E-01	5.1E-01
	CO	9.7E-02	4.3E-01
	PM ₁₀	8.8E-03	3.9E-02
	SO _x	2.1E-03	9.1E-03
	VOC	6.4E-03	2.8E-02

2.8 Registration #1406-M1-RV1 (Building 700)

Registration #1406-M1-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.8 MMBtu/hr	NO _x	1.6E-02	7.00E-02
	CO	2.7E-02	1.18E-01
	PM ₁₀	2.4E-03	1.06E-02
	SO _x	1.9E-04	8.40E-04
	VOC	1.8E-03	7.7E-03

2.9 Permit # 1712-RV1 (Building 6539)

Permit #1712-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
FLAME & XTF test cells and 2 Natural Gas Boilers 1.8 MMBtu/hr	NO _x	1.1E-02	4.8E-02
	CO	5.4E-02	2.4E-01
	PM ₁₀	4.2E-02	1.9E-01
	SO _x	2.3E-03	9.9E-03
	VOC	7.7E-02	1.31E-01

Flame – Fire Laboratory for Accreditation of Modeling by Experimentation
XTF – Cross Flow Fire Test Facility

2.10 Permit # 1725-M1 (Building 518)

Permit #1725-M1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lbs/hr	tpy
2 Natural Gas Boilers 6 MMBtu/hr each & 7 Natural Gas Humidifiers 0.8 MMBtu/hr each	NO _x	8.1E-02	3.6E-01
	CO	6.8E-02	3.0E-01
	PM ₁₀	6.2E-03	2.7E-02
	SO _x	4.9E-04	2.1E-03
	VOC	4.5E-03	2.0E-02
Diesel-Fired Generator 680 hp 9 hr/yr	NO _x	1.6E+01	7.3E-02
	CO	3.7E+00	1.7E-02
	PM ₁₀	4.8E-01	2.1E-03
	SO _x	5.5E+00	2.5E-02
	VOC	4.8E-01	2.2E-03

2.11 Permit # 1820-M1 (Building 858)

Permit #1820-M1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 20.412 MMBtu/hr 1 Natural Gas Boiler 10.206 MMBtu/hr 8 Natural Gas Boilers 2 MMBtu/hr	NO _x	3.1E-01	1.4E+00
	CO	5.2E-01	2.3E+00
	PM ₁₀	4.7E-02	2.1E-01
	SO _x	1.1E-02	4.9E-02
	VOC	3.4E-02	1.5E-01
Diesel-Fired Generator 1480 hp	Operating Hours: 11	NO _x	3.3E+01
		CO	8.8E+00
		PM ₁₀	3.2E+00
		SO _x	3.0E+00
		VOC	3.7E+00
Diesel-Fired Generator 1877 hp	Operating Hours: 10	NO _x	4.2E+01
		CO	1.1E+01
		PM ₁₀	4.1E+00
		SO _x	3.8E+00
		VOC	4.7E+00

2.12 Registration # 1823-RV1 (Building 899A)

Registration #1823-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 8.17 MMBtu/hr And 1 Natural Gas Boiler 3.68 MMBtu/hr	NO _x	6.8E-02	3.0E-01
	CO	5.7E-02	2.5E-01
	PM ₁₀	5.2E-03	2.3E-02
	SO _x	4.1E-04	1.8E-03
	VOC	3.8E-03	1.6E-02

2.13 Permit # 1828 (Southeast Corner of Technical Area-I Generator)

Permit #1828 CY2016 Emissions

Source Description	Emissions			
	Operating Hours	Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 750 hp	28.7	NO _x	1.8E+01	2.6E-01
		CO	4.1E+00	5.9E-02
		PM ₁₀	5.3E-01	7.5E-03
		SO _x	6.1E+00	8.7E-02
		VOC	5.3E-01	7.6E-03

2.14 Registration #1888-RV1 (Building 878)

Registration #1888-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
13 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.3E-01	1.0E+00
	CO	2.0E-01	8.6E-01
	PM ₁₀	1.8E-02	7.7E-02
	SO _x	1.4E-03	6.1E-03
	VOC	1.3E-02	5.6E-02

2.15 Permit #1900 (Building 963)

Permit #1900 CY2016 Emissions

Source Description	Emissions			
	Operating Hours	Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 380 hp	13.2	NMHC + NO _x	2.5E+00	1.7E-02
		CO	2.2E+00	1.4E-02
		PM ₁₀	1.1E-01	7.5E-04
		SO _x	8.0E-01	5.3E-03

NMHC – Non-Methane Hydrocarbons

2.16 Permit #1901-M1 (Site Wide-Chemicals)

Permit #1901-M1 CY2016 Emissions

Source Description	Emissions	
	Pollutant	tpy
Chemical Exhaust	HAP	9.5
	VOC	15

2.17 Registration #1902-RV1 (Building 865)

Registration #1902-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 0.28 MMBtu/hr	NO _x	2.68E-02	1.17E-01
	CO	2.25E-02	9.86E-02
2 Natural Gas Boilers 1.3 MMBtu/hr	PM ₁₀	2.04E-03	8.93E-03
	SO _x	1.61E-04	7.05E-04
	VOC	1.47E-03	6.46E-03

