Los Alamos
NATIONAL LABORATORY
EST. 1943

memorandum

Environmental Protection Division
Environmental Compliance Programs (ENV-CP)

To/MS: 2014 Emissions Inventory File
From/MS: Alison M. Dorries, ENV-DO, (E-File)
From/MS: Steven L. Story, ENV-CP, (E-File)
Phone/Fax: 7-2211/7-0731
LA-UR: 15-21793
Symbol: ENV-DO-15-0077
Date: MAR 2 3 2015

Subject: 2014 Emissions Inventory Electronic Submittal

Los Alamos National Laboratory (LANL) submitted their 2014 Emissions Inventory Report to New Mexico Environmental Department (NMED) via online reporting tool, AEIR. This report is required by Title 20, Chapter 2, Part 73 of the New Mexico Administrative Code (20.2.73 NMAC), Notice of Intent and Emissions Inventory Requirements. The report was submitted on March 24, 2015, and meets New Mexico Environmental Department's deadline of April 1st.

Should you have any questions or comments regarding the information provided in this report, please contact Steve Story at (505) 665-2169 or story@lanl.gov .

AMD:SLS/LM

Cy: Kirsten Laskey, NA-LA, (E-File)
Hai Shen, NA-LA, (E-File)
Michael A. Lansing, PADOPS, (E-File)
Amy E. De Palma, PADOPS, (E-File)
Michael T. Brandt, ADESH, (E-File)
Raeanna Sharp-Geiger, ADESH, (E-File)
Alison Dorries, ENV-DO, (E-File)
Steven L. Story, ENV-CP, (E-File
Walter Whetham, ENV-CP, (E-File)
Emissions Inventory Project File
ADESH Correspondence (E-File)
locatesteam@lanl.gov, (E-File)
env-correspondence@lanl.gov, (E-File)

Enclosure

2014 Emissions Inventory Report

ENV-DO-15-0077

Electronic Submittal

Date: March 23, 2015

LA-UR-13-22031

Facility Annual Emissions - Subject Item Submittal Review

Tuesday, March 17, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-116
Designation: TA-60-BDM
Description: Asphalt Plant Dryer - Natural Gas
Type: Asphalt Drum/Burner
SCC: Industrial Processes, Mineral Products, Asphalt Concrete, Drum Mix Plant: Rotary Drum Dryer / Mixer, Natural Gas - Fired
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Asphalt (OUTPUT)	
Materials Consumed:	0.921	MM SCF
Fuel Heating Value:	1020.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	8
Operating Time in Days per Week:	5
Operating Time in Weeks per Year:	26
Operating Time in Hours per Year:	1040
Percent of Operation During Winter:	10
Percent of Operation During Spring:	30
Percent of Operation During Summer:	30
Percent of Operation During Fall:	30

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.117	tons/y	EPA emission factors (e.g., AP-42)
Ethylbenzene:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Lead:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.003	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.002	tons/y	Manufacturer Specification
Particulate Matter (2.5 microns or less):	0.002	tons/y	Manufacturer Specification
Particulate Matter (total suspended):	0.002	tons/y	Manufacturer Specification
Sulfur Dioxide:	0.001	tons/y	EPA emission factors (e.g., AP-42)

Volatile Organic Compounds (VOC): 0.002 tons/y EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: ACT -2
Designation: TA-35-213
Description: Be Target Fabrication Facility - Machining TA-35-213
Type: Beryllium Work
SCC: Industrial Processes, Fabricated Metal Products, Machining Operations, Specify Material**
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Metal (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	5
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	1820
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Beryllium:	0.0	tons/y	Estimate
Particulate Matter (total suspended):	0.0	tons/y	Estimate

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: ACT -3
Designation: TA-3-141
Description: Be Test Facility - Machining TA-3-141
Type: Beryllium Work
SCC: Industrial Processes, Fabricated Metal Products, Machining Operations, Specify Material**
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Metal (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Beryllium:	0.0	tons/y	Sample testing
Particulate Matter (total suspended):	0.0	tons/y	Sample testing

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: ACT -6
Designation: TA-55-PF4 (a)
Description: Plutonium Facility Beryllium machining, weld cutting / dressing and metallography
Type: Beryllium Work
SCC: Industrial Processes, Fabricated Metal Products, Machining Operations, Specify Material**
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Metal (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	5
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	1820
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Beryllium:	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: ACT -41
Designation: TA-3-66
Description: Sigma Facility- electroplating/metallography
Type: Beryllium Work
SCC: Industrial Processes, Fabricated Metal Products, Abrasive Cleaning of Metal Parts, Polishing
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Metal (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	8
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Beryllium:	0.0	tons/y	Design calculation

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-11
Designation: TA-53-365-BHW-1
Description: Boiler TA-53-365-BHW-1
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers < 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	11.02	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	15
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	33
Operating Time in Hours per Year:	3465
Percent of Operation During Winter:	40
Percent of Operation During Spring:	20
Percent of Operation During Summer:	0
Percent of Operation During Fall:	40

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.463	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.01	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.551	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.003	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.03	tons/y	EPA emission factors (e.g., AP-42)

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-12
Designation: TA-53-365-BHW-2
Description: Boiler TA-53-365-BHW-2
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers < 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	11.015	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	15
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	33
Operating Time in Hours per Year:	3465
Percent of Operation During Winter:	40
Percent of Operation During Spring:	20
Percent of Operation During Summer:	0
Percent of Operation During Fall:	40

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.463	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.01	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.551	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.042	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.003	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.03	tons/y	EPA emission factors (e.g., AP-42)

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-24
Designation: TA-3-22-1
Description: Power Plant Boiler (pph, Natural Gas)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	95.201	MM SCF
Fuel Heating Value:	1020.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	1.904	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.004	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.086	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	2.761	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.362	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.362	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.362	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.029	tons/y	EPA emission factors (e.g., AP-42)

Toluene; (Methyl benzene):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.262	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-25
Designation: TA-3-22-2
Description: Power Plant Boiler (pph, Natural Gas)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	228.237	MM SCF
Fuel Heating Value:	1020.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	4.565	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.009	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.205	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	6.619	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.867	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.867	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.867	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.068	tons/y	EPA emission factors (e.g., AP-42)

Volatile Organic Compounds (VOC): 0.628 tons/y EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-26
Designation: TA-3-22-3
Description: Power Plant Boiler (pph, Natural Gas)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	55.798	MM SCF
Fuel Heating Value:	1020.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	1.116	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.002	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.05	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	1.618	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.212	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.212	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.212	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.017	tons/y	EPA emission factors (e.g., AP-42)

Volatile Organic Compounds (VOC): 0.153 tons/y EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-29
Designation: TA-55-6-BHW-1
Description: Sellers Boiler TA-55-6-BHW-1
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers < 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	15.965	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent

Operating Detail

	Value
Operating Time in Hours per Day:	15
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	33
Operating Time in Hours per Year:	3465
Percent of Operation During Winter:	35
Percent of Operation During Spring:	20
Percent of Operation During Summer:	10
Percent of Operation During Fall:	35

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.305	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.014	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	1.102	tons/y	Actual stack test
Particulate Matter (10 microns or less):	0.113	tons/y	Manufacturer Specification
Particulate Matter (2.5 microns or less):	0.113	tons/y	Manufacturer Specification
Particulate Matter (total suspended):	0.113	tons/y	Manufacturer Specification
Sulfur Dioxide:	0.005	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.048	tons/y	Manufacturer Specification

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-30
Designation: TA-55-6-BHW-2
Description: Sellers Boiler TA-55-6-BHW-2
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers < 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	8.123	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	15
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	33
Operating Time in Hours per Year:	3465
Percent of Operation During Winter:	40
Percent of Operation During Spring:	10
Percent of Operation During Summer:	10
Percent of Operation During Fall:	40