2.18 Permit #1930-RV1 (Building 962)

Registration #1930-RV1 CY2016 Generator Emissions

Source Description	Emissions			
	Operating Hours	Criteria Pollutant	lb/hr	tpy
Diesel-Fired Generator 99 hp	2.1	NO _x	1.16E+00	1.21E-03
		CO	8.08E-01	8.49E-04
		PM ₁₀	6.55E-02	6.88E-05
		SO _x	2.03E-01	2.13E-04
		VOC	6.81E-02	7.15E-05

Registration #1930-RV1 CY2016 Boiler Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
4 Natural Gas Boilers 2 MMBtu/hr	NO _x	4.7E-03	2.1E-02
	CO	8.0E-03	3.5E-02
	PM ₁₀	7.2E-04	3.2E-03
	SO _x	1.7E-04	7.5E-04
	VOC	5.2E-04	2.3E-03

2.19 Permit #2097-M2 (Building 833)

Registration #2097-M2 CY2016 Emissions

Source Description	Emissions			
	Operating Hours	Criteria Pollutant	lb/yr	tpy
Diesel-Fired Generator 335 hp	1	NO _x	2.2E-01	1.1E-04
		CO	1.9E+00	9.6E-04
		SO _x	6.9E-01	3.4E-04
		NMHC	1.0E-01	5.2E-05
		PM ₁₀	7.4E-03	3.7E-06

2.20 Registration #2109 (Building 802)

Registration #2109 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.3E-02	9.9E-02
	CO	3.8E-02	1.7E-01
	PM ₁₀	3.4E-03	1.5E-02
	SO _x	8.2E-04	3.6E-03
	VOC	2.5E-03	1.1E-02

2.21 Registration #2110 (Building 804)

Registration #2110 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
4 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.3E-02	1.0E-01
	CO	3.9E-02	1.7E-01
	PM ₁₀	3.5E-03	1.5E-02
	SO _x	8.3E-04	3.6E-03
	VOC	2.5E-03	1.1E-02

2.22 Registration #2111 (Building 810)

Registration #2111 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	1.6E-02	7.0E-02
	CO	2.7E-02	1.2E-01
	PM ₁₀	2.4E-03	1.1E-02
	SO _x	5.8E-04	2.5E-03
	VOC	1.8E-03	7.7E-03

2.23 Registration #2112 (Building 823)

Registration #2112 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.3E-02	1.0E-01
	CO	3.9E-02	1.7E-01
	PM ₁₀	3.5E-03	1.5E-02
	SO _x	8.3E-04	3.7E-03
	VOC	2.5E-03	1.1E-02

2.24 Registration #2113 (Building 840)

Registration #2113 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
4 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.2E-02	9.8E-02
	CO	3.8E-02	1.6E-01
	PM ₁₀	3.4E-03	1.5E-02
	SO _x	8.1E-04	3.5E-03
	VOC	2.5E-03	1.1E-02

2.25 Registration #2114 (Building 857)

Registration #2114 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.3 MMBtu/hr	NO _x	1.3E-02	5.9E-02
	CO	2.3E-02	9.9E-02
	PM ₁₀	2.0E-03	9.0E-03
2 Natural Gas Boilers 1.001 MMBtu/hr	SO _x	4.8E-04	2.1E-03
	VOC	1.5E-03	6.5E-03

2.26 Registration #2115 (Building 860)

Registration #2115 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.3 MMBtu/hr	NO _x	1.0E-02	4.4E-02
	CO	1.7E-02	7.4E-02
	PM ₁₀	1.5E-03	6.7E-03
	SO _x	3.6E-04	1.6E-03
	VOC	1.1E-03	4.8E-03

2.27 Permit #2116-M1 (Building 880)

Permit #2116-M1 CY2016 Emissions

Source Description	Operating Hours	Emissions		
		Criteria Pollutant	lb/hr	tpy
Diesel Fired Generator 2922 hp	10.4	NO _x	3.05E+01	1.59E-01
		CO	1.68E+01	8.75E-02
		PM ₁₀	9.66E-01	5.02E-03
		SO _x	3.58E-03	1.86E-05
		VOC	4.00E-01	2.08E-03

2.28 Registration #2117 (Building 890)

Registration #2117 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.0E-02	8.8E-02
	CO	3.4E-02	1.5E-01
	PM ₁₀	3.1E-03	1.3E-02
	SO _x	7.2E-04	3.2E-03
	VOC	2.2E-03	9.7E-03

2.29 Registration #2118 (Building 887)

Registration #2118 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	1.3E-02	5.6E-02
	CO	2.1E-02	9.3E-02
	PM ₁₀	1.9E-03	8.4E-03
	SO _x	4.6E-04	2.0E-03
	VOC	1.4E-03	6.1E-03