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.155	tons/y	Manufacturer Specification
Formaldehyde:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.007	tons/y	EPA emission factors (e.g., AP-42)
Lead:	0.0	tons/y	Manufacturer Specification
Nitrogen Dioxide:	0.56	tons/y	Actual stack test
Particulate Matter (10 microns or less):	0.058	tons/y	Manufacturer Specification
Particulate Matter (2.5 microns or less):	0.058	tons/y	Manufacturer Specification
Particulate Matter (total suspended):	0.058	tons/y	Manufacturer Specification
Sulfur Dioxide:	0.002	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.024	tons/y	Manufacturer Specification

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-53
Designation: TA-16-1484-BS-2
Description: Low NOx Boiler TA-16-1484-BS-2
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	9.832	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Ash of Fuel:	0.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.182	tons/y	Design calculation
Hexane:	0.009	tons/y	Design calculation
Lead:	0.0	tons/y	Design calculation
Nitrogen Dioxide:	0.182	tons/y	Design calculation
Particulate Matter (10 microns or less):	0.037	tons/y	Design calculation
Particulate Matter (2.5 microns or less):	0.037	tons/y	Design calculation
Particulate Matter (total suspended):	0.037	tons/y	Design calculation
Sulfur Dioxide:	0.003	tons/y	Design calculation
Volatile Organic Compounds (VOC):	0.027	tons/y	Design calculation

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-90
Designation: B-1
Description: Boiler-CMRR
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	1.159	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.022	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.017	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.015	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-104
Designation: B-2
Description: Boiler-CMRR
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	1.159	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.022	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.017	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.015	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-105
Designation: B-3
Description: Boiler-CMRR
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	1.159	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.022	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.017	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.015	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-106
Designation: B-4
Description: Boiler-CMRR
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	0.0	MM SCF
Fuel Heating Value:	0.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.0	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	0.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	0
Operating Time in Days per Week:	0
Operating Time in Weeks per Year:	0
Operating Time in Hours per Year:	0
Percent of Operation During Winter:	0
Percent of Operation During Spring:	0
Percent of Operation During Summer:	0
Percent of Operation During Fall:	0

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

This unit has not been built.

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-107
Designation: B-5
Description: Boiler-CMRR
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	0.0	MM SCF
Fuel Heating Value:	0.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.0	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	0.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	0
Operating Time in Days per Week:	0
Operating Time in Weeks per Year:	0
Operating Time in Hours per Year:	0
Percent of Operation During Winter:	0
Percent of Operation During Spring:	0
Percent of Operation During Summer:	0
Percent of Operation During Fall:	0

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

This unit has not been built.

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-134
Designation: TA-16-1484-BS-1
Description: Low NOx Boiler TA-16-1484-BS-1
Type: Boiler
SCC: External Combustion Boilers, Commercial/Institutional, Natural Gas, < 10 Million Btu/hr
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	9.832	MM SCF
Fuel Heating Value:	1021.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.182	tons/y	Design calculation
Hexane:	0.009	tons/y	Design calculation
Lead:	0.0	tons/y	Design calculation
Nitrogen Dioxide:	0.182	tons/y	Design calculation
Particulate Matter (10 microns or less):	0.037	tons/y	Design calculation
Particulate Matter (2.5 microns or less):	0.037	tons/y	Design calculation
Particulate Matter (total suspended):	0.037	tons/y	Design calculation
Sulfur Dioxide:	0.003	tons/y	Design calculation
Volatile Organic Compounds (VOC):	0.027	tons/y	Design calculation

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-137
Designation: TA-3-22-2
Description: Power Plant Boiler (pph, No. 2 fuel oil)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Distillate Oil, Grades 1 and 2 Oil
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	0.0	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.05	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-138
Designation: TA-3-22-3
Description: Power Plant Boiler (pph, No. 2 fuel oil)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Distillate Oil, Grades 1 and 2 Oil
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	0.0	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.05	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Hexane:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-141
Designation: TA-3-22-1
Description: Power Plant Boiler (pph, No. 2 fuel oil)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	0.0	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.05	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-144
Designation: All Boilers
Description: Natural Gas and No. 2 Fuel Boilers (cap)
Type: Boiler
SCC: External Combustion Boilers, Electric Generation, Natural Gas, Boilers > 100 Million Btu/hr except Tangential
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	0.0	MM SCF
Fuel Heating Value:	0.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.0	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	0.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	0
Operating Time in Days per Week:	0
Operating Time in Weeks per Year:	0
Operating Time in Hours per Year:	0
Percent of Operation During Winter:	0
Percent of Operation During Spring:	0
Percent of Operation During Summer:	0
Percent of Operation During Fall:	0

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

This Facility ID represents the total from the power plant boilers for both natural gas and fuel oil. However, these emissions are already captured with Facility IDs 24, 25, and 26 for natural gas and Facility IDs 137, 138, and 141 for fuel oil. In order to avoid counting the emissions twice, NMED has asked us to enter zeros for this Facility ID.

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-119
Designation: TA-33-G-2
Description: Kohler Diesel Generator TA-33-G-2 (temp located to TA-39)
Type: Internal combustion engine
SCC: Internal Combustion Engines, Electric Generation, Distillate Oil (Diesel), Reciprocating
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	21.59	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	2
Operating Time in Days per Week:	2
Operating Time in Weeks per Year:	10
Operating Time in Hours per Year:	13
Percent of Operation During Winter:	50
Percent of Operation During Spring:	0
Percent of Operation During Summer:	0
Percent of Operation During Fall:	50

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.001	tons/y	Design calculation
Nitrogen Dioxide:	0.005	tons/y	Design calculation
Particulate Matter (10 microns or less):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.0	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.0	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Tuesday, March 17, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-120
Designation: TA-33-G-3
Description: Kohler Diesel Generator TA-33-G-3 (temp located to TA-39)
Type: Internal combustion engine
SCC: Internal Combustion Engines, Electric Generation, Distillate Oil (Diesel), Reciprocating
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	28.4	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	2
Operating Time in Days per Week:	2
Operating Time in Weeks per Year:	10
Operating Time in Hours per Year:	17
Percent of Operation During Winter:	50
Percent of Operation During Spring:	0
Percent of Operation During Summer:	0
Percent of Operation During Fall:	50

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.002	tons/y	Design calculation
Nitrogen Dioxide:	0.007	tons/y	Design calculation
Particulate Matter (10 microns or less):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.001	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-128
Designation: 3 Generators
Description: 3 Cummins Diesel Powered Generators, CMRR-GEN-1, CMRR-GEN-2, and CMRR-GEN-3
Type: Internal combustion engine
SCC: Internal Combustion Engines, Industrial, Distillate Oil (Diesel), Reciprocating: Cogeneration
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Distillate Oil (Diesel)	
Materials Consumed:	4278.7	gal

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.217	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.991	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.031	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.031	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.031	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.017	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.031	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-135
Designation: TA-33-G-4
Description: Caterpillar Diesel Generator TA-33-G-4
Type: Internal combustion engine
SCC: Internal Combustion Engines, Electric Generation, Distillate Oil (Diesel), Reciprocating
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Input Materials Processed:	Diesel (INPUT)	
Materials Consumed:	300.2	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.01	percent
Percent Carbon Content:	83.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	19
Percent of Operation During Winter:	50
Percent of Operation During Spring:	50
Percent of Operation During Summer:	0
Percent of Operation During Fall:	0

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.019	tons/y	Design calculation
Nitrogen Dioxide:	0.09	tons/y	Design calculation
Particulate Matter (10 microns or less):	0.007	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.007	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.007	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.007	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-146
Designation: TA-33-G-1P
Description: Cummins Portable Diesel Generator
Type: Internal combustion engine
SCC: Internal Combustion Engines, Electric Generation, Distillate Oil (Diesel), Reciprocating
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Diesel	
Materials Consumed:	47.5	gal
Fuel Heating Value:	138.0	MM BTU/M gal
Percent Sulfur of Fuel:	0.001	percent

Operating Detail

	Value
Operating Time in Hours per Day:	1
Operating Time in Days per Week:	1
Operating Time in Weeks per Year:	1
Operating Time in Hours per Year:	3
Percent of Operation During Winter:	50
Percent of Operation During Spring:	50
Percent of Operation During Summer:	0
Percent of Operation During Fall:	0