2.30 Registration #2119 (Building 891)

Registration #2119 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	1.2E-02	5.2E-02
	CO	2.0E-02	8.7E-02
	PM ₁₀	1.8E-03	7.9E-03
	SO _x	4.3E-04	1.9E-03
	VOC	1.3E-03	5.7E-03

2.31 Registration #2120 (Building 892)

Registration #2120 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	5.7E-02	2.5E-01
	CO	9.7E-02	4.2E-01
	PM ₁₀	8.7E-03	3.8E-02
	SO _x	2.1E-03	9.1E-03
	VOC	6.3E-03	2.8E-02

2.32 Registration #2121 (Building 894)

Registration #2121 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	8.7E-02	3.8E-01
	CO	1.5E-01	6.4E-01
2 Natural Gas Boilers 1.001 MMBtu/hr	PM ₁₀	1.3E-02	5.8E-02
	SO _x	3.1E-03	1.4E-02
2 Natural Gas Boilers 1.3 MMBtu/hr	VOC	9.5E-03	4.2E-02

2.33 Registration #2122 (Building 897)

Registration #2122 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.5E-02	1.1E-01
	CO	4.2E-02	1.8E-01
	PM ₁₀	3.8E-03	1.7E-02
	SO _x	9.0E-04	3.9E-03
	VOC	2.7E-03	1.2E-02

2.34 Registration #2169 (Building 960)

Registration #2169 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.5 MMBtu/hr	NO _x	9.6E-03	4.2E-02
	CO	8.1E-03	3.5E-02
	PM ₁₀	7.3E-04	3.2E-03
	SO _x	5.8E-05	2.5E-04
	VOC	5.3E-04	2.3E-03

2.35 Registration #2170 (Building 895)

Registration #2170 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
3 Natural Gas Boilers 2 MMBtu/hr	NO _x	2.0E-02	8.7E-02
	CO	1.7E-02	7.3E-02
	PM ₁₀	1.5E-03	6.6E-03
	SO _x	1.2E-04	5.2E-04
	VOC	1.1E-03	4.8E-03

2.36 Registration #2171 (Building 800)

Registration #2171 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.44 MMBtu/hr	NO _x	1.9E-02	8.2E-02
	CO	1.6E-02	6.9E-02
	PM ₁₀	1.4E-03	6.2E-03
	SO _x	1.1E-04	4.9E-04
	VOC	1.0E-03	4.5E-03

2.37 Registration #2172-RV1 (Building 6585)

Registration #2172-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 5 MMBtu/hr	NO _x	3.4E-02	1.5E-01
	CO	2.8E-02	1.2E-01
	PM ₁₀	2.6E-03	1.1E-02
	SO _x	2.0E-04	8.8E-04
	VOC	1.8E-03	8.1E-03

2.38 Registration #2173 (Building 6597)

Registration #2173 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
1 Natural Gas Boiler 2.47 MMBtu/hr	NO _x	2.4E-01	1.1E+00
	CO	2.0E-01	8.9E-01
	PM ₁₀	1.8E-02	8.1E-02
	SO _x	1.5E-03	6.4E-03
	VOC	1.3E-02	5.8E-02

2.39 Registration #2174-RV1 (Building 6580)

Registration #2174-RV1 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
4 Natural Gas Boilers 2 MMBtu/hr	NO _x	5.7E-02	2.5E-01
	CO	4.8E-02	2.1E-01
	PM ₁₀	4.3E-03	1.9E-02
	SO _x	3.4E-04	1.5E-03
	VOC	3.1E-03	1.4E-02

2.40 Registration #2175 (Building 981)

Registration #2175 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.8 MMBtu/hr	NO _x	3.2E-02	1.4E-01
	CO	2.7E-02	1.2E-01
	PM ₁₀	2.4E-03	1.1E-02
	SO _x	1.9E-04	8.3E-04
	VOC	1.7E-03	7.6E-03

2.41 Registration #3111 (Building 983)

Registration #3111 CY2016 Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
2 Natural Gas Boilers 1.3 MMBtu/hr	NO _x	7.0E-02	3.1E-01
	CO	1.2E-01	5.2E-01
	PM ₁₀	1.1E-02	4.7E-02
	SO _x	8.4E-04	3.7E-03
	VOC	7.7E-03	3.4E-02

2.42 Permit #3216-M1 (Burn Site)

Permit #3216-M1 CY2016 Igloo Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
Igloo	NO _x	6.8E-02	1.3E-05
	CO	1.1E+00	5.5E-04
	TSP	2.8E-01	5.0E-04
	SO _x	1.4E-01	1.9E-06
	VOC	3.6E-01	2.0E-04

Permit #3216-M1 CY2016 FLAME Emissions

Source Description	Emissions		
	Criteria Pollutant	lb/hr	tpy
FLAME	NO _x	4.00E-02	1.00E-04
	CO	3.9E-01	9.75E-04
	TSP	3.6E+01	1.08E+00

HAP emission are reported in the Site-Wide Chemical Permit #1901-M1