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Carbon Monoxide:	0.009	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.04	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (10 microns or less):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.001	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-21
Designation: TA-55-DG-1
Description: Degreaser - Ultrasonic Cold Batch TA-55-4
Type: Parts Washer
SCC: Petroleum and Solvent Evaporation, Organic Solvent Evaporation, Degreasing, Trichloroethylene: General Degreasing Units
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Solvent (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	4
Operating Time in Days per Week:	1
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	208
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
TCE; (Trichloroethylene); (Trichloroethene):	0.005	tons/y	Material balance

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Tuesday, March 17, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: ACT -7
Designation: LANL-FW-CHEM
Description: R & D Activities - Labwide (031)
Type: Research/Testing
SCC: Industrial Processes, Photographic Equipment/Health Care/Laboratories, Laboratories, Bench Scale Reagents: Research
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Operating Detail

	Value
Operating Time in Hours per Day:	24
Operating Time in Days per Week:	7
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	8760
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Acetaldehyde; (Ethyl aldehyde):	0.0	tons/y	Material balance
Acetonitrile; (Methyl cyanide):	0.199	tons/y	Material balance
Acetophenone:	0.0	tons/y	Material balance
Acrylamide:	0.001	tons/y	Material balance
Acrylic acid:	0.0	tons/y	Material balance
Acrylonitrile:	0.0	tons/y	Material balance
Ammonia:	0.0	tons/y	Material balance
Aniline:	0.003	tons/y	Material balance
Antimony:	0.0	tons/y	Material balance
Antimony compounds:	0.0	tons/y	Material balance
Arsenic Compounds:	0.0	tons/y	Material balance
Benzene:	0.014	tons/y	Material balance
Benzyl Chloride:	0.001	tons/y	Material balance
Biphenyl:	0.0	tons/y	Material balance
Bromoform; (Tribromomethane):	0.0	tons/y	Material balance
Butadiene(1,3-):	0.0	tons/y	Material balance
Cadmium:	0.0	tons/y	Material balance
Cadmium compounds:	0.007	tons/y	Material balance
Carbon Disulfide:	0.0	tons/y	Material balance

Carbon tetrachloride; (Tetrachoromethane):	0.004	tons/y	Material balance
Carbonyl sulfide:	0.0	tons/y	Material balance
Catechol (Pyrocatechol):	0.0	tons/y	Material balance
Chlorine:	0.546	tons/y	Material balance
Chloroacetic Acid:	0.0	tons/y	Material balance
Chlorobenzene(Phenyl Chloride):	0.003	tons/y	Material balance
Chloroform; (Trichloromethane):	0.168	tons/y	Material balance
Chromium:	0.0	tons/y	Material balance
Chromium VI compounds:	0.011	tons/y	Material balance
Cobalt Compounds:	0.017	tons/y	Material balance
Cresol(m-); (Methylphenol, 3-):	0.0	tons/y	Material balance
Cumene:	0.0	tons/y	Material balance
Cyanide compounds:	0.004	tons/y	Material balance
Dibutylphthalate; (Di-n-butyl phthalate):	0.003	tons/y	Material balance
Dichloroethane (1,2-); (EDC); (Ethylene dichloride):	0.003	tons/y	Material balance
Diethanolamine:	0.0	tons/y	Material balance
Dimethyl Sulfate:	0.0	tons/y	Material balance
Dimethyl formamide:	0.012	tons/y	Material balance
Dimethylhydrazine(1,1-):	0.0	tons/y	Material balance
Dioxane(1,4-) (1,4-Diethyleneoxide):	0.001	tons/y	Material balance
Epichlorohydrin; (1-Chloro-2,3-epoxypropane):	0.0	tons/y	Material balance
Epoxybutane(1,2-) (1,2-Butylene oxide):	0.0	tons/y	Material balance
Ethyl Acrylate:	0.0	tons/y	Material balance
Ethyl chloride; (Chloroethane):	0.0	tons/y	Material balance
Ethylbenzene:	0.016	tons/y	Material balance
Ethylene Glycol:	0.139	tons/y	Material balance
Ethylene dibromide; (EDB); (1.2-Dibromoethane):	0.0	tons/y	Material balance
Formaldehyde:	0.001	tons/y	Material balance
Glycol Ethers:	0.219	tons/y	Material balance
Hexachlorocyclopentadiene:	0.0	tons/y	Material balance
Hexamethylphosphoramide:	0.001	tons/y	Material balance
Hexane:	0.378	tons/y	Material balance
Hydrazine:	0.001	tons/y	Material balance
Hydrochloric acid (HCl):	1.411	tons/y	Material balance
Hydrofluoric Acid; (Hydrogen fluoride):	0.048	tons/y	Material balance
Hydroquinone:	0.066	tons/y	Material balance
Iodomethane (Methyl iodide):	0.001	tons/y	Material balance
Lead Compounds:	0.002	tons/y	Material balance
Maleic anhydride:	0.001	tons/y	Material balance
Manganese:	0.0	tons/y	Material balance
Manganese compounds:	0.008	tons/y	Material balance
Mercury compounds:	0.0	tons/y	Material balance
Methanol; (Methyl alcohol):	0.558	tons/y	Material balance
Methyl Ethyl Ketone; (MEK); (2-Butanone):	0.0	tons/y	Material balance
Methyl Methacrylate:	0.0	tons/y	Material balance
Methyl bromide; (Bromomethane):	0.0	tons/y	Material balance
Methyl chloride; (Chloromethane):	0.001	tons/y	Material balance
Methyl isobutyl ketone; (Hexone); (4-Methyl-2-pentanone):	0.0	tons/y	Material balance
Methyl tert butyl ether:	0.008	tons/y	Material balance

Methylene chloride; (Dichloromethane):	0.662	tons/y	Material balance
Methylenebiphenyl isocyanate; (MDI); (Diphenylmethane diisocyanate):	0.133	tons/y	Material balance
Naphthalene:	0.0	tons/y	Material balance
Nickel:	0.0	tons/y	Material balance
Nickel compounds:	0.017	tons/y	Material balance
Nitrobenzene; (nitro-Benzene):	0.0	tons/y	Material balance
Nitrophenol(4-); (p-Nitrophenol):	0.0	tons/y	Material balance
PCE; (Perchloroethylene); (Tetrachloroethylene); (Tetrachloroethene):	0.011	tons/y	Material balance
Phenol:	0.0	tons/y	Material balance
Phenylenediamine(p-); (Phenylenediamine):	0.0	tons/y	Material balance
Phosphine:	0.0	tons/y	Material balance
Phosphorus:	0.0	tons/y	Material balance
Phthalic anhydride:	0.0	tons/y	Material balance
Polycylic Organic Matter:	0.001	tons/y	Material balance
Propylene Dichloride (1,2-Dichloropropane):	0.159	tons/y	Material balance
Propylene oxide:	0.0	tons/y	Material balance
Selenium:	0.0	tons/y	Material balance
Selenium compounds:	0.0	tons/y	Material balance
Styrene:	0.001	tons/y	Material balance
TCE; (Trichloroethylene); (Trichloroethene):	0.012	tons/y	Material balance
Tetrachloroethane(1,1,2,2-):	0.0	tons/y	Material balance
Titanium tetrachloride:	0.0	tons/y	Material balance
Toluene diisocyanate(2,4-):	0.0	tons/y	Material balance
Toluene; (Methyl benzene):	0.17	tons/y	Material balance
Total HAP:	5.06	tons/y	Material balance
Trichloroethane(1,1,1-) (Methyl Chloroform):	0.006	tons/y	Material balance
Trichloroethane(1,1,2-):	0.0	tons/y	Material balance
Triethylamine:	0.001	tons/y	Material balance
Trimethylpentane(2,2,4-):	0.0	tons/y	Material balance
Urethane; (Ethyl carbamate):	0.0	tons/y	Material balance
Vinyl acetate; (Vinyl acetate monomer):	0.005	tons/y	Material balance
Volatile Organic Compounds (VOC):	10.86	tons/y	Material balance
Xylene(o-); (1,2-Dimethylbenzene); (ortho-Xylene):	0.001	tons/y	Material balance
Xylene(p-); (1,4-Dimethylbenzene); (para-Xylene):	0.001	tons/y	Material balance
Xylenes (total); (Xylol):	0.017	tons/y	Material balance
bis(2-ethylhexyl) phthalate; (Di-2-ethylhexyl phthalate); (DEHP):	0.0	tons/y	Material balance

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-89
Designation: TA-52-11
Description: Data Disintegrator/industrial Shredder
Type: Shredder
SCC: Industrial Processes, Pulp and Paper and Wood Products, Miscellaneous Paper Products, Other Not Classified
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

Input Materials Processed: Paper (INPUT)

Operating Detail

	Value
Operating Time in Hours per Day:	7
Operating Time in Days per Week:	5
Operating Time in Weeks per Year:	52
Operating Time in Hours per Year:	1820
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Particulate Matter (10 microns or less):	0.06	tons/y	Manufacturer Specification
Particulate Matter (2.5 microns or less):	0.04	tons/y	Manufacturer Specification
Particulate Matter (total suspended):	0.07	tons/y	Manufacturer Specification

Subject Item Comments

Print Close

Facility Annual Emissions - Subject Item Submittal Review

Thursday, March 05, 2015

Agency ID: 856
Facility Name: Los Alamos National Laboratory
Organization Name: U.S. Department of Energy National Nuclear Security Administration
Submittal Status: 2014 Submittal (In Process)

Subject Item ID: EQPT-112
Designation: TA-3-22-CT-1
Description: Combustion Turbine
Type: Turbine
SCC: Internal Combustion Engines, Electric Generation, Natural Gas, Turbine
GHG Reporting: Reports GHG to EPA

Supplemental Parameters

	Amount	Unit of Measure
Fuel Type:	Natural Gas	
Input Materials Processed:	Natural Gas (INPUT)	
Materials Consumed:	39.0	MM SCF
Fuel Heating Value:	1020.0	MM BTU/MM SCF
Percent Sulfur of Fuel:	0.001	percent
Percent Ash of Fuel:	0.0	percent
Percent Carbon Content:	65.0	percent

Operating Detail

	Value
Operating Time in Hours per Day:	7
Operating Time in Days per Week:	4
Operating Time in Weeks per Year:	12
Operating Time in Hours per Year:	500
Percent of Operation During Winter:	25
Percent of Operation During Spring:	25
Percent of Operation During Summer:	25
Percent of Operation During Fall:	25

Actual Pollutants

Pollutant	Amount	Unit of Measure	Calculation Method
Acetaldehyde; (Ethyl aldehyde):	0.001	tons/y	EPA emission factors (e.g., AP-42)
Carbon Monoxide:	0.205	tons/y	EPA emission factors (e.g., AP-42)
Copper:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Ethylbenzene:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Formaldehyde:	0.014	tons/y	EPA emission factors (e.g., AP-42)
Lead:	0.0	tons/y	EPA emission factors (e.g., AP-42)
Manganese:	0.002	tons/y	EPA emission factors (e.g., AP-42)
Nickel:	0.002	tons/y	EPA emission factors (e.g., AP-42)
Nitrogen Dioxide:	0.984	tons/y	EPA emission factors (e.g., AP-42)

Particulate Matter (10 microns or less):	0.133	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (2.5 microns or less):	0.133	tons/y	EPA emission factors (e.g., AP-42)
Particulate Matter (total suspended):	0.133	tons/y	EPA emission factors (e.g., AP-42)
Propylene oxide:	0.001	tons/y	EPA emission factors (e.g., AP-42)
Sulfur Dioxide:	0.068	tons/y	EPA emission factors (e.g., AP-42)
Toluene; (Methyl benzene):	0.003	tons/y	EPA emission factors (e.g., AP-42)
Volatile Organic Compounds (VOC):	0.043	tons/y	EPA emission factors (e.g., AP-42)
Xylenes (total); (Xylol):	0.001	tons/y	EPA emission factors (e.g., AP-42)

Subject Item Comments

Print Close